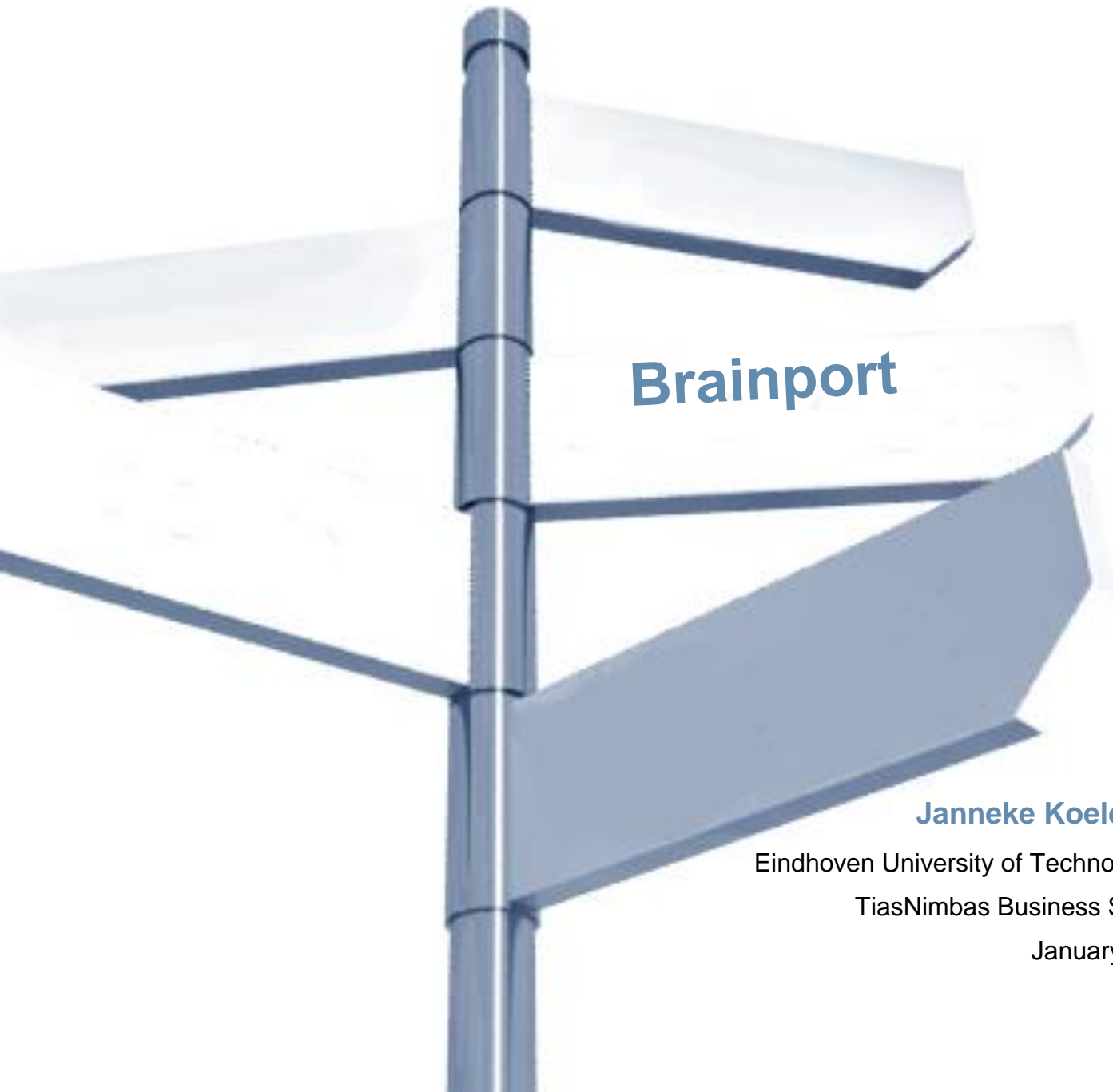


EXPATRIATES HOUSING CHOICE BEHAVIOR

Mapping the housing careers of international knowledge workers and students in Brainport Eindhoven



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TERMS AND ABBREVIATIONS

In this study the following definitions will be used:

Brainport Eindhoven

A high-tech oriented region in Eindhoven area; in the Southeast of the Netherlands. It comprises the 21 SRE-municipalities: Asten, Bergeijk, Best, Bladel, Cranendonck, Deurne, Eersel, Eindhoven, Geldrop-Mierlo, Gemert-Bakel, Heeze-Leende, Helmond, Laarbeek, Nuenen c.a., Oirschot, Reusel- De Mierden, Someren, Son en Breugel, Valkenswaard, Veldhoven and Waalre.

International knowledge workers

Highly skilled and highly educated migrants with a foreign nationality who are on any type of contract with a minimum stay of 6 months.

Expatriates

Combined term for both international knowledge workers and international students that follow higher education

Housing career

The sequence of housing situations that a person has actually lived in

Migration process

The whole period of expatriation from the time a person knows about the migration and starts to prepare until the time of return or permanent residence.

In this study, the following abbreviations will be used:

HECS

Holland Expat Center South

SRE

Samenwerkingsverband Regio Eindhoven (Dutch)

TU/e

Eindhoven University of Technology

SUMMARY - ENGLISH

Brainport is a fast growing high-tech oriented region in the Eindhoven area; in the Southeast of the Netherlands and was elected smartest region in the world in 2011 by the Intelligent Community Forum. Since the demand for highly skilled personnel is higher than the number of persons the region can provide, the international working population in Brainport Eindhoven is increasing rapidly.

One of the important aspects in providing an attractive environment for these expatriates is creating an attractive residential environment. To understand what an attractive residential environment for expatriates means, more insight should be gained in the housing choice behavior of the target group. Therefore, the aim of this study is not only to find out what the housing preferences of expatriates in Brainport are but also to get a better insight in the actual housing careers during the whole expatriation period. Hereby, the attempt is to see if characteristics of the expatriate and the migration process influence the housing choice behavior, by answering the following research question:

Are there different stages in the housing careers of expatriates distinguishable and do these stages and the expatriate's characteristics affect the housing choice behavior of expatriates in Brainport Region?

This research focuses on international knowledge workers and international students who follow higher education and either work or live in one of the 21 SRE-municipalities that comprise Brainport Eindhoven. First, a literature study was conducted to gain insight in the characteristics of expatriates, the migration process and the housing choice behavior of expatriates. Second, the specific situation in Brainport was mapped, using in depth interviews with different stakeholders and an online survey among expatriates in Brainport. Finally, the results were analyzed and enriched with external data and social media discussions.

Based on the literature review, the exact number of international knowledge workers in Brainport is unknown but current estimates range from 12,500 till 30,000. The total population of international students at TU/e, Fontys Eindhoven and the Design Academy is approximately 1500, including people from all over the world. Nationalities that are highly represented from outside of Europe are respectively China, India and Iran. Also within the European Union, there is a lot of traffic to Brainport Eindhoven.

To gain a better insight in this heterogeneous group of expatriates, a differentiation was made based on the theory of Mahroum (2002). Three types of highly skilled migrants were distinguished, based on profession and the purpose of their stay: 1. Accidental tourists & economy class passengers (knowledge workers), 2. Pilgrims (academics and scientists, including PhD and PostDoc students) and 5. Passengers (students)

Furthermore, the process of migration was taken into account. According to Bhugra (2001), the process of migration can be broadly described in three stages: 1. Pre-migration; the stage before departure which involves the decision and preparation to move, 2. Migration; the actual migration, when the physical relocation occurs and 3. Post-migration: the stage of integration where social and cultural

rules and new roles can be learned. This stage is defined as the “absorption of the immigrant within the social and cultural framework of the new society”. These stages are also related to different levels of cultural adaptation and the housing career. In the first stage, expatriates will prepare for the migration and think about housing preferences. In the second stage; the actual first housing situation will be chosen. Later, in the third stage of post-migration, the expatriate is already settled in Brainport and he or she can decide to move to another house and make further steps in the housing career.

Since, in most cases, it is not possible to attain a house that meets the initial preference, a household has to adapt its ideal image to the achievable opportunities. The ideal image will be turned into an aspiration image where the set of preferences will be applied to the situation that the household regards achievable. The transition between these two phases can be more difficult for expatriates, since they might not have a clear view on the Dutch housing market. Between the aspiration image and the actual housing choice, a household will decide which concessions are acceptable to them in order to find a suitable dwelling.

Based on the literature review the following attributes of the housing preferences were included in the survey: characteristics of the dwelling, the living environment and household characteristics. To gain better insight in the existing constraints, also questions are asked about financial and cognitive resources.

In total, the survey results of 137 respondents were included in the data analysis. This group consists of knowledge workers (28%), PhD or PostDoc students (18%), students (42%) and 12% is classified as other. Compared to the total population in Brainport, this sample size is relatively small, especially for knowledge workers. However, regarding the fact that the target group seems very hard to reach and only indirect distribution channels were available for this study, the response rate is satisfying. To complement the results, qualitative analyses were used for interpretation of the results.

Differences in housing preferences were found for the subgroups of expatriates. Especially for the preferred type of house, the importance of amenities such as an international school and parking space and the maximum price they were willing to pay. As could be expected, students and single-person households have less money to spend and therefore prefer a lower priced house. Families with children on the other hand have more to spend and need a bigger house, so they more often prefer a single-family dwelling. These differences do not seem specific for expatriates, but seem to be caused by socio-demographic characteristics. However, almost all expatriates show a strong preference for rental dwellings especially furnished which is generally different from the preferences of Dutch housing seekers.

This puts expatriates in a difficult position where they have to search for housing in a very small share of the housing market with great scarcity. As in any market where the demand is high and supply is low, prices are high. Furthermore, the amount of income spent on housing in the Netherlands is one of the highest in the world so prices can be experienced as high in general. This also results in a fairly poor

rating of housing conditions in the Netherlands by all expatriates; expectations were not met and most respondents feel like housing conditions in the Netherlands are worse than in their home country. Most complaints are made about high housing prices and incorrect behavior and high fees of commercial real estate agents. These problems especially apply to expatriates with a lower income, such as pilgrims (academics) and passengers (students), since scarcity is even higher in the affordable housing market.

As it turns out, most respondents do not have a realistic perception of the Dutch housing market as it comes to which price they have to pay for a certain type of housing. Almost all respondents expected to get more value for their money than they actually did. Therefore, concessions have to be made. Most concessions are made on the type of living environment and type of housing. For instance, many PhD or PostDoc students have to live in a student room, because they cannot afford the preferred studio or apartment and their housing situations become similar to that of students. Furthermore, a third of the respondents had to pay more than they said they were willing to. Least concessions are made on the type of tenure and furnishing. Also, households with children seem less likely to make concessions on the living environment than other groups.

Besides general problems with finding housing in a scarcity market, characteristics of the migration process make it even more difficult for expatriates to attain a suitable dwelling. Since most expatriates only know shortly before their migration that they are going to move to a different country, time constraints are huge. This goes along with the fact that finding a new house is required, because distances are too far to travel, in contrary to Dutch knowledge workers who could shuttle between home and workplace for a while. Furthermore, for the first housing situation most expatriates cannot attend required meetings or sign contracts in person since they are still living in their home country.

Therefore, most problems occur during the search process for the first housing situation. This results in quite a low satisfaction level for the first housing situation; only 44% is satisfied. However, as the length of stay gets longer, the housing search process seems to go more smoothly. In general, expatriates have to make a few steps in their housing career to attain a housing situation that satisfies their preferences; the overall satisfaction level increases with each subsequent housing situation. Hence, the majority of expatriates have lived in more than one house during their stay. It seems that, as an expatriate has made a few steps in the housing career and primary housing needs are met, life-course and external changes become more important in the decision to move and the housing careers of expatriates become more similar to that of Dutch inhabitants.

Based on the described conclusions of this study, the following advice could be given to improve and create an attractive residential environment for expatriates: 1. Increase in the amount of (furnished) commercial rental dwellings, 2. Establish a transparent housing search engine for rental housing and 3. Participate on the increasing internationalization of Brainport by making more information available in English.

SAMENVATTING – NEDERLANDS

Brainport is een snelgroeïende regio rondom de stad Eindhoven in het zuidoosten van Nederland. Het is gericht op de hightech industrie en is in 2011 gekozen tot slimste regio van de wereld door het Intelligent Community Forum. Omdat de vraag naar hoogopgeleid technisch personeel groter is dan het aantal dat in de regio gevonden kan worden, groeit het aantal internationale werknemers erg snel.

Een van de belangrijke aspecten in het aanbieden van een aantrekkelijke omgeving voor expats is het creëren van een prettige woonomgeving. Om beter te begrijpen wat een prettige woonomgeving voor expats inhoudt, dient een beter inzicht te worden verkregen in het woonkeuzegedrag van de doelgroep. Het doel van deze studie is niet alleen het achterhalen van de woonvoorkeuren van expats in Brainport, maar ook om de daadwerkelijke wooncarrière gedurende de hele migratieperiode in beeld te brengen. Het is de bedoeling te kijken of de verschillende karakteristieken van expats en het migratieproces van invloed zijn op het woonkeuzegedrag, door het beantwoorden van de volgende onderzoeksvraag:

Zijn er verschillende fases te herkennen in de wooncarrière van expats en zijn deze fases en de karakteristieken van de expat van invloed op het woonkeuzegedrag van expats in Brainport?

De doelgroep van deze studie zijn internationale kenniswerkers en studenten die werken en/of wonen in een van de 21 SRE-gemeentes die Brainport vormen. De studie bestaat uit een literatuurstudie, interviews met verschillende stakeholders en een online enquête onder expats in Brainport. Eerst is een literatuurstudie uitgevoerd om inzicht te verkrijgen in de karakteristieken van verschillende soorten expats, het migratieproces en het woonkeuzegedrag van expats. Vervolgens is gekeken of deze informatie tevens toepasbaar is op de specifieke situatie in Brainport door middel van diepte-interviews met diverse stakeholders en een online enquête onder expats in Brainport. Uiteindelijk zijn de resultaten hiervan geanalyseerd en verrijkt met externe data en social media discussies.

Het exacte aantal kenniswerkers in Brainport is op basis van bestaande gegevens niet bekend. Schattingen lopen uiteen van 12.500 tot 30.000. De totale populatie studenten van de TU/e, Fontys Eindhoven en de Design Academy is ongeveer 1500. Deze mensen komen uit alle werelddelen en de volgende landen buiten Europa zijn sterk vertegenwoordigd: China, India en Iran. Binnen de Europese Unie vindt tevens veel uitwisseling plaats met Brainport.

Om een beter inzicht te verkrijgen in de heterogene groep van expats, zal een differentiatie worden gemaakt gebaseerd op de typologie van Mahroum (2002). Drie verschillende typen hoogopgeleide migranten worden onderscheiden, gebaseerd op het type beroep dat zij uitvoeren en de reden voor migratie: 1. Accidental tourists & economy class passengers (kenniswerkers), 2. Pilgrims (academici en wetenschappers inclusief PhD en PostDoc studenten) en 3. Passengers (studenten)

Daarnaast zullen ook aspecten van het migratieproces worden meegenomen in de studie. Volgens Bhughra (2001), kan het migratieproces grofweg worden onderverdeeld in drie fases: 1. Pre-migratie; de fase voor het daadwerkelijke vertrek waarin de beslissing voor migratie wordt gemaakt en

voorbereidingen worden getroffen, 2. Migratie; fase van daadwerkelijke migratie waarin de fysieke verplaatsing plaatsvindt en 3. Post-migratie; de fase van integratie waarin sociale en culturele normen en waarden van een land worden geleerd. Deze fase is gedefinieerd als de: “absorptie van de immigrant in het sociale en culturele kader van de nieuwe samenleving”. Deze fases hangen samen met verschillende niveaus van culturele aanpassing en de wooncarrière. In de eerste fase wordt de migratie voorbereid en zullen expats nadenken over woonvoorkeuren. In de tweede fase zal de daadwerkelijke eerste woning worden gekozen. Later, in de fase van post-migratie, is de expat reeds gehuisvest in Brainport en kan de beslissing worden gemaakt om eventueel te verhuizen en stappen te maken in de wooncarrière.

Aangezien het in de meeste gevallen niet mogelijk is een woning te verkrijgen die voldoet aan de initiële woonvoorkeuren, moet een huishouden vaak het ideaalbeeld bijstellen. Zoals te zien is in figuur 2, zal het ideaalbeeld worden omgezet tot een aspiratiebeeld waarin de ideale woonvoorkeuren worden aangepast aan de situatie die het huishouden haalbaar acht. De transitie tussen twee fases kan moeilijker zijn voor expats, aangezien zij misschien een minder duidelijk beeld hebben van de Nederlandse woningmarkt. Tussen het aspiratiebeeld en de daadwerkelijke woningkeuze zal een huishouden bepalen welke concessies zij acceptabel vinden om een geschikte woning te vinden.

De volgende aspecten met betrekking tot the woonvoorkeur worden gevraagd in de enquête en zijn gebaseerd op de literatuurstudie: karakteristieken van de woning, de leefomgeving en van het huishouden. Daarnaast worden vragen gesteld over financiële en cognitieve vaardigheden om de mogelijke beperkingen in beeld te brengen.

In totaal zijn de enquêteresultaten van 137 respondenten geschikt voor data-analyse. Van deze groep is 28% kenniswerker, 18% PhD of PostDoc student, 42% student en 12% anders. In vergelijking tot de totale populatie expats in Brainport is deze steekproef vrij klein, vooral voor de groep kenniswerkers. Het resultaat is echter niet teleurstellend als wordt meegenomen dat de doelgroep erg lastig te bereiken lijkt en alleen een indirecte respondentenbenadering kon plaatsvinden via de beschikbare distributiekanaalen. Aanvullende kwalitatieve analyses zijn uitgevoerd voor een goede interpretatie van de resultaten.

De verschillende groepen expats hebben verschillende woonvoorkeuren. Deze woonvoorkeuren verschillen vooral voor het gewenste woningtype, het belang van de aanwezigheid van voorzieningen zoals een internationale school en parkeerruimte en de maximale prijs die ze bereid zijn te betalen. Zoals verwacht, hebben studenten en eenpersoonshuishoudens minder geld te besteden en geven zij daarom vaker de voorkeur aan een goedkopere woning. Aan de andere kant hebben gezinnen met kinderen vaak meer te besteden en hebben ze meer ruimte nodig waardoor ze vaker de voorkeur hebben voor een eengezinswoning. Deze verschillen lijken niet specifiek voor expats te zijn, maar veroorzaakt te worden door socio-demografische kenmerken. Een groot verschil met de meeste Nederlandse woningzoekenden is de sterke voorkeur van expats voor huurwoningen, voornamelijk gemeubileerd.

Dit plaatst expats in een moeilijke positie waar ze een woning moeten vinden in een klein aandeel van de Nederlandse woningmarkt. Zoals in elke markt waar de vraag groot is en het aanbod klein, zijn de prijzen hoog. Daarnaast ervaren expats Nederlandse woningprijzen in het algemeen als erg hoog, doordat in Nederland het percentage inkomen dat naar wonen gaat een van de hoogste van de wereld is. Dit is tevens terug te zien in een lage beoordeling van woonomstandigheden in Nederland door alle typen expats; verwachtingen worden niet waargemaakt en de meeste respondenten vinden de woonomstandigheden in Nederland slechter dan in hun thuisland. De meeste klachten gaan over de hoge woningprijzen en onfatsoenlijk gedrag en hoge bemiddelingskosten van makelaars. Deze problemen zijn vooral van toepassing op expats met een lager inkomen zoals pilgrims (academici) en passengers (studenten), omdat de schaarste in het betaalbare segment nog groter is.

Het blijkt dat de meeste respondenten geen realistisch beeld hebben van de Nederlandse woningmarkt als het gaat om de prijs voor een bepaald type woning. Bijna alle respondenten hadden verwacht meer waar voor hun geld te krijgen dan daadwerkelijk het geval was. Daarom moesten concessies worden gedaan. De meeste concessies worden gemaakt op het woningtype en de leefomgeving. Zo wonen veel PhD en PostDoc studenten bijvoorbeeld in een studentenkamer, terwijl ze eigenlijk een studio of appartement wilden. Daarnaast moest een derde van de respondenten uiteindelijk meer voor de woning betalen dan ze bereid waren. Er worden nauwelijks concessies gedaan op de voorkeur voor huren of kopen en de mate van meubilering. Daarnaast lijken gezinnen met kinderen minder geneigd concessies te doen op de leefomgeving dan andere groepen.

Naast de genoemde problemen die voorkomen in een markt waar schaarste voorkomt, maken bepaalde aspecten van het migratieproces het nog moeilijker voor expats om geschikte woonruimte te vinden. Omdat veel expats pas kort voor vertrek weten dat ze gaan migreren, is de tijdsdruk enorm. Tevens is het vinden van woonruimte noodzakelijk, omdat afstanden te groot zijn om te pendelen in tegenstelling tot de situatie van veel Nederlandse kenniswerkers. Daarnaast kunnen expats vaak niet de benodigde afspraken fysiek bijwonen, omdat ze tijdens het eerste zoekproces nog in hun thuisland verblijven.

De meeste problemen komen dan ook voor tijdens het zoekproces voor de eerste woonsituatie. Dit resulteert in een vrij lage tevredenheid waarin slechts 44% aangeeft tevreden te zijn. Het lijkt echter, dat naarmate de verblijfsduur langer wordt en expats beter gewend raken aan de nieuwe cultuur, het woningzoekproces gemakkelijker verloopt. De meeste expats moeten dan ook een aantal stappen in hun wooncarrière doorlopen voordat ze een huis vinden waar ze tevreden over zijn; het tevredenheidsgehalte stijgt bij iedere opeenvolgende woning. The meerderheid heeft dan ook in meerdere woningen gewoond gedurende het verblijf in Brainport. Het lijkt er op dat als een expat een paar stappen verder is in de woningcarrière en aan de primaire behoeften is voldaan, veranderingen in de levensfase en externe veranderingen steeds belangrijker worden in de beslissing om te verhuizen en de wooncarrières van expats steeds meer gaan lijken op die van autochtone kenniswerkers.

Gebaseerd op de beschreven conclusies zouden de volgende veranderingen moeten worden doorgevoerd om een aantrekkelijk leefklimaat te creëren voor expats in Brainport: 1. Het verhogen van het aantal commerciële (gemeubileerde) huurwoningen, 2. Het creëren van een transparant zoekplatform voor huurwoningen en 3. Een verdere internationalisatie van Brainport door het beter beschikbaar stellen van Engelstalige informatie.

PREFACE

With proud I present you my master thesis:

Expatriates housing choice behavior; mapping the housing careers of international knowledge workers and students in Brainport Eindhoven

This report is conducted as part of my graduation project of the Real Estate Management & Development track within the faculty of Architecture Building & Planning at Eindhoven University of Technology and was completed during an internship period at TiasNimbas Business school Tilburg.

The housing choice behavior of expatriates turned out to be a challenging, but most of all very interesting topic where I had to combine my interest in real estate with other aspects such as cross-cultural differences and cultural adaption. Visiting international introduction days and talking to different expats in Eindhoven changed my project from a solely research project into a much more interesting and broader project where I've made new friends and gained many valuable experiences.

Of course this result would not have been possible without the help of others. First, I would like to thank my supervisors at Eindhoven University of Technology: Astrid Kemperman and Jos Smeets for their helpful comments and guidance throughout my graduation project. A special word of thanks goes to Ingrid Janssen and Dirk Brounen who not only gave me the opportunity to finish my graduation project at TiasNimbas business school, but provided all kinds of fun opportunities in the world of real estate over the last 1,5 years. Furthermore, I would like to thank all people who participated in the interviews and survey and especially Willem van Hoorn who lead me into the world of expats in Eindhoven and introduced me to so many useful people. Last but not least, I would like to make some personal words of thanks to my family and friends:

Lieve vrienden, Marieke, Guusje en natuurlijk Thijs, ontzettend bedankt voor al jullie steun, begrip en liefde gedurende mijn studie en vooral de laatste tijd. Zonder jullie was dit niet gelukt. Lieve pap en mam, bedankt voor alle hulp en mogelijkheden die jullie me hebben geboden in al die jaren. Nu is het zo ver, ik ga mijn studie afronden en kijken wat de wereld me verder nog te bieden heeft. Pap, ik weet dat je er van genoten zou hebben. Veel liefs.

Please enjoy reading!

Janneke

Tilburg, January 20, 2014

CONTENTS

1. INTRODUCTION	19
1.1. Background and relevance	19
1.2. Research framework	20
1.2.1. <i>Problem outline and definition</i>	20
1.2.2. <i>Objectives</i>	20
1.2.3. <i>Research questions and conceptual model</i>	21
1.3. Research design	22
2. SCOPE	25
2.1. Brainport	25
2.2. Expatriates	26
2.2.1. <i>(International) knowledge workers</i>	26
2.2.2. <i>Expatriates in Brainport</i>	26
2.3. The Dutch residential context	27
2.3.1. <i>Dutch housing</i>	27
2.3.2. <i>Living environments</i>	29
2.4. Conclusions	32
3. THEORETICAL BACKGROUND	33
3.1. Expatriates characteristics	33
3.1.1. <i>Previous research on expatriates in Brainport region</i>	33
3.1.2. <i>Types of highly skilled migrants</i>	34
3.2. Expatriation	34
3.2.1. <i>Process of migration</i>	35
3.2.2. <i>Motives for migration</i>	35
3.2.3. <i>Cultural adjustment</i>	36
3.3. Expatriates housing choice behavior	38
3.3.1. <i>Residential decision making process</i>	38
3.3.2. <i>Choosing a new residence</i>	39
3.3.3. <i>Evaluation of the current residence</i>	42
3.4. Conclusions	43
4. DATA COLLECTION	45
4.1. Methodology	45
4.2. In depth interviews	45
4.2.1. <i>Interviews and attended meetings</i>	45
4.2.2. <i>Research input</i>	47
4.3. Survey	48
4.3.1. <i>Distribution</i>	48
4.3.2. <i>Language</i>	49
4.3.3. <i>Design</i>	49
4.3.4. <i>Operationalization</i>	50
4.4. Conclusions	63
5. ANALYSES & RESULTS	65
5.1. Descriptives	65

5.1.1.	<i>Response</i>	65
5.1.2.	<i>Socio-demographics</i>	66
5.1.3.	<i>Migration characteristics</i>	71
5.1.4.	<i>Types of expatriates</i>	74
5.1.5.	<i>Conclusions</i>	75
5.2.	Housing search process	75
5.2.1.	<i>First housing arrangements</i>	75
5.2.2.	<i>Rating the housing search process</i>	76
5.2.3.	<i>Perspectives on the Dutch housing market</i>	80
5.2.4.	<i>Conclusions</i>	81
5.3.	Housing preferences	82
5.3.1.	<i>Price</i>	82
5.3.2.	<i>Tenure</i>	83
5.3.3.	<i>State of furnishing</i>	84
5.3.4.	<i>Type of house</i>	84
5.3.5.	<i>Living environment</i>	86
5.3.6.	<i>Conclusions</i>	88
5.4.	First housing concessions	88
5.4.1.	<i>Price</i>	89
5.4.2.	<i>Tenure</i>	90
5.4.3.	<i>State of furnishing</i>	90
5.4.4.	<i>Type of house</i>	92
5.4.5.	<i>Living environment</i>	94
5.4.6.	<i>Conclusions</i>	95
5.5.	Housing careers	95
5.5.1.	<i>Number of living situations</i>	95
5.5.2.	<i>Satisfaction</i>	96
5.5.3.	<i>Reasons to move</i>	98
5.5.4.	<i>Relocation patterns</i>	99
5.5.5.	<i>Conclusions</i>	103
5.6.	Conclusions	104
6.	CONCLUSIONS & DISCUSSION	107
6.1.	Conclusions	107
6.2.	Reflection & discussion	110
6.2.1.	<i>The first housing search process</i>	110
6.2.2.	<i>The Dutch housing market in perspective</i>	111
6.2.3.	<i>Discussion</i>	112
6.3.	Recommendations	113
6.3.1.	<i>Practical implementation</i>	113
6.3.2.	<i>Limitations and future research</i>	114
	REFERENCES	115
	APPENDICES	123

1. INTRODUCTION

1.1. BACKGROUND AND RELEVANCE

Brainport is a fast growing high-tech oriented region in the Eindhoven area; in the Southeast of the Netherlands and was elected smartest region in the world in 2011 by the Intelligent Community Forum. (*Brainport Development, 2013a*) Since the demand for highly skilled personnel is higher than the number of persons the region can provide, Brainport Eindhoven needs to attract and retain international knowledge workers. Different research and policy reports endorse this:

“For the Eindhoven Region, attracting and retaining knowledge workers from other countries is considered to be essential for future development. Consequently, Eindhoven needs to formulate a targeted policy to attract and retain this group. However, there appears to be insufficient information with respect to the growth, composition and wishes of this community in Eindhoven to ground such a policy.” (Buiskool & Grijpstra, 2006, p. 3)

“Industry and research in Brainport Eindhoven Region have difficulty in finding enough knowledge workers and skilled craftsmen; each day there is a shortfall of 7 people to fill all the vacancies.” (Brainport Development, 2013c)

“For the city of Eindhoven and its surrounding region, it is of great importance to attract and retain international knowledge workers. However, it lacks sufficient knowledge and information about the population of international knowledge workers and their characteristics, wishes and desires, particularly their qualitative housing demands.”

(Vriens & van Dam, 2011, p.1; translation author)

Attracting and retaining knowledge workers, both national and international, has therefore become a focus point in policy on different governmental levels as stated in several policy papers by Gemeente Eindhoven (2012), Provincie Noord-Brabant (2012) and Samenwerkingsverband Regio Eindhoven (SRE, 2012).

Research among potential international knowledge workers by Berkhout, Smid & Volkering (2010) shows that accommodation is the number one factor of information desired when one considers moving to Brainport region. A high standard of living comes second; having a comfortable social environment comes third.

This indicates that a suitable house and living environment is considered important in the decision making process of emigration and choosing a destination country. Research by Urhahn Urban Design & RIGO Research en Advies (2010) underlines that a high quality standard for housing and living is also an important condition for the establishment of the knowledge driven multinational companies.

The first steps in getting insight in the housing process of expatriates were done in previous studies by Buiskool & Grijpstra (2006) and Vriens & Dam (2011).

1.2. RESEARCH FRAMEWORK

Based on the described background and relevance, a research framework is conducted. All objectives and research questions in this study are based on the target group: expatriates in Brainport Eindhoven region.

1.2.1. Problem outline and definition

As stated in paragraph 1.1, it is important for Brainport region to attract international knowledge workers in order to attain enough highly skilled employees and retain the excellent standard in the high-tech industry. Hereby, providing an attractive residential environment is of great importance.

However, according to Buiskool & Grijpstra (2006) finding suitable accommodation is considered as a big issue in Brainport. Vriens & Dam (2011) underline this based on interviews held with different stakeholders such as companies, housing associations and expatriates.

Although these studies provide a good insight in the housing preferences and housing search process, little is known yet about the housing choice behavior of expatriates, especially in a quantitative way. Furthermore, these studies are mainly focused on the first housing situation after the initial migration. Therefore, further research has to be done in order to gain a full insight in the housing career during the whole stay in Brainport.

This leads to the following problem definition:

“Too little information is available about the housing choice behavior of expatriates in order to provide an attractive residential environment for expatriates and to strengthen the position of Brainport Eindhoven. Especially quantitative information about the housing careers during the whole migration period has to be conducted.”

1.2.2. Objectives

The aim of this study is to get a better insight in the housing careers of expatriates during the whole expatriation period in order to give recommendations on how the housing stock in Brainport region can be optimized to provide an attractive residential environment for expatriates. Hereby, the attempt is to see if characteristics of the migration process and differences between subgroups of expatriates influence the housing choice behavior. Is an expatriate, as the length of stay in Brainport gets longer and cognitive resources increase, better able to find the housing alternative that he or she is looking for?

Based on the previously described background and relevance and problem definition, the following objectives were derived:

- Gain insight in the different stages of the housing career of expatriates in Brainport Region
- Gain insight in the housing preferences of expatriates during the different stages of the housing career
- Find out to what extent the preferences meet the actual situation, given the fact that the preferred situation is not always available
- Give recommendations on how the housing stock in Brainport region can be adapted to the housing choice behavior of expatriates
- Give recommendations on how the expatriation process, regarding to housing, can be adapted to the housing choice behavior of expatriates

1.2.3. Research questions and conceptual model

In order to meet the described objectives, the following research questions need to be answered.

Research question (RQ)

Are there different stages in the housing careers of expatriates distinguishable and do these stages and the expatriate’s characteristics affect the housing choice behavior of expatriates in Brainport Region?

Sub-questions

- Q1. *What are the characteristics of different types of expatriates?*
- Q2. *How does the migration process for highly skilled migrants work?*
- Q3. *What is the housing choice behavior of the target group?*
- Q4. *Is there a relation between the characteristics of different groups of expatriates and their housing choice behavior?*
- Q5. *Are the characteristics of the migration process of influence on the housing choice behavior of expatriates?*

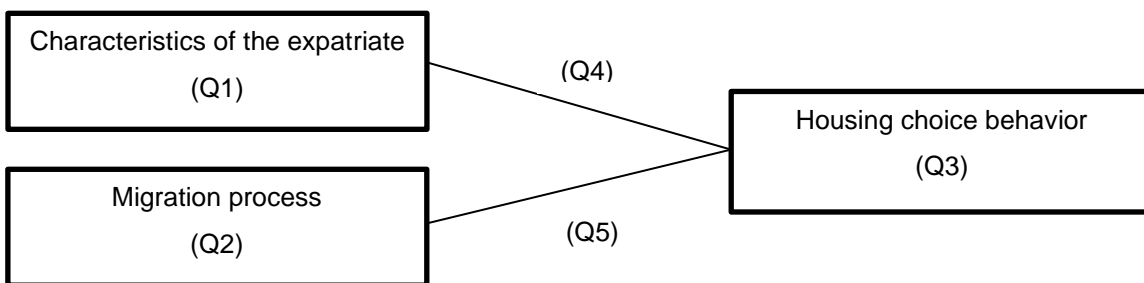


Figure 1. Conceptual model

The conceptual model in figure 1 shows the relations between the different research questions. First, information about the individual factors; characteristics of the expatriate, migration process and housing choice behavior has to be conducted. This way, a better insight in the housing choice process of expatriates can be gained and possible factors that could influence the housing choice behavior will

become clear. Then, it will be checked whether characteristics of the expatriate and the migration process influence the housing choice behavior of expatriates in Brainport Eindhoven.

1.3. RESEARCH DESIGN

Figure 2 shows an overview of the research design. The study is divided into four parts. First, the research field is defined. Second, a literature study is done to determine the definitive research framework on the one hand and to provide input for the qualitative and quantitative research on the other hand. Third, the research methodology is determined and data is analyzed. Finally, conclusions are drawn from the literature study and data analysis and a reflection on the study is made.

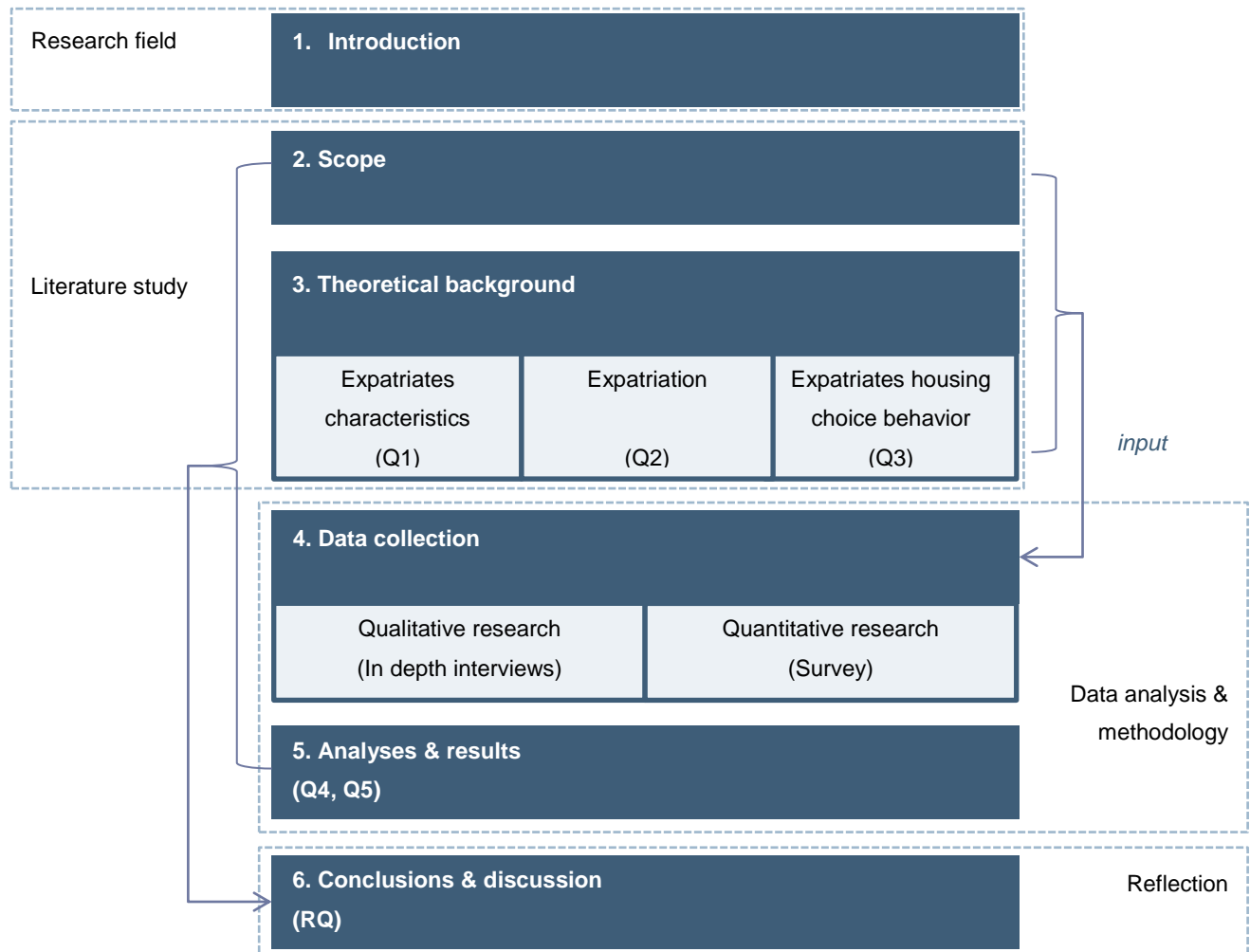


Figure 2. Research design

The thesis consists of six chapters that together answer the defined research questions and objectives:

Chapter 1 Introduction

Within this chapter the background and relevance of the study are discussed. Furthermore, the research framework and an overview of the research design are given.

Chapter 2 **Scope**

In this chapter the scope of the study is sketched to gain insight in the target group: expatriates, the location Brainport Eindhoven and the Dutch residential market in order to place the further research into context.

Chapter 3 **Theoretical background**

This chapter provides information about the characteristics of expatriates, the expatriation period and the housing choice behavior of expatriates based on the existing literature. Within this chapter the first three research questions are answered:

Q1. What are the characteristics of different types of expatriates? (§3.1)

Q2. How does the migration process for highly skilled migrants work? (§3.2)

Q3. What is the housing choice behavior of the target group? (§3.3)

Chapter 4 **Data collection**

Chapter 4 gives an overview of the used methodology in this research. General information regarding the housing choice behavior of expatriates as described in chapter 3 will be adapted to Brainport using in depth interviews and an online survey among expatriates in Brainport. In this chapter, results from the in depth interviews are given and the structure of the survey is described. This chapter provides information about the way in which data is collected and serves as a research explanation for chapter 5.

Chapter 5 **Analyses & results**

In this chapter the survey results are analyzed both quantitative and qualitative and information is given about the housing preferences, the housing search process and the actual housing careers of expatriates in Brainport. Hereby, the following research questions are answered:

Q4. Is there a relation between the characteristics of different groups of expatriates and their housing choice behavior?

Q5. Are the characteristics of the migration process of influence on the housing choice behavior of expatriates?

Furthermore, the following objectives are obtained:

- *Gain insight in the different stages of the housing career of expatriates in Brainport Region*
- *Gain insight in the housing preferences of expatriates during the different stages of the housing career*
- *Find out to what extent the preferences meet the actual situation, given the fact that the preferred situation is not always available*

Chapter 6 **Conclusions & discussion**

The final chapter summarizes all findings and conclusions from the literature study and data analysis and answers the main research question:

Are there different stages in the housing career of expatriates distinguishable and do these stages and the expatriate's characteristics affect the housing choice behavior of expatriates in Brainport Region?

Furthermore, it provides a reflection on the study and the findings of the study are placed into perspective. Recommendations are given to obtain the following objectives:

- *Give recommendations on how the housing stock in Brainport region can be adapted to the housing choice behavior of expatriates*
- *Give recommendations on how the expatriation process, regarding to housing, can be adapted to the housing choice behavior of expatriates*

2. SCOPE

Although the amount of international knowledge workers is increasing in multiple places in the world due to globalization and centration of specific knowledge areas, this study specifically focuses on expatriates in Brainport Eindhoven Region in the Netherlands. To get a better insight in this target group, both Brainport region and the terms (international) knowledge workers and expatriates will be explained. Furthermore, the Dutch housing context will be described briefly. This way, a better understanding of the context of the study can be gained.

2.1. BRAINPORT

Brainport Eindhoven Region, elected as smartest region in the world by the Intelligent Community Forum in 2011, is a region in the Southeast of the Netherlands and focuses on high tech innovations. Together with Airport Amsterdam and Seaport Rotterdam, Brainport Eindhoven is one of the three core areas of the Dutch economy as is shown in figure 3. Brainport Eindhoven has the largest income related to knowledge in the Netherlands and surrounding foreign areas. It accounts for a third of all Dutch private research and development (R&D) expenditure, invests 8% of the GDP on R&D and is one of Europe's top three regions in terms of patent density (Urhahn Urban Design & RIGO Research en Advies, 2010). It is therefore one of Europe's largest knowledge regions, competing with other knowledge regions such as Lyon, Birmingham and Stockholm.



Figure 3. Location of Brainport Eindhoven Region in the Netherlands (OpenInnovatie.nl, 2013)

The region covers the area of 21 SRE-municipalities (Samenwerkingsverband Regio Eindhoven) around the cities of Eindhoven and Helmond and has a population of approximately 750,000 persons of which a relatively high amount, compared to the average in the Netherlands, is highly educated (Brainport Development, 2013d).

Brainport Eindhoven consists of a cooperation among industry, research and government. This triple helix cooperation generates a conducive climate for businesses, for both internationally renowned companies and innovative small and medium-sized enterprises in the region. These companies cooperate with each other and with knowledge institutes by sharing and multiplying knowledge in an open innovation environment before bringing their products to market. According to Brainport Development (2013), it is known as a powerful innovative actor in both a European and global context.

Brainport Development (2013) has pointed out five focal sectors of the region: High Tech Systems & Materials, Food, Automotive, Lifetec and Design. As Berkhout, Kouwenberg, Sparla & Waasdorp (2013) describe, the following organizations and educational institutions are affiliated with Brainport in 2011 and 2012: ASML, DAF-Trucks, DSM, Fontys University of applied sciences, M2I, Océ Technologies, Philips, SKF and Eindhoven University of Technology.

2.2. EXPATRIATES

Since the migration process of both international knowledge workers and international students is quite similar and good distribution channels are available for both groups, both international knowledge workers and international students who follow higher education will be included in the study. The term expatriates will be used to describe the whole group; both international knowledge workers and international students.

2.2.1. (International) knowledge workers

Brainport region has a specific high-tech focus based on technology and design. This type of work demands highly skilled employees which cannot always be found within the own region. Therefore, Brainport has to attract employees from other parts of the country and the world. These specific employees are known as (international) knowledge workers. In this study the definition of international knowledge workers will be based on the definition by Buiskool & Grijpstra (2006), excluding the income criterion:

The term “international knowledge worker” covers all knowledge workers, both European and non-European, employed in the Eindhoven Region:

- With a foreign nationality and not born in the Netherlands; and
- At higher educational level (higher education diploma / certificate); and
- Being on any type of contract with a minimum stay of 6 months; and
- Working or living in the broader Eindhoven region

The category of workers known as ‘cross border employees’ is excluded.

2.2.2. Expatriates in Brainport

The number of international knowledge workers in Brainport region is increasing rapidly. When this number was first defined in 2006 by Buiskool & Grijpstra., the region housed approximately 3,600

international knowledge workers. Estimations were that this number would reach 4,600 in 2015. Reality shows that this number has become much higher than once expected. However, the exact number is still unknown since current estimates range from 12,500 till 30,000 (Eindhovens Dagblad, 2013). According to the Eindhoven University of Technology (2013), they have approximately 900 international academic staff members at the moment.

A more accurate estimation can be given of the number of international students in Eindhoven. In the academic year 2012-2013, there were approximately 850 international students at Eindhoven University of Technology (Eindhoven University of Technology, 2013), 150 international students at the Design Academy Eindhoven (Nuffic, 2013) and 528 international students at Fontys University Eindhoven (Bailey, 2014). This leaves a total population of international students in Eindhoven of approximately 1500.

Brainport attracts people from all over the world. Nationalities that are highly represented from outside of Europe are respectively China, India and Iran (Hoorn, 2013 and Brainport Development, 2011). Also within the European Union, there is a lot of traffic to Brainport Eindhoven.

2.3. THE DUTCH RESIDENTIAL CONTEXT

The housing context and available options differ substantially among different countries. Therefore, expatriates that move into a certain foreign country for the first time, can have a different perception of housing possibilities. How housing characteristics are perceived, depends on individual cultural experiences. Therefore, in this chapter, the Dutch housing context and the present living environments will be described.

2.3.1. Dutch housing

The perception of housing characteristics depends on individual cultural experiences. For example, most Europeans find housing in the Netherlands expensive and comment that gardens are small. The perception of the size of a property is very different. Americans, for example, are used to very spacious properties and consider the rooms small. People from Singapore however, are used to scarce space and might experience housing in the Netherlands quite different from Americans (Holland expat center south, 2013).

Most expatriates receive information about the Netherlands from the Holland Expat Center South. According to the Holland Expat Center South (2013), expatriates that move to Brainport region can expect the following:

- The Netherlands is one of the most densely populated countries in Europe, with almost 400 people per square kilometer.
- Due to this high population density, houses are smaller and more compact than in many countries.
- Dutch builders are extremely skilled in maximizing the use of space.

- The area offers a wide range of housing – from the city feel to village life in the surrounding countryside.
- One bathroom is the norm in The Netherlands. The toilet is often separate and on the ground floor. Showers are more common than baths in most houses and apartments.
- Dining rooms are a luxury – normally there is an open kitchen and living room with a dining area.
- Washing machines are often located in the kitchen or the bathroom. Utility rooms are found only in larger houses.
- Garages tend to be used as storage space in The Netherlands.
- Parking permits are needed in some areas, particularly if you are living in the city center.
- Houses are well insulated, and newer buildings will be double-glazed.

As is shown in figure 4, in the Netherlands, 59% of all dwellings are private owned, 41% are rental dwellings. Markable is the large amount of rental dwellings owned by the semi-public housing associations; 83% of all rental dwellings (Rijksoverheid, 2012).

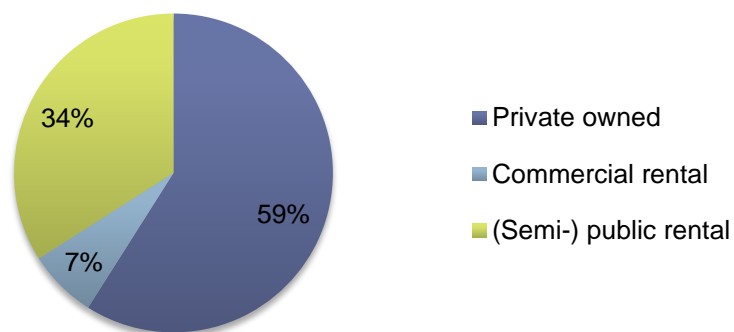


Figure 4. Tenure rate in the Netherlands

Rental dwellings owned by housing associations are seen as social dwellings and are usually better affordable than houses owned by commercial parties. However, these houses are not freely available but have to be assigned to a household by the housing association, based on the best suitability and longest waiting period. Waiting lists for these types of housing are long and getting an apartment in the city of Eindhoven can take up to 7 years (Holland expat center south, 2013). Houses rented in the commercial market are usually available for immediate tendency and therefore most expatriates will search for these houses. These rental dwellings are available in three different states of furnishing: bare, soft-furnished and furnished. Differing from no furnishing to only carpets and curtains and furniture fully included.

In table 1, Dutch housing is divided into 5 types, varying from studio apartments (a single room that includes a sleeping area, living area and cooking facilities), to bigger apartments and larger houses. The average monthly costs, for both rental and private-owned dwellings, are shown based on data by

the Holland expat center south. As is shown, purchasing a house can be less expensive in the long run and can therefore be a suitable option when an expatriate decides to stay for a longer period.

Table 1. Average housing costs in Brainport region, excluding service costs and utilities.
(Holland expat center south, 2013)

	Commercial rental price per month	Purchase price	Mortgage per month/net (indication, incl. tax refund)
Studio apartment	€300 - €800	€120.000 - € 60.000	€375 - €475
Two-bedroom apartment	€600 - €1200	€140.000 - €200.000	€425 - €525
Three-bedroom terraced house	€1000 - €1450	€170.000 - €250.000	€450 - €575
Semi-detached house	> €900	€220.000 - €540.000	€625 - €1075
Detached house	> €1200	> €500.000	> €1100

2.3.2. Living environments

In the last decades, the awareness to acknowledge the surrounding living environment as an important factor in people's housing situations has grown. Not only the dwelling itself, but also the direct living environment and the way in which residents can identify themselves with this living environment is of great importance.

Definition

The typical Dutch word: "woonmilieu"; freely translated as living environment is hard to define. It consists of different elements of a neighborhood including: the construction period, types of dwellings, tenure ratio, street atmosphere, status, types of residents, way in which residents live together and the location within the region (Wassenberg et al., 2006). The term is used to describe the direct living environment of human beings and was first defined by Schouten as "the immediate surroundings of a dwelling; the area that one can see from inside the house and in which details are still clearly visible, on the understanding that the area within a radius of 100 meters from the dwelling should always be taken into account" (Schouten, 1967, translation author). Over time, the term has been extended to a large extent. In 1988, Grunfeld defined "woonmilieu" as: "the environmental qualities of a defined spatial area which is regularly used by residents and which is considered relevant for their activities and communications and to which they also assign certain uniformity" (Grunfeld, 1988, translation author). In this definition, Grunfeld considers the living environment as a spatial and in a sociological way important entity, in which people evolve their daily activities.

In all definitions, the term is used to describe the type of urban environment in which people live and shall be used in this context for this study.

Typologies

Previous research show many ways to divide the Dutch residential landscape into different living environment typologies. These typologies divide the living environments based on certain criteria. In

the literature review of Wassenberg, Arnoldus, Goetgeluk, Penninga and Reinders (2006), the distinction is made between typologies based on geographical location, hard criteria and soft criteria.

Typologies based on geographical location, are mostly done by ZIP code. Although these codes provide a lot of information about location, they don't include any sociological criteria and do not reflect the perception of the residents and therefore do not give a good display of the living environment.

Hard criteria consist of important measurable characteristics of the residential environment like the housing stock, the green surroundings, paving, public lighting and the presence of nuisance sources (dissatisfiers). Also, social characteristics of the population like income, education level and ethnicity are hard criteria. Nevertheless, different consumer groups show great differences. Commonly accepted characteristics like household composition, income and age still determine a great part of the housing and location choice.

However these factors are still considered important, policymakers are getting more aware of the importance of soft criteria in this housing choice behavior as well. These factors concern the perception of a certain neighborhood on the one hand, and the lifestyles of residents and the way in which they use the residential environment on the other hand and are hard to measure. Subjective living environment classifications can be based on: mental mapping, housing cultures, lifestyles, cultural profiles, perception of city landscapes, neighborhood profiles and residents mentality.

In this study, the classification of living environment typologies by ABF Research (1996) as incorporated in the "Nota Wonen" (Ministerie van VROM, 2000) will be used. ABF Research distinguishes five types of living environments that can be subdivided into 13 categories. This typology is based on the following dimensions: density, accessibility, mix of functions and the quality of the built environment and is assigned based on zip codes and cohort areas. For this study, the division by ABF in five typologies is sufficient; urban central, off city center, green-urban, central-village and rural.

An overview of these living environments with description and characteristics can be found in table 2.

Table 2. Types of living environments (VROM, 2000; translation author)

Type of living environment	Description and characteristics
Urban central	<i>(Historical) city centers and new urban centers</i> <ul style="list-style-type: none"> - (Historical) city centers - New urban centers - Centers of new cities - Central location - Large scale complexity - High density
Off city center	<i>Areas surrounding the city center with a compact and monofunctional living environment</i> <ul style="list-style-type: none"> - Compact surrounding areas of the city center - The urban neighborhood - Monofunctional
Green-urban	<i>Monofunctional living environment with spacious structures and greenery in larger municipalities</i> <ul style="list-style-type: none"> - City expansions - Urban growth centers - House with garden - Surrounding greenery - Spacious structures
Village-central	<i>Multifunctional (historical) village centers</i> <ul style="list-style-type: none"> - (Historical) centers - Small scale complexity - Smaller municipalities - Multifunctional
Rural living	<i>Low density in a mainly green area with few amenities</i> <ul style="list-style-type: none"> - Villa quarters - Scenery living - Low density - Lots of greenery - No amenities

Living environments in Brainport region

In Brainport region, a high diversity of living environments is available, as is shown in figure 5. Based on the living environments, Brainport is quite comparable to the Netherlands in total, but the percentage of green-urban living environments is quite higher.

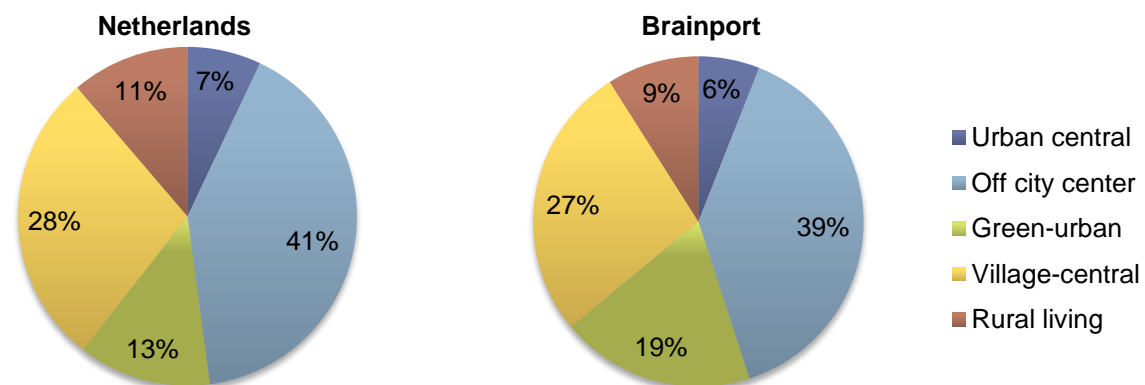


Figure 5. Types of living environments in the Netherlands and Brainport region. Based on ABF Research (2010), Leeuwen et al. (2010), Urhahn Urban Design & RIGO Research en Advies (2010).

Within Brainport, the available living environments differ per municipality as is shown in table 3. As could be expected, the rural living environments are not present in the cities of Eindhoven and Helmond whereas the more urban living environments are not present in the surrounding rural areas. This means that although one could have an initial preference for a certain living environment, other variables such as the time willing to travel to work could influence the actual housing choice.

Table 3. *Living environments in Brainport Region. (In: Urhahn Urban Design & RIGO Research en Advies, 2010 based on ABF Research, 2010)*

	Eindhoven	Helmond	Surrounding municipalities	De Kempen	De Peel	Total
Urban central	6%	5%	13%	0%	0%	6%
Off city center	82%	64%	15%	0%	0%	39%
Green-urban	12%	29%	45%	0%	0%	19%
Village-central	0%	0%	24%	60%	78%	27%
Rural living	0%	1%	4%	40%	22%	9%
Total (no. of dwellings)	106.230	37.830	84.130	31.640	58.150	317.990

2.4. CONCLUSIONS

Brainport Eindhoven is located in the South of the Netherlands and functions as one of the three core areas of the Dutch economy. It is focused on the high-tech industry, where it is difficult to attain enough highly skilled employees from within the Netherlands. Therefore, the international population in Brainport is increasing fast. Highly educated people who specifically come to Brainport to work for a certain company are known as (international) knowledge workers. In this study, the focus is on both international knowledge workers and international students, as their migration process is quite similar and good distributions are available for both groups. The term expatriates is used to describe the whole target group for this study.

Reality shows that the amount of international knowledge workers in Brainport is increasing dramatically. However, the exact number is still unknown and current estimates range from 12,500 till 30,000. A more accurate estimation can be given of the number of international students in Eindhoven, about 1500. These expatriates come from all over the world with the highest amount from respectively China, India and Iran. Also within the European Union, there is a lot of traffic to Brainport Eindhoven.

One of the important aspects in creating an attractive environment for these expatriates is creating an attractive residential environment. Housing in the Netherlands can be quite different from other countries. In general, it could be perceived as small and pricy due to the high population density. The most common housing types are: a studio apartment, a two- or three bedroom apartment, a terraced house, a semi-detached house and a detached house. In this study the Dutch living environments will be divided into 5 categories, based on the division of ABF (1996) by the degree of urbanization: urban central, off city center, green-urban, central-village and rural.

3. THEORETICAL BACKGROUND

In order to answer the first three sub research questions, a literature study was conducted. In this chapter, information is gathered about the different types of expatriates and their characteristics, the expatriation process and the housing choice behavior of expatriates. The following research questions will be answered subsequently in paragraph 3.1, paragraph 3.2 and paragraph 3.3:

Q1. *What are the characteristics of different types of expatriates? (§3.1)*

Q2. *How does the migration process for highly skilled migrants work? (§3.2)*

Q3. *What is the housing choice behavior of the target group? (§3.3)*

3.1. EXPATRIATES CHARACTERISTICS

To better understand the heterogenous group of expats, in this paragraph, previously conducted interviews by the municipality of Eindhoven will be discussed along with a literature study to distinguish different types of expats. The aim of this paragraph is to answer the question: *What are the characteristics of different types of expatriates?*

3.1.1. Previous research on expatriates in Brainport region

Interviews with leading companies in Brainport Region, conducted by the municipality of Eindhoven (Vriens & van Dam, 2011), show that attracting international knowledge workers is of great importance to get enough qualified personnel and that the housing process differs per company. Some companies provide turnkey housing, others provide housing for the first period of stay. When a company does not provide housing, they almost always offer the first night stay in a hotel.

According to research by Buiskool & Grijpstra (2006), most expatriates in the Eindhoven region are male (70%) and relatively young, the latter being determined by the relatively large and younger group working at the Eindhoven University of Technology (including PhD students). While 35 percent of the respondents did not have a partner or children and 27 percent did not bring their partner or children to Brainport region, 17 percent stated that they brought both partner and children and 14 percent stated they only brought their partner. Therefore, not only the international knowledge workers themselves are important in providing suitable housing, but also their families.

Most expatriates are interested in rental dwellings. Dependent on function and income, according to Vriens & Dam (2011) expatriates in the Eindhoven region are willing to pay rent varying from €550,- till €700,-. However, most expatriates experience difficulties finding suitable housing for this price.

It turns out that differences in housing preferences between the subgroups within expatriates are large. Hence, it seems logical to make a distinction between these different groups in order to get better insight in the housing choice behavior and preferences of the target group. Therefore, in the next paragraph, the attempt will be made to get a better insight in the different types of expats and their characteristics

3.1.2. Types of highly skilled migrants

Due to differences in motives for migration, cultural backgrounds and values, it is obvious that not all expatriates are the same. In order to gain better sight on this heterogeneous group, the typology by Mahroum (2002) will be used. He distinguishes five types of highly skilled migrants, based on profession and the purpose of their stay:

- *Accidental tourists:*
managers and executives for whom the decision to migrate is often temporary and initiated by their employers. Migration is motivated by intra company transfers, driven by mergers or expansion or part of career development plans.
- *Economy-class passengers:*
engineers and technicians are dubbed 'economy-class passengers', because they move to destinations where their skills are most needed and best rewarded. Loyalty to companies or countries is at best secondary.
- *Explorers:*
the group of highly skilled entrepreneurs. These migrants are valuable as they bring new businesses, capital and ideas. Explorers are attracted by supportive government policy, flexible labor markets, low taxes, availability of (venture) capital and the openness of markets.
- *Pilgrims:*
academics and scientists are attracted by the type of work, academic freedom and working conditions. This includes the reputation of a discipline or area of research, and the international prestige of an institution.
- *Passengers:*
students hitchhike via existing networks of governmental, intergovernmental and inter-institutional policies. Reputations of universities are important, as are practical issues like grants and student housing. Students can be an easy route to obtaining highly skilled personnel.

All these types of expatriates can be relevant for Brainport region. Probably the most obvious, are the economy-class passengers who come to Brainport due to its specific expertise and technical focus. Since Brainport is still growing, some multinational companies start an extra location in Brainport. This commonly brings the first type of highly skilled migrants as described by Mahroum: accidental tourists. Also, new start-up companies are seeking to establish in Brainport region. This brings the third type of expatriates: explorers. Both pilgrims and passengers can be attracted to the region due to presence of the Technical University, the Fontys University of Applied sciences and well-known research institutes.

3.2. EXPATRIATION

In order to understand the housing process of international knowledge workers, the process of expatriation has to be taken into account. Motives for expatriation and the difficulty to adapt to a foreign country can be quite different per person and origin country. In this paragraph this subjects will be

described and the following research question will be answered: How does the migration process of highly skilled migrants work?

3.2.1. Process of migration

According to Bhugra (2001), the process of migration can be broadly described in three stages: pre-migration, migration and post-migration. The first stage is before departure and involves the decision and preparation to move. The second stage includes the actual migration, when the physical relocation occurs. The third stage is the one of integration where social and cultural rules and new roles can be learned. This stage is defined as the “absorption of the immigrant within the social and cultural framework of the new society” In this research on housing of expatriates in Brainport, the third stage will also include the end of assignment, where the expatriate either decides to move back home or to stay and settle in the Netherlands.

3.2.2. Motives for migration

Motives for labor migration are widely studied. However, according to Berkhout et al. (2010) the focus on highly skilled labor migration is relatively new. Theories of labor migration can be divided into two different approaches: economic and non-economic, more sociological, approaches (Lowell, 2009).

Economical migration theories state that migration can best be explained by differences in economical utility (mostly differences in income, but also non-measurable factors such as happiness). Hicks (1932), was the first to publish such ideas. Later, Stark (1991) found that migration is a way of risk spreading and that therefore family members are determinative for migration. Piore (1979) explains labor migration by a dual labor market. Highly developed countries can't find the personnel for low skilled and low status jobs and therefore hire migrants for this work. These last two theories appear to be valid for developing countries and do not seem relevant for highly skilled migrants. Theories that do seem relevant for highly skilled migrants are made by Cervantes (2004) and Mahroum (2000). They state that over the last years, the expansion policy of large multinationals seems to cause an increasingly growing population of labor migrants. Also, network theories, the so called 'economies of scale' seem to be important. When multiple high-tech companies are present, they function as a magnet in attracting other new, innovative companies.

There are also approaches that are based on non-economic factors. First, a world system approach by for example Martin (2002), states that the historical structure of the world economy is underlying of migration patterns. Due to for example colonization, a dependency relationship between countries is still present today. More important are social network theories. Existing contacts in the country of destination reduce costs and risks for migrants. Therefore, Massey & Zenteno (1999) state that the migration of specific ethnical groups is partly path-dependent. Besides social network theories, theories of networks of specialists also exist. Mahroum (2000) and Cervantes (2004) show that scientists and researchers, but also other highly skilled immigrants, migrate to hubs of expertise to learn and to seize career opportunities. Finally, some theories state that policy matters, but according to Berkhout et al. (2010), this is not systematically studied yet.

According to Berkhout et al. (201), the decision to migrate is determined by both push factors and pull factors. Push factors are factors that cause a migrant wanting to leave its home country; pull factors are the factors that attract a migrant to its destination country. As a destination region, Brainport can only influence its pull factors in order to attract highly-skilled migrants. According to Berkhout et al., international knowledge workers are attracted by the following pull factors:

- Work and career possibilities
- Knowledge infrastructure
- Living environment
- Admission policy

Although it seems apparent that most highly skilled migrants first choose a job and then choose a country, the secondary conditions in a destination country are still important in the decision to migrate to a certain country. In this study, the goal is to gain insight in the third variable as mentioned by Berkhout et al.: living environment and especially focuses on the housing career during the expatriation process.

3.2.3. Cultural adjustment

Moving to another country with its different culture and/or language can lead to difficulties in the adjustment process for immigrants and can even cause a culture shock. The concept of expatriate adjustment has therefore been frequently researched. In previous literature, two different concepts of expatriate adjustment can be distinguished. The first concept defines adjustment as a subjective perception. It can generally be defined as the degree of psychological comfort experienced by the expatriate within the new society (e.g. Black, 1988; Black & Mendenhall, 1991; Feldman and Tompson, 1993; McEvoy & Parker, 1993; Puck et al., 2003; Selmer, 2002). The second concept focuses on objective measures of success like: performance criteria or turnover-rates of expatriates. (e.g. Early, 1987; Edmond, 2002)

In this study, the first, subjective, concept of adjustment will be used. In this matter, the multifaceted framework as proposed by Black, Mendenhall & Oddou (1991) will be used to explain expatriate adjustment:

- Adjustment to work
- Adjustment to interacting with host nationals
- Adjustment to general environment

It turns out that almost every expatriate experiences a similar process, as long as the expatriation period is long enough. Lysgaard (1955) was the first to recognize a U-shape curve in the cultural adjustment of expatriates. He found that the extent to which one can adapt to a foreign situation not only depends on the properties of person and situation but that adjustment is also a time process. The duration of the expatriation period was of great influence on the degree of adaption. Lysgaard found certain stages of adjustment. When one first arrives, adjustment is felt to be easy and successful. Later,

when one starts to feel lonely and the daily routine starts to occur; adjustment is felt to be really hard. Finally, one begins to feel better adjusted again, becoming more integrated into the foreign community.

Later, different studies have acknowledged the U-shaped adjustment curve by Lysgaard and adapted it in several ways. For example, Hofstede (1991) and McEvoy and Parker (1995) both found four stages in the cultural adjustment process. Although named and characterized rather differently; both listed an initial period of happiness and adjustment, followed by a period of cultural shock and later, a stage where adjustment is gradually improving, finalized by the last stage where one feels at home in its new country and maximum adjustment has been reached. These four stages are characterized by a moderate, low, moderate, and finally a high level of adjustment as showed in figure 6. In this study, the typology of McEvoy and Parker (1995) will be used:

1. Honeymoon

The excitement period just after arrival when an expatriate is fascinated by the new and exciting sights and sounds offered by the host country. Cultural differences are exciting as the new culture is being explored and cultural differences with the own culture are still appreciated.

2. Cultural shock

When daily life starts to occur and the expatriate has to cope with living in the new culture on a regular basis, the “honeymoon period” is over and culture shock can appear. Most expatriates start to feel disillusioned and frustrated in their host country due to cultural differences and lack of understanding. Communication difficulties can disturb building new relationships and can contribute to a feeling of loneliness, homesickness and disconnection.

3. Adjustment

When an expatriate is able to overcome the problems occurred in the cultural shock stage, gradual adaption to the new culture can take place. One starts to understand the new culture better and starts to feel comfortable. Behavior becomes appropriate according to the cultural norms of the host country.

4. Mastery

The final adjustment stage where an expatriate is able to function effectively in the new culture whilst retaining its own cultural values and beliefs.

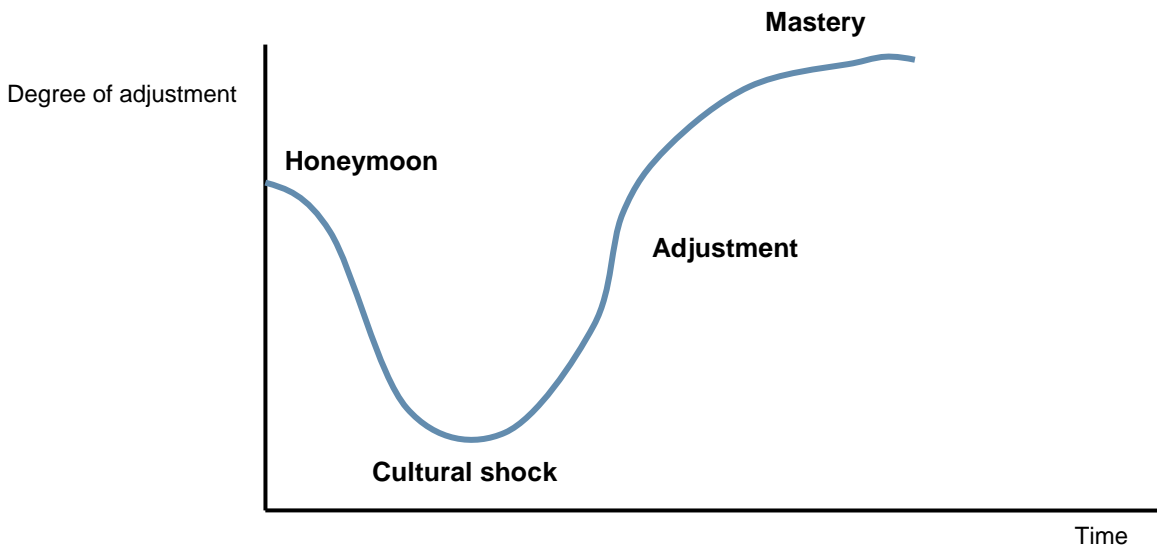


Figure 6. *The U-curve of cross-cultural adjustment. Based on Black & Mendenhall (1991) and McEvoy & Parker (1995)*

3.3. EXPATRIATES HOUSING CHOICE BEHAVIOR

Housing is a unique, complex product as it is highly expensive, durable, heterogeneous and location specific. Differences in structural characteristics, neighborhood characteristics and location ensure a broad range of different types of houses (Jansen, Coolen & Goetgeluk, 2011). Therefore, when a person has to choose a house, a product has to be selected out of a large number of extremely heterogeneous alternatives. In the case of expatriates, the housing choice process can be even more difficult due to the fact that they have less information available and do not know the local housing market as well as Dutch inhabitants. Therefore, in this paragraph the complex process of housing choice decision making will be illustrated and the following question will be answered: What is the housing choice behavior of the target group?

3.3.1. Residential decision making process

According to Boyle, Halfacree & Robinson (1998); in the residential decision making process, two phases can be distinguished: (1) the evaluation of the current residence and (2) the search for and selection of a new residence.

Since the definition of an (international) knowledge worker is or international student that one goes to another place in order to work or study for a specific company or institute, moving is initially not a free standing choice but more an additional consequence. Therefore, in the case of the first housing situation, evaluation of the current residence is not an issue and only the housing choice process will occur. Only if the expatriate considers moving during its expatriation period, the process of residential mobility and housing satisfaction applies. This process is illustrated in figure 7. The dashed line symbolizes the housing choice process when moving is necessary, on arrival and when the first

housing situation is temporarily arranged. The solid thick line represents the full housing choice process, when housing satisfaction also occurs and households have to decide whether they want to move or not. This process of relocation consideration can occur multiple times and determines a household's housing career.

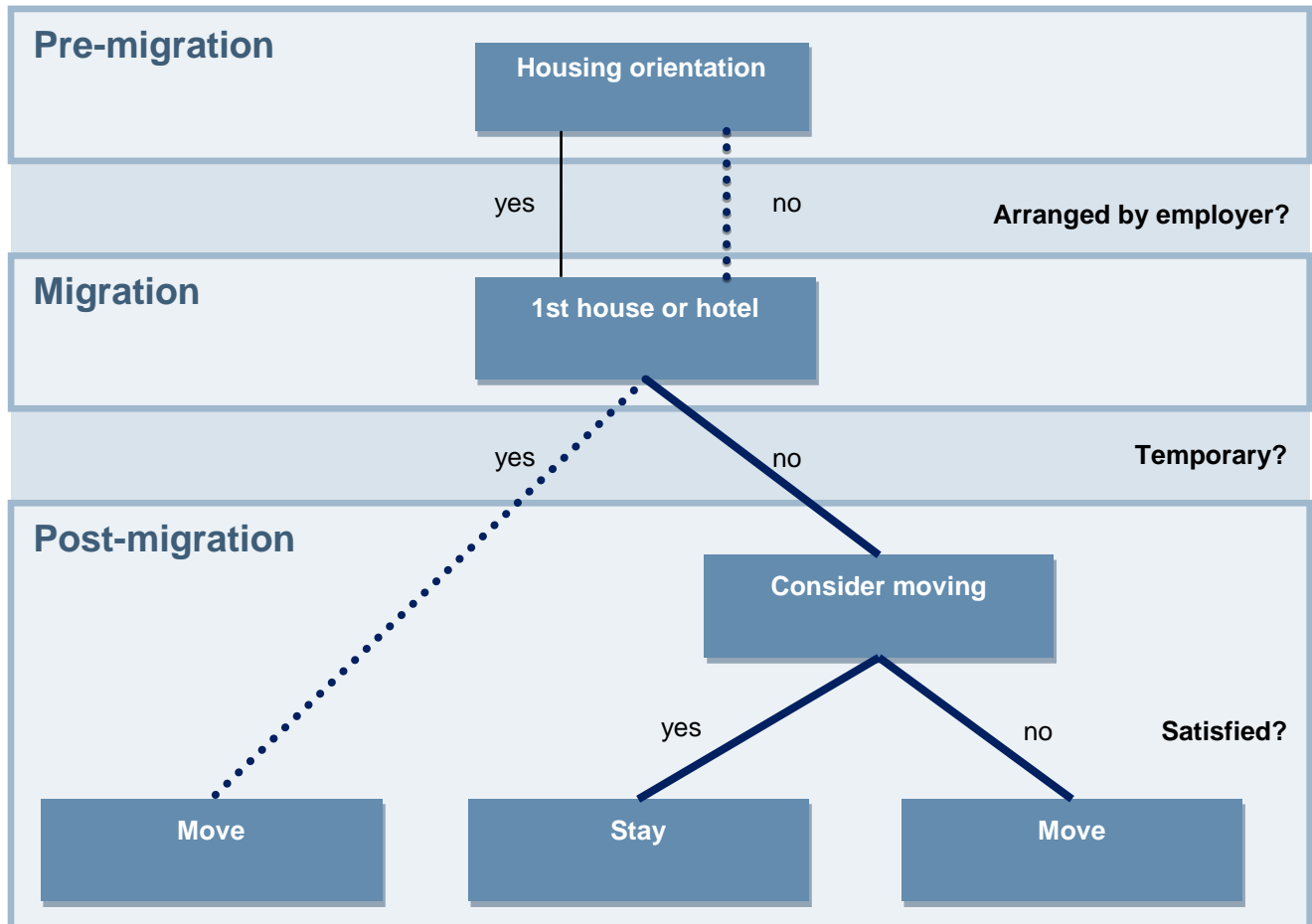


Figure 7. Residential mobility of expatriates during the housing sequence.

3.3.2. Choosing a new residence

Research on residential consumer behavior in the Netherlands by Blije et al. (2009) has shown that in general, people will state their ideal house as a cheap, new, detached home built in a traditional style with a large amount of space within the house and a big garden. This house should be located in a rural environment with lots of greenery and be surrounded by a sufficient amount of amenities, parking space and close to family and friends.

Although it seems practically impossible to find such a house in general, according to Bos & de Bruin (2007) it will definitely not correspond with most people's financial and personal situations. Therefore, when a household decides to move, housing preferences need to become more realistic due to the present constraints. In almost any case, concessions have to be made, whereby some wishes outweigh the others.

Since, in most cases, it is not possible to attain a house that meets the initial preference, a household has to adapt its ideal image to the achievable opportunities. Therefore, substitution behavior will occur and the ideal image will be turned into an actual housing choice in steps (Boumeester, 2004). As is shown in figure 8, the ideal image will be turned into an aspiration image where the set of preferences will be applied to the situation that the household regards achievable. Between the aspiration image and the actual housing choice, a household will decide which concessions are acceptable to them in order to find a suitable dwelling (Priemus, 1969).

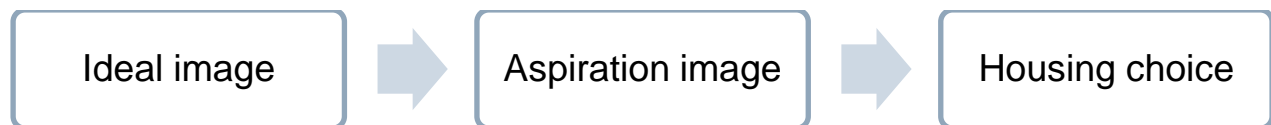


Figure 8. *Substitution behavior in housing. Based on Boumeester (2004) and Hoeven (2013)*

Based on previous research on the housing of international knowledge workers in Brainport, the presumption originated that as the length of stay gets longer, the housing choice behavior of expatriates will increasingly be similar to that of other Dutch knowledge workers, due to cultural adaption and increasing cognitive resources, such as the increased level of information gathered. Perceptions about the Dutch housing market will become more realistic and a correct aspiration image will easier emerge.

Housing choice determinants

Housing preference is mainly based on characteristics of the (1) dwelling, (2) living environment and (3) household. The influence of different housing characteristics has been studied extensively. Price and size of the dwelling are considered to influence the housing preference significantly (Dieleman, 2001; Lee & Waddell, 2010; Lindberg et al., 1989; Louviere & Timmermans, 1990; Molin et al., 1996; Molin et al., 2001; Timmermans et al., 1992).

Also, aspects of the living environment such as greenery and the availability of different facilities are considered important (Kim et al., 2005; Louviere & Timmermans, 1990; Molin et al., 1996). Although considered less important, social and economic ties and relative location aspects, such as accessibility and travel time to shopping centers, schools and public transportation are also of influence (Kim et al., 2005; Lee & Waddell, 2010; Lindberg et al., 1989; Louviere & Timmermans, 1990; Molin et al., 2001).

Besides characteristics of the property, socio-demographics of the housing seekers also affect the housing choice. Household income is such a characteristic (Geist & McManus, 2008; Molin et al., 2001; Timmermans et al., 1992), but also age (Geist & McManus, 2008; Lee et al., 1994; Lee & Waddell, 2010; Timmermans et al., 1992), gender (Timmermans et al., 1992), employment status (Dieleman, 2001), education level (Timmermans et al., 1992) and household composition (Lee & Waddell, 2010; Molin et al., 2001) are found to predict housing choice behavior.

Lately, the influence of psychological variables such as human values on housing choice behavior has been studied and although not much research on this topic has been done yet, it seems to be a

predictor as well (Coolen & Hoekstra, 2001; Coolen et al., 2002; Jansen et al., 2011; Lindberg et al., 1989). According to Dahya (1974) and Phillips (1981) people find a certain lifestyle and the proximity to similar people important. This counts especially for immigrants who might be looking for similar cultural values.

The available resources a household has determine the actual housing options and reachable living environments. One of these is financial resources, including income, security of income and capital assets. In the housing market, income is considered to determine the ability to close the gap between the current housing situation and the desired housing situation (Deurlo et al. 1990, Dieleman et al, 1989). The other important aspect is cognitive resources. Education level, skills and knowledge of the local market are important in this matter (Kempen & van Weesep, 1998). According to Jansen et al. (2011), also personal constraints such as time constraints, motivation, culture and perception can influence the number of realistic housing options.

Obviously, a house cannot be chosen if it does not exist. Therefore, market constraints such as the available housing supply and composition of the housing stock are of influence in the housing choice process. Also economic issues as the current state of the local housing market can be opportunities or constraints in the housing choice process.

Based on the reviewed literature, an overview of the important determinants in housing choice behavior is given in table 4. The table is set in two columns. The left column shows the attributes that influence housing preference, the opportunities and constraints described in the right column determine the actual housing options available.

These attributes are interrelated and cannot be seen separate as explained by van Kempen & van Weesep (1998). As they state, every household ranks its housing preferences differently and in a subjective hierarchy. Although one might want an apartment in the middle of the city and another one might want a rural villa with a big garden, other characteristics such as distance to work might be more important to some households than the housing type. This hierarchy is dynamic and changes when a household's life-course career changes. It could also alter when the composition of the housing stock changes. For example, when new attractive areas are being developed and high-income households move there, other parts of the city become available for households with less income. This way, the dynamics of the city change and this could lead to other preferences and potential options of all households as well.

Table 4. *Determinants in housing choice behavior*

Preferences	Available housing options
Dwelling <ul style="list-style-type: none"> - Price - Size - Type of dwelling - Facilities included 	Financial resources <ul style="list-style-type: none"> - Income - Security of income - Capital assets
Living environment <ul style="list-style-type: none"> - Greenery - Facilities - Interaction with neighbors - Distance to work - Appearance - Distance to other family members and friends - Cultural place attachment - Safety 	Cognitive resources <ul style="list-style-type: none"> - Education level - Skills - Knowledge of the local market - Time - Motivation - Culture - Perception
Household characteristics <ul style="list-style-type: none"> - Household composition - Age - Gender - Employment status - Education level - Psychological values - Previous housing situations 	Housing stock <ul style="list-style-type: none"> - Amount of supply available - Composition of the housing stock - Local market circumstances

3.3.3. Evaluation of the current residence

Since housing is a very complex product, a household does not move very often and residential mobility is a rare event (Coulter et al, 2010). Although the residential situation can be dissatisfactory, a strong trigger is needed to actually make the decision to move. As described in paragraph 3.3.1, in the case of the first housing situation for expatriates, the migration is the trigger and moving is an additional consequence. However, if the expatriate is not satisfied with his or her first housing situation in the Netherlands he or she can decide to reevaluate the current residence and make the decision to either stay in this house or move to another house. According to Canter & Rees (1982), the extent to which a household is satisfied with its current housing situation is determined by the characteristics of the dwelling, the living environment and household characteristics.

A mismatch between a household's residential needs and the current housing situation can occur when a change in life-course encounters. In that case, the household can decide to move to another residence. This was first recognized by Rossi (1980, orig. 1955), when he found that a change in residence was related to a household's or individuals life-course change. Later, four life-course careers are defined in housing choice research: labor career, family career, educational career and housing career. Changes in each of these life-course careers affect the probability of moving (Devisch, 2008; Verhoeven, 2010).

Although these kinds of changes can lead to the reconsideration of the housing situation, a household will only decide to take action when the discrepancy between the desired and current situation is significant.

3.4. CONCLUSIONS

Of course, not all expatriates are the same. Different types of expatriates are distinguished in order to answer the following research question:

Q1. What are the characteristics of different types of expatriates?

To make a specific differentiation the typology of Mahroum will be used. He distinguishes five groups of expatriates based on profession and reason for migration: 1. Accidental tourists, 2. Economy class passengers, 3. Explorers, 4. Pilgrims and 5. Passengers. An overview of the different characteristics per type of expatriate is given in table 5.

Table 5. *Types of expatriates and their characteristics, based on Mahroum (2002)*

Type of expatriate	Type of profession	Reason to move
Accidental tourists	managers and executives	Temporary migration, initiated by employers
Economy-class passengers	engineers and technicians	Migration because skills are most needed and best rewarded in a certain place
Explorers	highly skilled entrepreneurs	attracted by supportive government policy, flexible labor markets, low taxes, availability of (venture) capital and the openness of markets
Pilgrims	academics and scientists	Attracted by the reputation of a discipline or area of research, and the international prestige of an institution.
Passengers	students	Reputations of universities are important, as are practical issues like grants and student housing

Besides characteristics of the expatriate, characteristics of the migration process could also be of influence on the housing choice behavior of expatriates. Therefore, a literature study is conducted to see how the expatriation period works. Hereby, the following research question is answered:

Q2. How does the migration process for highly skilled migrants work?

According to Bhugra (2001), the process of migration can be broadly described in three stages: pre-migration, migration and post-migration. The first stage, before departure, involves the decision and preparation to move. The second stage includes the actual migration, when the physical relocation occurs. The third stage is the one of integration where social and cultural rules and new roles can be learned. During the second and third stage, different levels of cultural adjustment will occur. Lysgaard

was the first to found a U-shape curve of adjustment level over time. For this study, the typology by McEvoy & Parker will be used. They distinguish 4 levels of adjustment: 1. Honeymoon, 2. Cultural shock, 3. Adjustment and 4. Mastery. Since the borders of these stages are not clear and not the same for each person, these stages will not be used during data analysis, but the knowledge will only be taken into account when interpreting the results. To fully understand the housing choice behavior of expatriates, first, literature on housing choice behavior in general is conducted. Second, this information is applied to the target group: expatriates in order to answer the following research question:

Q3. What is the housing choice behavior of the target group?

During the residential decision making process, according to Boyle et al (1998), two phases can be distinguished: (1) the evaluation of the current residence and (2) the search for and selection of a new residence. For expatriates, during their first housing search only the second phase applies, since the decision to move is a consequence of the migration. During their stay in Brainport, they can decide to move to another dwelling and then the full housing decision making process occurs. Therefore, the survey will be set up in a different way for the first housing situation than for the possible following housing situations.

When choosing a new residence, in most cases, it is not possible to attain a house that meets the initial preference; a household has to adapt its ideal image to the achievable opportunities. Therefore, substitution behavior will occur and the ideal image will be turned into an actual housing choice in three steps, according to Boumeester and Hoeven: 1. Ideal image, 2. Aspiration image and 3. Housing choice. Especially for expatriates the step from the ideal image to an aspiration image is very important since they might not immediately understand the Dutch housing conditions and need some time to get a better market feeling.

Based on the reviewed literature, attributes of the housing preferences will be based on characteristics of the dwelling, the living environment and household characteristics. To get a better insight in the present constraints, questions will be asked about financial and cognitive resources. After data analysis, the results will be related to the current housing stock to get a full image of the housing choice behavior and possibilities of expatriates.

In this chapter, the first three research questions are answered and provide an overview of the most important influences and attributes on housing choice behavior. This gives a framework to set up the survey and determine survey questions and answer categories. However, more information has to be gained in order to get a full insight in the important aspects of the housing choice behavior of expatriates, before any relations can be tested. Therefore, in the next chapter, several in depth interviews are described that also deliver input for the survey. Furthermore, the research methodology will be discussed.

4. DATA COLLECTION

In the previous chapter, information is gained about the individual aspects: expatriates characteristics, the migration process and the housing choice behavior of expatriates. However, before any tests can be conducted to see whether there are any relations between the three, a good research methodology has to be chosen. Furthermore, more information has to be gained to make sure that nothing important is forgotten. Therefore, in this chapter, an overview of the used methodologies is given along with a description of several in depth interviews and the survey design.

4.1. METHODOLOGY

In order to answer the mentioned research questions, both qualitative and quantitative research have to be conducted as is shown in figure 9. First, several interviews will be held and expat meetings will be attended in order to get a good image of the issues that expats have to deal with when searching for a house in Eindhoven region. This input will be used, along with the previous described literature review, to determine the survey design, in particular the questions to ask and answer categories. After conducting the survey, results can be enriched by asking people specific questions about remarkable findings. This will be done by starting discussions on the most active social media websites. Also, the survey will provide multiple opportunities to fill in open comments and share experiences about the housing choice process.



Figure 9. Research methodology

4.2. IN DEPTH INTERVIEWS

Several interviews with the subject experts were conducted and expat meetings were attended in order to gain better insight in the group of expatriates in Brainport and to find out what the most common problems are regarding housing. This shows the core issues and helps to determine the necessary research focus. The gained information will also be used as input to determine the questions to be asked in the survey.

4.2.1. Interviews and attended meetings

A full program of the meetings and the notes taken in the interviews can be found in appendix A

Joep Berghuis, Municipality of Eindhoven

First, an interview with a representative of the municipality of Eindhoven who is involved in research on the housing of international knowledge workers in the region was conducted on July 4, 2013. Results of previous research by the municipality on the housing choice behavior of international knowledge workers by Vriens & van Dam (2011) were discussed. According to this research, the preferred housing situations (fully furnished, rental dwellings in the city center) are rarely available for the price the respondents are willing to pay (about 700 euro a month including service costs and utilities). This is especially true for international knowledge workers who earn less and mostly work for scientific institutes, such as the Eindhoven University of Technology. Housing associations cannot fill this gap, since costs for these types of housing are very high and international knowledge workers do not belong to their primary target group. A better communication and publicity about housing in Eindhoven is needed, especially when the people are still in their home country. Furthermore, the representative of the municipality emphasized the importance of a good differentiation of the target group in order to attain useable results. He also explained that most problems with housing probably occur with the first housing situation, at the moment of migration. Later, as the length of stay gets longer, the housing choice behavior of international knowledge workers will become more similar to that of Dutch inhabitants.

Willem van Hoorn, Advisor internationalization at Eindhoven University of Technology

Second, an interview with Willem van Hoorn, advisor internationalization for the Department for personnel and organization (DPO) at the Eindhoven University of Technology was held on August 22, 2013. His work is to make the new TU/e employees feel at home in Eindhoven and he organizes several activities for TU/e employees to facilitate this. As he explained, in most cases when an expatriate returns home prematurely, this is not work related but personally. If an expatriate is not able to settle down and be satisfied with his or her situation, he or she may begin to feel lonely and get homesick. This is not only true for the employee himself, but also for the accompanying partner. Therefore, TU/e finds it very important to make good arrangements to facilitate the migration process. Providing suitable housing or helping to find suitable housing is an important aspect in this process. He also mentions problems regarding to housing for students and PhD students, since their income is too low to rent on the commercial market. Furthermore, the shortage of affordable rental housing units with own facilities increases.

International introduction day at TU/e, organized by Willem van Hoorn

To meet new expatriates in Eindhoven, the international introduction day for new employees of TU/e was attended on September 6, 2013. On this day, it became clear that expatriates can go through a heavy migration process that could affect their personal well-being. In the first few weeks all new impressions have to be taken in and it could get overwhelming. Arranging housing is just one of the many aspects a new international has to deal with and this process can be experienced as confusing. Most people spoken with indicated that it was very hard to find housing when they were still in their home country. They did not know where to go and could only arrange things by email or phone. The

fact that they could not see the property before the final decision (and payment) had to be made, made it difficult to make good agreements. Furthermore, they experienced several other obstacles such as: websites of many real estate agents and contracts were only available in Dutch, high fees from real estate agents and time constraints lead to a difficult position where they had to except the first (and only) housing situation they could get.

Anke Sweere, graduation student HBO Nederland, research conducted for Ballast Nedam

On 24 September 2014, an inspiration lecture about the housing of expatriates, organized by Anke Sweere was attended. For her graduation project at HBO Nederland she did an internship at Ballast Nedam and conducted research aiming to find out how the region can be made more attractive for expatriates. All parties involved in her research were invited to attend the inspiration lecture at the Hub for expats in Eindhoven. As she found out, Eindhoven is already a very attractive place to work for high tech oriented international knowledge workers. However, living in Eindhoven can be made more attractive. Although the current housing stock is sufficient for the demand at the moment, a qualitative mismatch exists. The available housing situations do not meet the preferences of expatriates in terms of location, size and price. Therefore, she suggests to develop a: “Expat building” designed for expatriates who are either a single- or two person household. According to Anke Sweere (2013), this concept offers the following benefits: a possibility for short term lease, finding suitable housing will be easier and better accessible, there will be direct contact with other expatriates and this offers the opportunity to live together with likeminded people. Improving the housing situation for expatriates could also strengthen the power of the region.

4.2.2. Research input

The interviews described above gave a good insight in the migration process of expatriates in Eindhoven and helped to create a clear research focus. It turned out that most problems occur in the first period of stay in Brainport. People do not yet know where to go in order to arrange important aspects such as housing and general adjustment problems can occur. Therefore, it is important to include characteristics of the migration process in the study. This way, a better insight in the knowledge constraints about the Dutch housing market at the time of migration can be obtained. Another aspect gained is the importance of good target group differentiation in order to attain useable results.

Furthermore, it became clear that a quantitative housing shortage exists in the lower priced segment. Therefore, people with a low income have trouble finding suitable housing. This is especially true for PhD and PostDoc students and students. Since it is easy to include international students in the survey via the existing distribution channels and it seems like students have to deal with similar housing issues as international knowledge workers, they will also be included in the survey.

Although all the people spoken with report similar problems such as a high price and low availability, they come up with quite different solutions. To test the concept of clustered living situations for expats, such as “the expat building”, questions will be included in the survey that ask the expatriates if they find it important to live close to other expatriates.

4.3. SURVEY

A survey will be conducted to answer the last two research questions:

Q1. Is there a relation between the characteristics of different groups of expatriates and their housing choice behavior?

Q2. Are the characteristics of the migration process of influence on the housing choice behavior of expatriates?

A survey is chosen as a research method, because it is a convenient way to reach a relatively large amount of people in a short time (Baarda & de Goede, 2006). It is based on the information derived from the literature study and in depth interviews. It will be a web-based questionnaire, designed with the "Berg enquête systeem" (vragen1.ddss.nl), developed by the Design and decision support systems group at the Eindhoven University of Technology.

4.3.1. Distribution

Since the survey design is quite complex and contains a lot of cross-references, it will only be distributed online. This way, respondents only get to see the sections and questions that are relevant to them which shortens the minimum completion time. Another reason to choose only an online approach is the ease of data processing afterwards.

Since the amount of expatriates living in Eindhoven region is unknown, it is impossible to determine the necessary sample size. Furthermore, no institution, including the municipality has the correct numbers and contact information of the total group. Therefore, two types of online distribution channels were chosen:

- Direct approach via network organizations and employers
(ASML, TU/e, Fontys, Holland Expat Center South, High Tech Campus)
- Indirect approach via social media
(Groups related to expats in Brainport on Facebook and LinkedIn)

A complete overview of the distribution channels and the number of persons reached per channel is given in appendix B. Unfortunately, the total number of unique persons that has been reached is unknown, because there is a good chance that people are member of more than one of these groups. To maximize the number of respondents, three dinner gift cards worth 50 euros were raffled among the participants.

Data was collected during three weeks from 22 October 2013 till 10 November 2013. Via all channels a first request and one reminder was sent. An example of this invitation is given in appendix C. After the first results were scanned, some discussions were started on the most popular social media pages together with an extra reminder to get a better insight and attract more attention for the survey.

4.3.2. Language

Since the international population in Brainport region consists of people with very diverse cultural backgrounds and all companies use English as the common language, the survey will only be distributed in English.

Since many concepts regarding the local housing market are typically Dutch and not well known in other countries, all difficult terms were explained in the survey when necessary. Examples are: Dutch types of houses and living environments. A simplified form of English was used, so most people can understand all questions easily. The survey was first tested by a native English speaker and then by two international PhD students of the Real Estate department at Eindhoven University of Technology.

4.3.3. Design

The survey is distributed online, so automatic routing can be applied and question sets can be customized for each respondent. The attribute levels are pre-coded as much as possible to shorten the completion time. However, in each section possible open comments will be allowed.

As found in the literature study, the migration process broadly consists of three phases: 1. pre-migration, 2. migration and 3. post-migration. The survey will be set up in this order, where respondents will first answer the questions about the period of arrival. This chronological order is chosen, so the respondent can answer the questions following its decision pattern at the time.

Socio-demographic information will be asked at the end, so respondents won't get bored at the beginning and are possibly more willing to fill in this information after they have filled in the survey and better understand the purpose of these questions. At the beginning of the survey three questions will be asked to see whether the respondent belongs to the target group. If not, the survey will be ended and no time will be wasted.

An overview of the survey design is given in figure 10. A full overview of the survey is given in appendix D. More information about measurements and the underlying literature is given in the next paragraph: operationalization.

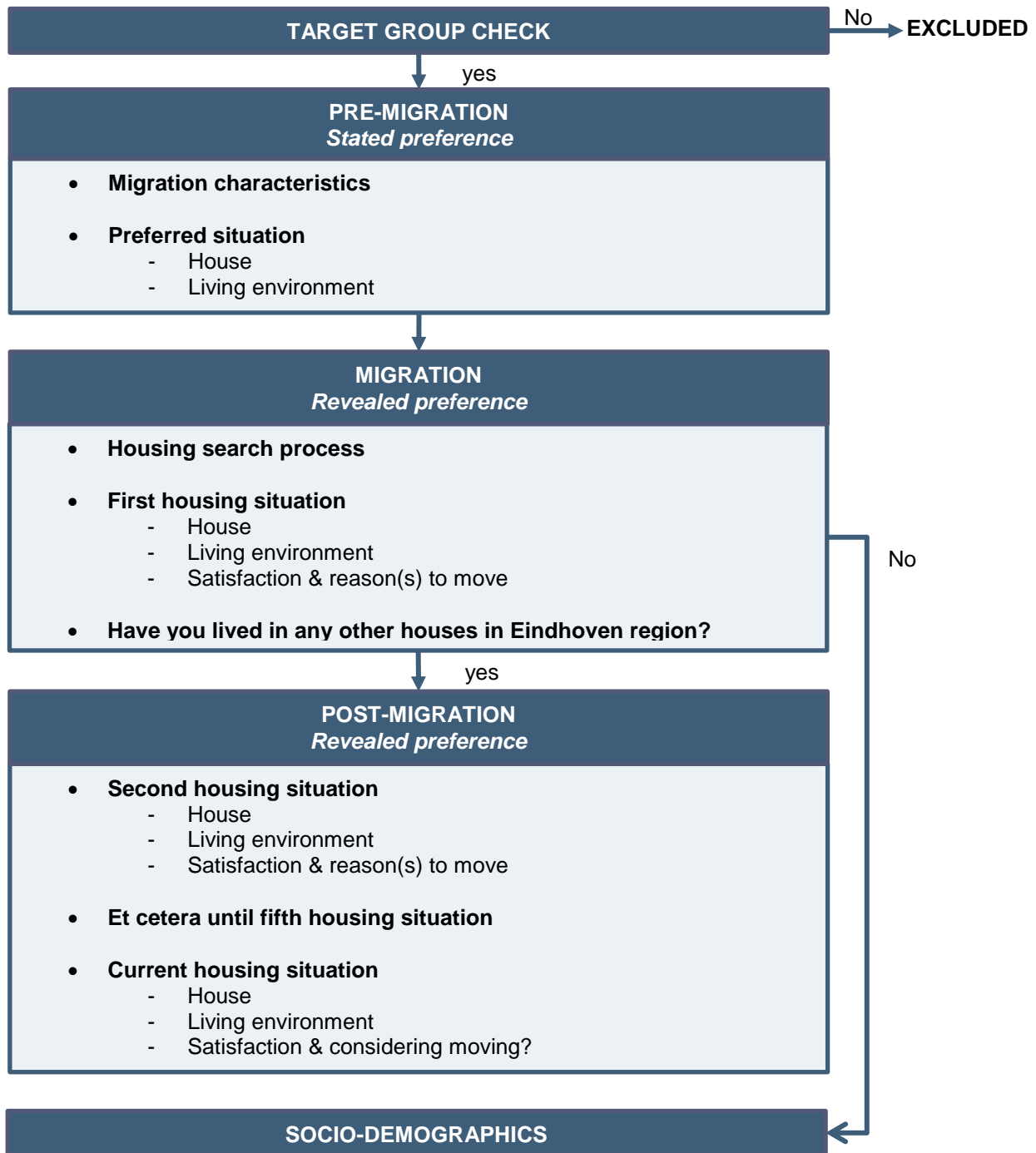


Figure 10. Survey design

4.3.4. Operationalization

Specifically Dutch or difficult terms in the survey are avoided as much as possible. However, in some cases, this is not possible and the terms have to be used along with the required explanation. In this paragraph an overview of all asked questions and answer categories is given along with a more detailed description of the questions that require additional explanation.

Target group check

At the start of the survey, first a check is done to see whether the respondent belongs to the target group. If not, the survey will be ended. This check is based on the criteria for international knowledge workers given in paragraph 2.2.1. The higher education criterion was only excluded, if the expatriate stated that he or she is a student and is following higher education at the moment. This leaves two criteria for the primary target group check:

1. Nationality other than Dutch
2. Either living and/or working in Eindhoven region

(Defined as one of the following municipalities: Asten, Bergeijk, Best, Bladel, Cranendonck, Deurne, Eersel, Eindhoven, Geldrop-Mierlo, Gemert-Bakel, Heeze-Leende, Helmond, Laarbeek, Nuenen c.a., Oirschot, Reusel- De Mierden, Someren, Son en Breugel, Valkenswaard, Veldhoven and Waalre)

If a respondent does not meet the requirements, the survey is ended. An overview of the asked questions and attributes levels is given in table 6.

Table 6. Operationalization Target group check

Questions	Level of measurement	Answer categories
1. What is your country of origin?	Nominal	List of different countries or open field
2. Are you working or studying in Eindhoven region?	Nominal	1. Yes 2. No
3. Are you living in the Eindhoven region?	Nominal	1. Yes 2. No

Pre-migration

In this part of the survey, first, respondents are asked about the characteristics of their migration process before arrival such as intended length of stay and how much time they got to prepare. These asked attributes and attribute levels are based on the literature review about expatriation described in paragraph 3.2. An overview is given in table 7.

Table 7. Operationalization Pre-migration

Questions	Level of measurement	Answer categories
1. What was the main reason for your migration?	Nominal	<ol style="list-style-type: none"> 1. Assignment initiated by employer 2. To start up a new business or business location 3. Better job opportunities than in home country 4. My skills will be valued better due to the specific knowledge available in the region 5. To experience a period abroad for my personal development 6. Because of the expatriation (job opportunities of my partner) 7. Other, namely...
2. Which type of profession would you perform in Eindhoven region?	Nominal	<ol style="list-style-type: none"> 1. Manager or executive 2. Highly skilled employee 3. Entrepreneur 4. PhD or PostDoc student 5. Academic or scientist 6. Student 7. Volunteer 8. Unemployed 9. Other, namely...
3. Where did you live before coming to Eindhoven?	Nominal	List of different countries or open field
4. How long before departure did you know about your migration?	Interval	<ol style="list-style-type: none"> 1. <2 weeks 2. 2-4 weeks 3. 1-3 months 4. 3-6 months 5. >6 months
5. What was the intended length of stay in Brainport?	Interval	<ol style="list-style-type: none"> 1. <6 months 2. 6 months – 1 year 3. 1 – 3 years 4. 3 – 5 years 5. > 5 years
6. Had you visited Eindhoven region before your migration?	Nominal	<ol style="list-style-type: none"> 1. No 2. Yes, to make pre-arrangements for my migration such as contract and housing issues 3. Yes, for other (business) purposes 4. Yes, for both reasons mentioned above
7. At the time of migration, what was the composition of your household? Fill in including yourself	Ratio	<ul style="list-style-type: none"> - Adults - Children (age 12-18) - Children (age 4-12) - Children (younger than 4)
8. Was housing arranged before arrival in the Netherlands?	Nominal	<ol style="list-style-type: none"> 1. No, I planned on staying the first nights with a friend or at a hotel 2. Yes, I arranged it myself 3. Yes, (temporarily) housing was provided by my employer

In the survey, the main reason for the migration to Brainport is asked. Six reasons are proposed based on the literature described in paragraph 3.2.2 and respondents can fill in an open comment. During data analysis the results of this question were simplified into four categories:

1. Specific task/program
 - *Assignment initiated by employer*
 - *Specific educational program*
 - *Specific job opportunity*
2. Region's opportunities
 - *Better job opportunities than in home country*
 - *Better education possibilities than in home country*
 - *My skills will be valued better due to the specific knowledge available in the region*
3. Personal development
 - *To experience a period abroad for my personal development*
4. Other
 - *Because of the expatriation (job opportunities of my partner)*
 - *Other*

Second, respondents are asked to fill in their housing preferences as they felt at the time of migration. Attributes of both the dwelling and living environment are included, based on the found housing choice determinants as described in paragraph 3.3. An overview is given in table 8. Respondents also have to answer what price they were maximally willing to pay. In this part of the survey, people say what they would prefer so stated preference techniques will be used.

Table 8. Operationalization Housing preferences

Questions	Level of measurement	Answer categories
1. Which housing type did you prefer?	Ordinal	1. (Long stay) hotel 2. Student room 3. Studio apartment 4. Two- or three bedroom apartment 5. Terraced house 6. Semi-detached house 7. Detached house 8. Other, namely...
2. Which state of furnishing did you prefer?	Ordinal	1. Bare 2. Soft-furnished 3. Furnished
3. Which type of tenure did you prefer?	Nominal	1. Rental 2. Self-purchased 3. Stay with friends or family 4. Arranged by employer
4. How much were you maximally willing to spend on housing per month? (excluding service costs and utilities)	Interval	1. Less than €350 2. €350 - €650 3. €650 - €950 4. €950 - €1200 5. More than €1200
5. Which type of living environment would you most like to live in?	Ordinal	1. Urban-central 2. Off city center 3. Green-urban 4. Central village 5. Rural
6. Which of the following did you consider important to be close to your home? - Grocery shops - Parking space - Public transport - (international) elementary or secondary school - Recreative space - Greenery - Distance to work or study - Appearance of the neighborhood - Interaction with neighbors - Distance to other family members and friends - Other expatriates (with the same cultural background)	Interval	1. Not important 2. 3. 4. 5. Very important

The following concepts are explained in the survey to avoid any misunderstandings or language barriers:

Respondents were asked which state of furnishing they prefer. Since the term “furnishing” could be interpreted in many different ways, the description as given by the Holland Expat Center South (2013) was used:

1. Bare
No carpets, curtains, light fittings et cetera
2. Soft-furnished
Includes carpets and curtains
3. Furnished
Also includes furniture, cutlery, crockery, bed linen et cetera

Since different types of houses in the Netherlands can deviate from that in other countries, the respondents were asked which of the in figure 35 described housing types they preferred, along with a brief description of this type of house. To see whether there are differences between different groups, during data analysis, the given types of houses were classified into broader categories:

1. Student room
2. Apartment
 - Studio apartment (*1 bedroom*)
 - Two- or three bedroom apartment
3. Single-family house
 - Terraced house (*Multiple single-family houses built attached in a row*)
 - Semi-detached house (*2 single-family houses under 1 roof*)
 - Detached house (*1 free standing single-family house*)
4. Other
 - (Long stay) hotel
 - Other

Respondents were asked to fill in their most preferred living environment. To prevent any misunderstandings, a description of each living environment, as described in paragraph 2.3.2, was given in the survey:

1. Urban central
(Historical) city centers and some new urban centers
2. Off city center
Areas surrounding the city center with a compact and monofunctional living environment
3. Green-urban
Monofunctional living environment with spacious structures and greenery in larger municipalities
4. Central-village
Multifunctional (historical) village centers
5. Rural
Low density in a mainly green area with few amenities

Migration

In the second part of the survey based on the migration stage, respondents are asked how the housing search process for their first housing situation in Brainport went. Next, they are asked to fill in the characteristics of their actual first housing situation. These questions are all based on situations that have actually happened and therefore include the respondent's revealed preference.

To gain a better insight in the housing search process, seven statements are given and respondents have to rate them on a 5-scale level from strongly disagree to strongly agree. The first five statements are different for people who had to arrange housing themselves opposite to people whose employer arranged housing for them. These statements are based on the housing issues that were stated in different conversations with new expatriates and the interviews and expat meetings as described in paragraph 4.2. Furthermore, the respondents can give open comments about the housing search process. An overview is given in table 9.

Table 9. Operationalization Housing search 1

Questions	Level of measurement	Answer categories
1. To what extent do you agree with the following statements?	Interval	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree
2. Is there anything else you would like to mention about your housing search when moving to the Netherlands?	Nominal	Open field
3. In how many housing situations have you lived during your stay in Brainport?	Ratio	Open field

The people who indicated that they had to arrange housing themselves, had to rate the following statements:

1. There was sufficient information available about housing procedures in the Netherlands
2. My knowledge about the local housing market was sufficient
3. I felt like I've had enough available options to choose from
4. Expatriate organizations helped me to find suitable housing
5. Not speaking Dutch makes searching for a house difficult

As previously described, a different set of statements was shown to the people who indicated that their employer arranged their first housing situation. This group also had to rate following five given statements:

1. I was pleased that my employer arranged housing for me
2. I felt like my preferences were of influence on my housing situation
3. My employer gave me several housing options to choose from
4. The fact that housing would be arranged helped in the decision to move to Eindhoven region
5. I believe my local market knowledge would have been sufficient to arrange suitable housing myself

Both groups also had to answer two statements that give an indication of their general view on housing conditions in the Netherlands:

1. Housing in the Netherlands met my expectations
2. Housing conditions in the Netherlands are better than in my home country

After answering the questions about the housing search process, people are asked in how many housing situations they have lived. If this is more than one, they first have to fill in information about their first housing situation after arrival. Of course, people who have lived in only one house, immediately go to the questions about their current housing situation.

Post-migration

The survey part about the post-migration phase contains questions about the possible second to fifth housing situation in Brainport and the current housing situation. The attributes and attributes levels are similar to the ones of the first housing situation as described in the migration phase. The levels of satisfaction and reasons to move have to be given for each housing situation. This way, a comparison can be made and the housing career can be fully mapped. As it is for the first housing situation, these questions concern the actual housing situation, so the revealed preference is given. An overview is given in 0.

Table 10. Operationalization Housing situation 1 - 5

Questions	Level of measurement	Answer categories
1. What was your zip code?	Ratio	Numbers: open field (4) Letters: open field (2)
2. What was the composition of your household when living in this house? Fill in including yourself	Ratio	- Adults - Children (age 12-18) - Children (age 4-12) - Children (younger than 4)
3. How long have you lived in this house?	Interval	1. <6 months 2. 6 months – 1 year 3. 1-3 years 4. 3-5 years 5. >5 years
4. Which type of housing describes your housing condition best?	Ordinal	1. (Long stay) hotel 2. Student room 3. Studio apartment 4. Two- or three bedroom apartment 5. Terraced house 6. Semi-detached house 7. Detached house 8. Other, namely...
5. In which state of furnishing did you get this house?	Ordinal	- Bare - Soft-furnished - Furnished
6. What type of tenure describes your housing condition best?	Nominal	1. Rental 2. Self-purchased 3. Stay with friends or family 4. Arranged by employer
7. How much did you monthly spend on housing? (excluding service costs and utilities)	Interval	1. Less than €350 2. €350 - €650 3. €650 - €950 4. €950 - €1200 5. More than €1200
8. How would you describe your living environment?	Ordinal	1. Urban-central 2. Off city center 3. Green-urban 4. Central village 5. Rural
9. How satisfied were you with this housing situation?	Interval	1. Not at all satisfied 2. 3. 4. 5. Very satisfied
10. Why did you move? (multiple answers possible)	Nominal	- More financial recourses - Household change - Better possibilities available for the same price - Not satisfied with living environment - Housing complex not well managed or maintained - Size was too small - Wanted more interaction with neighbors - Travel distance to work was too far - Another type of dwelling - House was only temporarily available - Other, namely...

For the current housing situation, questions 1-8 are similar to the ones given in 0. An overview of the other questions and attribute levels is given in table 11.

Table 11. Operationalization Current housing situation

Questions	Level of measurement	Answer categories
1-8 Similar as in 0		
9. How do you rate the availability of the following characteristics of your living environment? - Grocery shops - Parking space - Public transport - (international) elementary or secondary school - Recreative space - Greenery - Distance to work or study - Appearance of the neighborhood - Interaction with neighbors - Distance to other family members and friends - Other expatriates (with the same cultural background)	Interval	1. Not important 2. 3. 4. 5. Very important
3. How satisfied are you with your current housing situation?	Interval	1. Not at all satisfied 2. 3. 4. 5. Very satisfied
4. Are you considering moving in the near future?	Nominal	1. Yes 2. No
5. Why are you considering moving? (multiple answers possible)	Nominal	- More financial recourses - Household change - Better possibilities available for the same price - Not satisfied with living environment - Housing complex not well managed or maintained - Size too small - Want more interaction with neighbors - Travel distance to work is too far - I do not like Eindhoven region - Another type of dwelling - Other, namely...

Socio-demographics and end of questionnaire

Besides characteristics of the housing- and migration process, characteristics of the respondent also have to be asked in order to make a target group differentiation. Therefore, socio-demographic information of the respondent and possibly the respondent's partner is asked at the end of the survey and is based on the housing choice determinants as described in paragraph 3.3 and on the specific

characteristics of expatriates as described in paragraph 3.1. Furthermore, since this research is about internationals, a question about the country of origin was added. An overview for the respondent is given in table 12 and for the respondent's possible partner in table 13.

Table 12. Operationalization Socio-demographic information

Questions	Level of measurement	Answer categories
1. What is your gender?	Nominal	1. Male 2. Female
2. What is your age?	Ratio	Open field
3. What is your highest level of education completed?	Ordinal	1. Grammar school 2. High school or equivalent 3. Vocational technical school (2year education) 4. Some college 5. Bachelors degree 6. Masters degree 7. Doctoral degree 8. Professional degree (MD, JD etc.)
4. What is your current type of profession?	Nominal	1. Manager or executive 2. Highly skilled employee 3. Entrepreneur 4. PhD or PostDoc student 5. Academic or scientist 6. Student 7. Volunteer 8. Unemployed 9. Other, namely...
5. Do you work or study at any of the following companies?	Nominal	1. ASML 2. Bosch 3. DAF 4. Design Academy Eindhoven 5. DSM 6. Eindhoven University of Technology 7. Fei company 8. Fontys University of applied sciences 9. M2I 10. Océ Technologies 11. Philips 12. SKF 13. Another high tech company 14. No
6. What is your current gross household income?	Interval	1. <€1300 2. €1300 - €1900 3. €1900 - €2500 4. €2500 - €3700 5. €3700 - €5000 6. > €5000
7. What is your current marital status?	Nominal	1. Married/ living together with partner 2. Single

Table 13. Operationalization Socio-demographic information partner

Questions	Level of measurement	Answer categories
1. What is the highest level of education completed by your partner?	Ordinal	<ol style="list-style-type: none"> 1. Grammar school 2. High school or equivalent 3. Vocational technical school (2year education) 4. Some college 5. Bachelors degree 6. Masters degree 7. Doctoral degree 8. Professional degree (MD, JD etc.)
2. What is the country of origin of your partner	Nominal	List of different countries or open field
3. Which daily occupation does your partner currently perform?	Nominal	<ol style="list-style-type: none"> 1. Manager or executive 2. Highly skilled employee 3. Entrepreneur 4. PhD or PostDoc student 5. Academic or scientist 6. Student 7. Volunteer 8. Unemployed 9. Other, namely...
4. Does your partner work or study at any of the following companies?	Nominal	<ol style="list-style-type: none"> 1. ASML 2. Bosch 3. DAF 4. Design Academy Eindhoven 5. DSM 6. Eindhoven University of Technology 7. Fei company 8. Fontys University of applied sciences 9. M2I 10. Océ Technologies 11. Philips 12. SKF 13. Another high tech company 14. No

The following simplifications were used for data analysis:

Since the diversity of cultural backgrounds is so big, the countries of origin were simplified to macro geographical regions. For this division, the classification by geographical location of the United Nations Statistics Division (2013) is used.

Since a division by profession as asked in the survey resulted in very small groups, a broader classification was made during data analyses:

1. Knowledge worker
(*manager or executive, highly skilled employee, entrepreneur, academic or scientist*)
2. PhD or PostDoc student
3. Student
4. Other
(*volunteer, not working, other*)

Respondents were classified into 5 categories of types of expatriates, based on the theory of Mahroum (2002) as previous described in 3.1.2. According to his theory different types of expatriates can be distinguished based on the profession they were going to perform in their destination country and the main reason of their migration. Criteria as described in paragraph 3.1 were handled to categorize the respondents. An overview is given in table 14.

Table 14. *Categorization of types of expatriates based on Mahroum (2002), own interpretation*

	Profession to perform	Reason for migration
Accidental tourists	<ul style="list-style-type: none"> - Manager or executive - Highly skilled employee - Academic or scientist 	<ul style="list-style-type: none"> - Assignment initiated by employer
Economy-class passengers	<ul style="list-style-type: none"> - Manager of executive - Highly skilled employee 	<ul style="list-style-type: none"> - Better job opportunities than in home country - My skills will be valued better due to the specific knowledge available in the region - To experience a period abroad for my personal development - Because of the job opportunities of my partner - Other
Explorers	<ul style="list-style-type: none"> - Entrepreneur 	
Pilgrims	<ul style="list-style-type: none"> - PhD or PostDoc student - Academic or scientist 	<ul style="list-style-type: none"> - Better job opportunities than in home country - My skills will be valued better due to the specific knowledge available in the region - To experience a period abroad for my personal development - Other
Passengers	<ul style="list-style-type: none"> - Student 	
Other	If respondent does not meet any of the requirements above	If respondent does not meet any of the requirements above

At the end of the questionnaire, respondents got the chance to fill in any comments about their housing choice process and/or the survey. Furthermore, they could fill in their email address to have a chance at winning a dinner cheque and to be informed about the results.

4.4. CONCLUSIONS

To maximize the results, information gathered during the literature study is supplemented by taking interviews and attending expat meetings in order to get a full insight in the important aspects in the housing careers of expatriates. As it turns out, most problems occur in the first period of stay in Brainport when people are not adjusted yet to the Dutch situation. Furthermore, it became clear that a quantitative housing shortage exists, especially in the lower priced segment. Therefore, people with a low income such as PhD and PostDoc students and students have trouble finding suitable housing. All persons interviewed stressed the importance of a good target group differentiation is very important to attain useable results.

In order to determine the housing choice behavior of the target group an online survey is conducted among expatriates in Brainport Eindhoven, taken the information gained from the in depth interviews into account. Hereby, the survey aims to gain information about the expatriate's characteristics, the migration process and the housing choice behavior of expatriates in Brainport Eindhoven during the whole stay. Not only the stated preference will be asked, but also the revealed preference by means of the actual housing situations a respondent has lived in so far. This way, the housing careers of expatriates can be fully mapped. The survey is conducted in such a way that relations between the different aspects can be tested and the following research questions can be answered:

Q4. Is there a relation between the characteristics of different groups of expatriates and their housing choice behavior?

Q5. Are the characteristics of the migration process of influence on the housing choice behavior of expatriates?

In the next chapter, the survey results will be described and the research questions as stated above will be answered.

5. ANALYSES & RESULTS

In this chapter both quantitative and qualitative results gained from the survey will be analyzed in order to gain insight in the housing career and housing choice process of expatriates in Brainport. The following research questions will be answered:

Q4. Is there a relation between the characteristics of different groups of expatriates and their housing choice behavior?

Q5. Are the characteristics of the migration process of influence on the housing choice behavior of expatriates?

In all paragraphs, the quantitative survey results will be described. Furthermore, remarks given in the survey will be used to better interpret the results and get more insight in the housing careers of expatriates. For all statistical tests described in this study, a significance level of 95% was used.

5.1. DESCRIPTIVES

Different socio-demographic data was collected for both the respondent and a possible partner. In this paragraph an overview of characteristics of the respondents will be given. Also, the migration process will be mapped to get a better insight in the group of respondents. For all statistical tests in this paragraph, the SPSS output is given in appendix E.

5.1.1. Response

In total 273 people have started the survey by clicking on the link, 153 of them have completed it. As described in the previous chapter, respondents were selected on nationality and involvement with Eindhoven region to see whether they belong to the target group. If not, the questionnaire was terminated. This was the case for 16 respondents, which were all eliminated for data analysis. The other 137 respondents all belong to the target group based on the following conditions; 1. Nationality other than Dutch, 2. Working/studying and/or living in Eindhoven region, 3. Highly educated (bachelor's degree or higher). Only some students did not meet the education requirement, since they are finishing their higher education at the moment. For that reason they were still included. For the quantitative analysis, only the cases of those respondents that belong to the target group and are fully complete will be taken into account. (N=137)

Due to the large insecurity in estimations of the amount of international knowledge workers in Eindhoven, it is difficult to calculate the ratio between sample size and total population. However, a rough estimate of the persons reached can be given. As described in paragraph 4.3.1, people can be member of multiple groups within the distribution channels. Therefore, to determine this estimation the largest group aimed at international knowledge workers is chosen: receivers of the Holland Expat Center South newsletter. 1800 persons receive this newsletter and 63 international knowledge workers have filled in the survey. This leaves a response rate of 3.5%. In total, 58 students filled in the survey out of a total international student population in Brainport of approximately 1500, so 4% of the total population participated in the survey.

The number of people that participated in the survey is low compared to the total population. However, with the available distribution channels and the small amount of people that could be reached directly, it was not feasible to obtain a larger sample for this study. As it turns out in conversations with several stakeholders such as the Hub Eindhoven for expats, the target group is very hard to reach.

5.1.2. Socio-demographics

Gender

Of all respondents, 54% is male and 46% is female. This is a more equal distribution than could be expected, since the number of males in the high-tech sector is generally higher than the number of females. This relative low percentage of male respondents could be explained by the fact that generally, in most surveys, the percentage of female respondents is higher than male respondents and because of the fact that the survey could be filled in by both expatriates themselves and accompanying spouses.

Age

The age of the respondents differs from 18 to 50, as is shown in figure 11. This is not surprising, since the survey targeted working or studying people. Therefore, age should be within the range of 18-65. Within this range, the respondents are relatively young. 88% is aged between 18 and 35 and only 2% is older than 45. This could be explained by the relative large amount of students on the one hand and the larger willingness to travel for work of young people on the other hand. As could be expected, other socio-demographic values (education, profession, household composition and income) show significant differences between the different age groups on a 95% confidence level. This is no surprise since all these factors determine the stage of life in which a person is. There are no significant differences in gender between the different age groups.

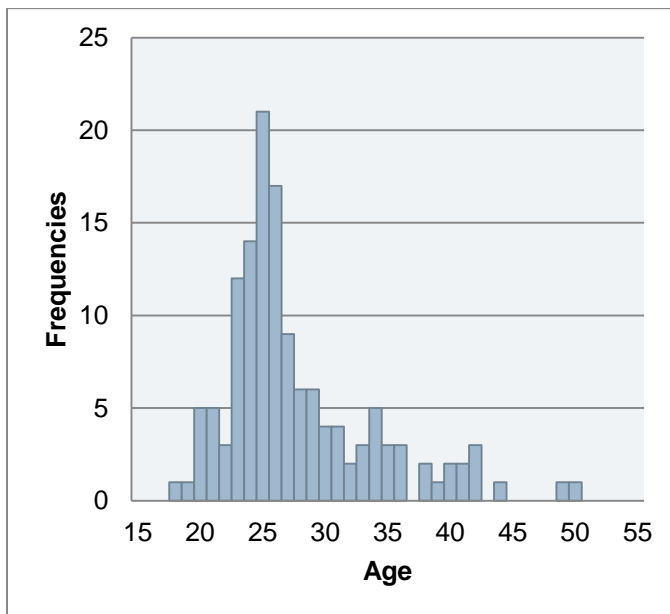


Figure 11. Age of the respondents (N=137)

Country of origin

Respondents have very diverse backgrounds. 48 different countries of origin were listed. Most people come from India (12%), followed by Mexico (7%), Germany (7%) and China (6%). An overview of the countries of origin by macro geographical region is shown in figure 12 .

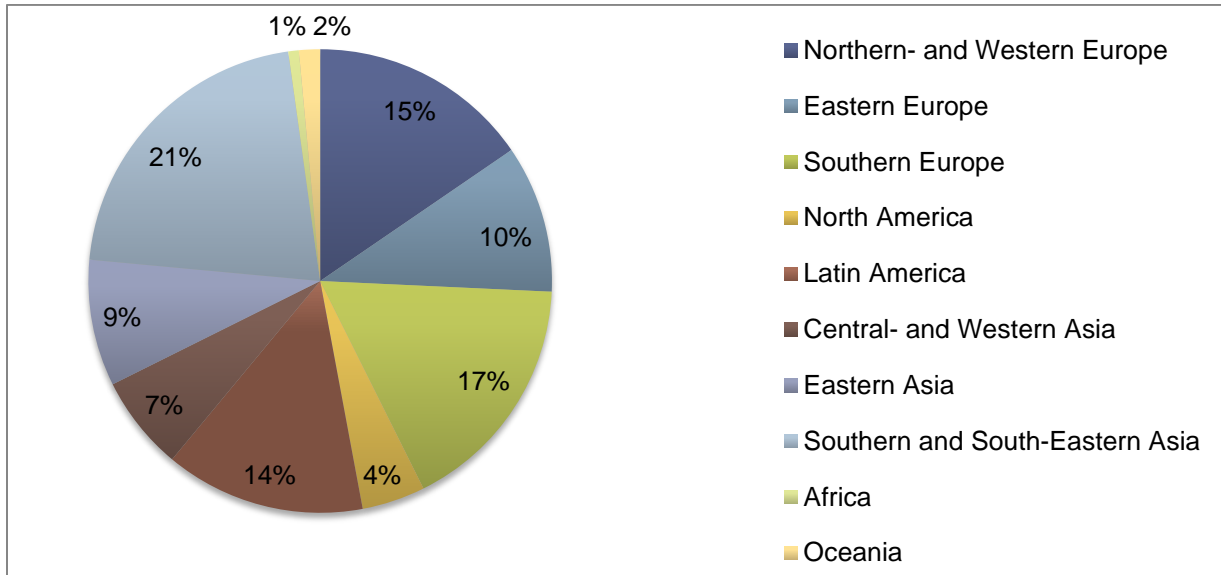


Figure 12. Countries of origin, classified by macro-geographical location (N=137)

Of the 52 people who listed that they are married or living together with a partner at the moment, almost 70% has a partner from the same country of origin as the respondent. 23% of the respondents that are married or living together have a Dutch partner.

Education level

87% of all respondents is higher educated (bachelors degree or higher), as is shown in figure 13. Most respondents indicate that they have a masters degree; 45%. The second largest group consist of people with a bachelors degree; 32%. All respondents who do not have a bachelors degree or higher, are either students (in 75% of all cases) or not working and accompanying partners.

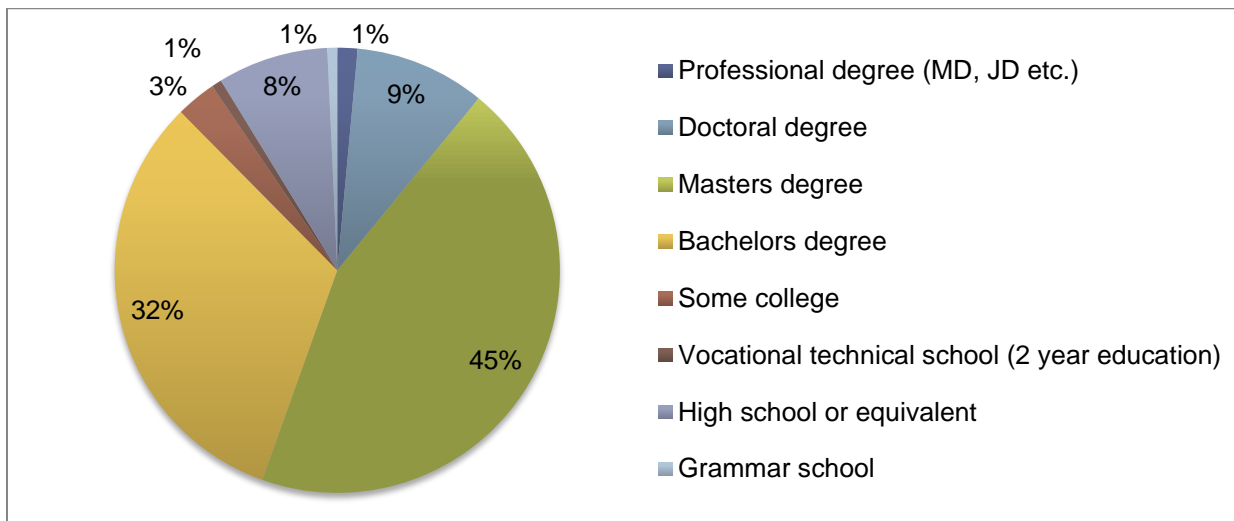


Figure 13. Education level (N=137)

Profession

Figure 14 shows the current profession of all respondents. The largest group is student. This is followed by highly skilled employees and then PhD or PostDoc students. Half of the respondents indicates that they work or study at the Eindhoven University of Technology (TU/e). This large amount can be explained, because they facilitate students, PhD or PostDoc students as well as knowledge workers and is therefore known as one of the biggest employers for highly educated people in Brainport. Besides that, both employers and students at TU/e were intensively asked to fill in the questionnaire. The second most mentioned employer is ASML, by 9% of the respondents.

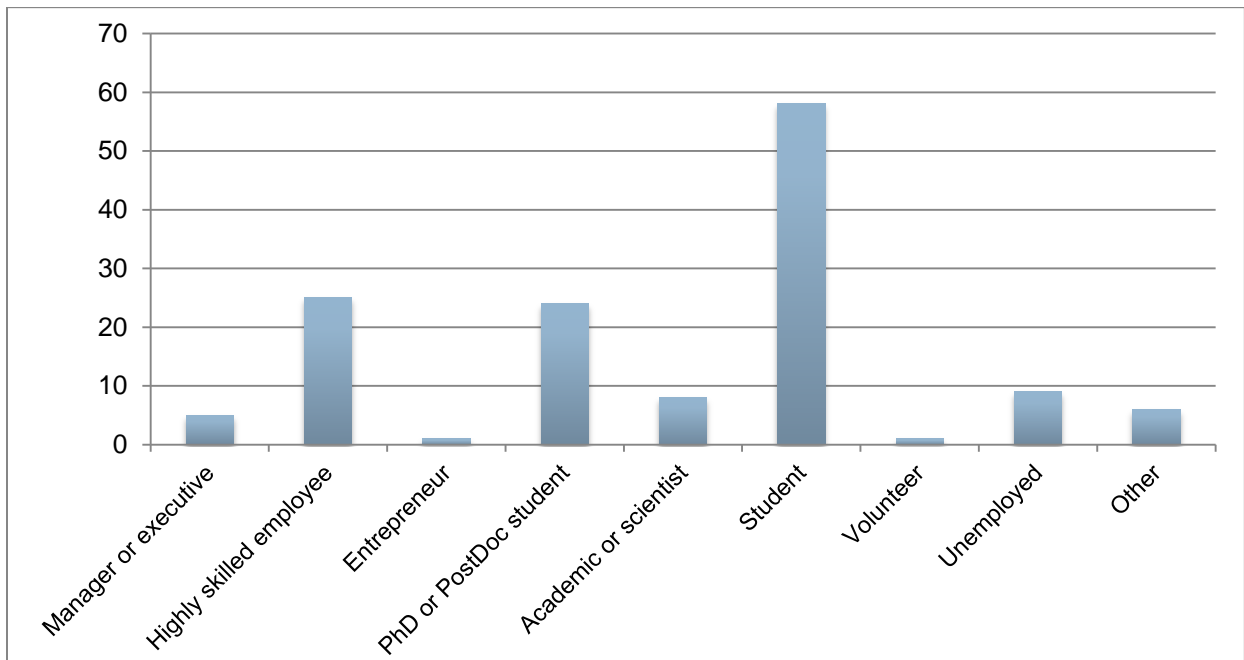


Figure 14. Current type of profession (N=137)

To simplify and enlarge profession categories, the above mentioned types of profession are reduced to four categories: Knowledge worker (28%), PhD or PostDoc student (18%), Student (42%) or Other (12%).

A distribution of categories of profession by gender is given in figure 15. It is noticeable that within the group: other, over 80% are women. In most cases these are women who have migrated because of the job opportunities of their husband. This difference is significant with all other groups according a 95% confidence level.

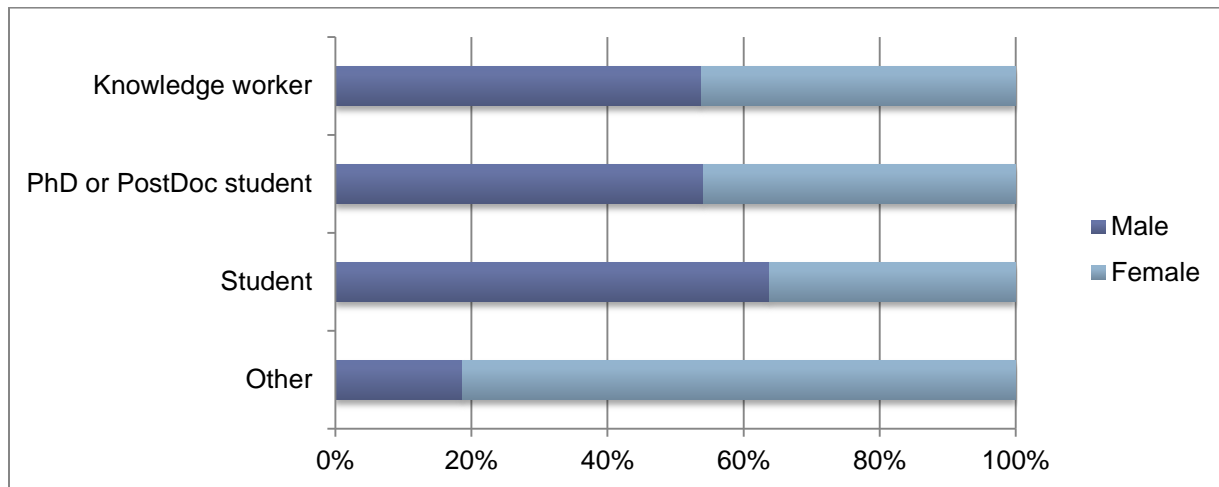


Figure 15. Type of profession by gender (N=137)

Not all respondents currently perform the same job as they did when coming to Eindhoven region. During their stay in Brainport, 19% of the respondents changed jobs. In most cases, they made a logical promotion or career step. For example, they moved to Brainport as a student and are now PhD student or they changed from PhD student to knowledge worker.

Household composition

Respondents were asked to fill in the number of adults and children they live with. For data analysis, respondents were classified into four categories: 1. Single; 2. Couple; 3. Single with children and; 4. Couple with children. If a respondent is single, this does not mean that they are living alone. For example, they could live in a student house with several roommates. Because of the fact that they (in most cases) do not make housing and residential mobility decisions together, they are regarded as a single person household.

An overview of the different categories of household composition is given in figure 16. To create larger groups, the categories single with children and couple with children will be combined to one category for further analysis: household with children.

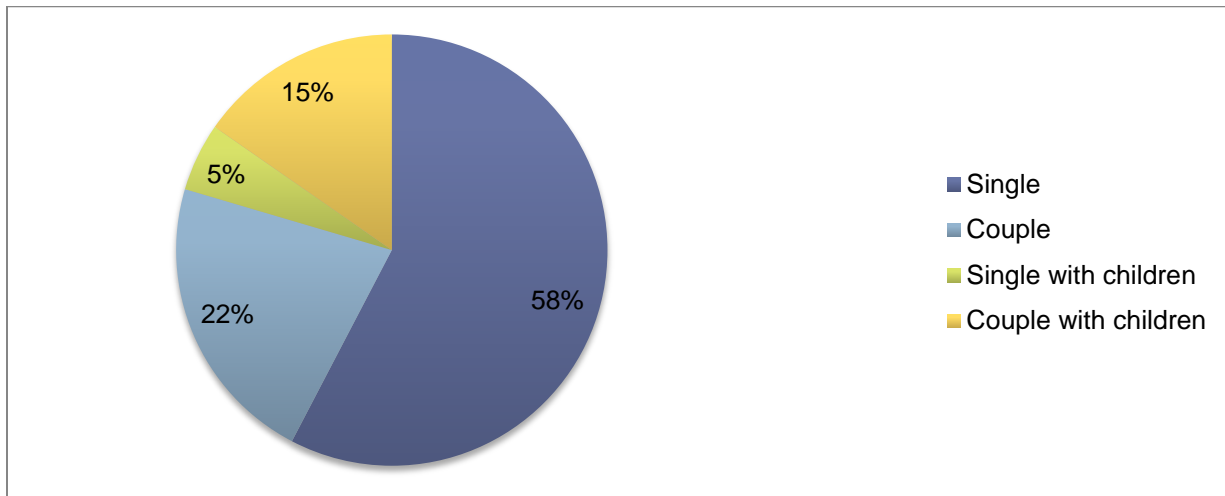


Figure 16. Current household composition (N=137)

Of the 77 people that have lived in more than 1 housing situation during their stay in Brainport, 35% had a household change in that period. In most cases (N=10), they changed from a single person household into a couple. This probably means that they either started a new relationship or that the partner moved to the Netherlands after the expatriate was already settled. Another 10 persons indicated that their household changed from a single person household to a household with children. The same explanation could be used: that an expatriate arrives in the Netherlands alone and brings his or her family when everything is settled.

Household income

Most respondents earn a gross monthly household income of less than €1300. This number is mainly determined by the group of students, who represent 85% of this income class. The second income class mainly consists of students and PhD or PostDoc students, who both represent 33% within this group. As could be expected, the highest incomes are earned by the group of knowledge workers. According to a chi-square test, difference between groups are significant ($p=0.000$)

Respondents' marital status, logically, also determines the household income, as is shown in figure 17, with a significance level of 0.000 using a chi-square test. Within the two highest income classes, around 80% is married or living together with a partner. Of all respondents, 38% indicated that they are married or living together with a partner, 62% is single.

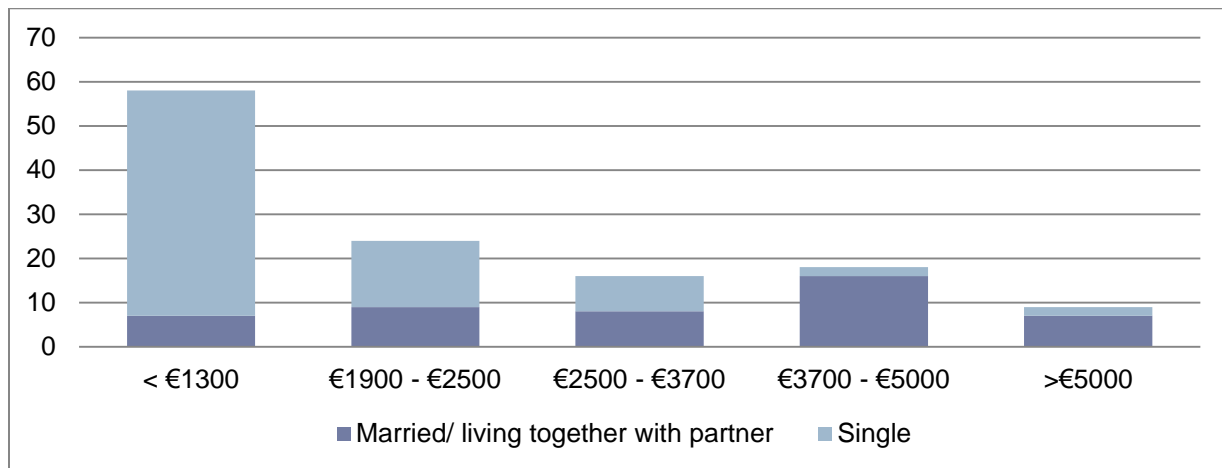


Figure 17. Household income by marital status (N=137)

Connection with Eindhoven region

Since respondents were selected by the fact that they either live or work in Eindhoven region, none of the respondents answered “no” to both questions. Only 2 respondents indicated that they work in Brainport, but do not live there. One of them answered that the house offers in Eindhoven region were not adequate. The persons (N=12) who indicated that they live in Eindhoven region but do not work or study there are in most cases accompanying partners.

5.1.3. Migration characteristics

Reason migration

Most respondents (31%) indicated that the main reason for their migration was to experience a period abroad for their personal development, as is shown in figure 18. This is followed by 17% who indicated that they expected to have better job opportunities in Brainport than in their home country. A lot of people who indicated that they had another reason, said they migrated because of a specific educational program.

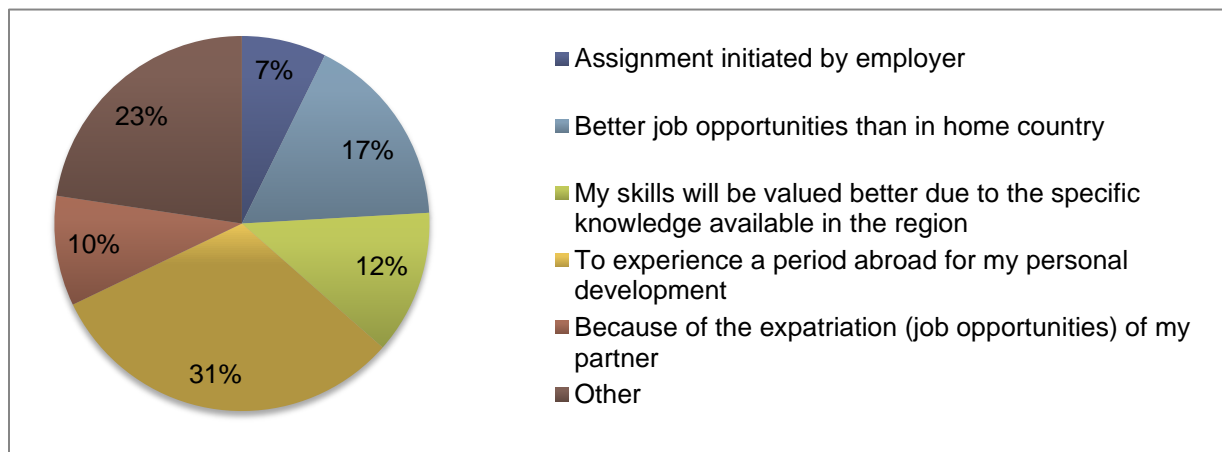


Figure 18. Reason for migration (N=137)

After analyzing the results and the other reasons for migration that were filled in, the answers were simplified into four categories: Specific task/program (27%), Region's opportunities (29%), Personal development (31%) and Other (12%)

As is shown in figure 19, the reasons for migration differ per type of profession. Most PhD or PostDoc students choose to migrate because of the opportunities a region has to offer them. Students on the other hand, mostly migrate for their personal development or because of a specific educational program. According to a chi-square test, the difference between these groups is significant ($p=0.00$). This is mainly caused by the group; Other. Remarkably often, they give another reason for migration. In most cases this concerns the accompanying partners who indicate that they have migrated for the job opportunities of their partner.

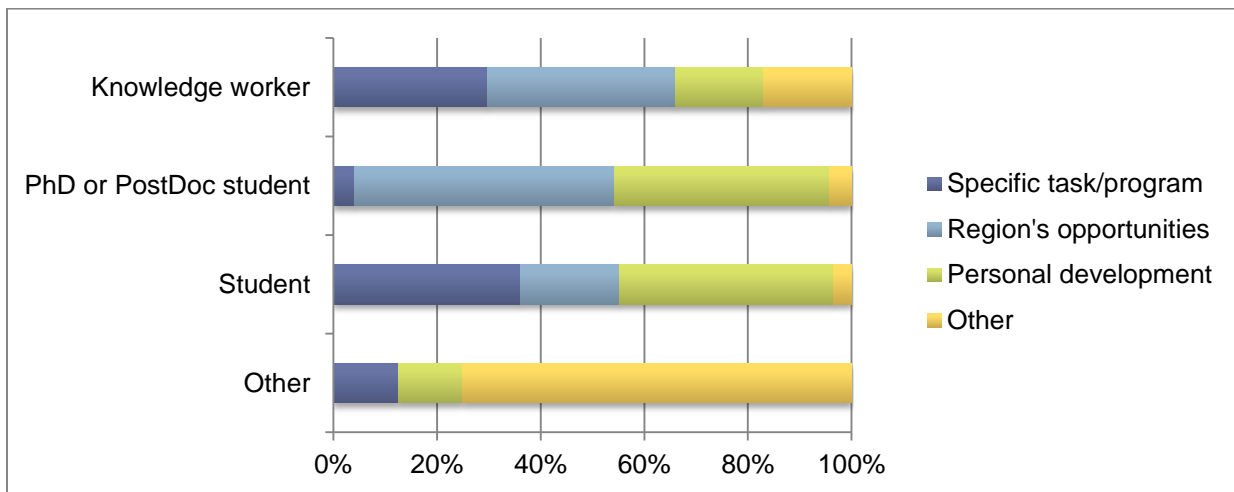


Figure 19. Reason for migration by type of profession (N=137)

Intended length of stay

No respondent has indicated that he or she moved to Eindhoven with the intention to stay less than six months. As is shown in figure 20, most respondents stay for a period of three to five years. This is the most common intended length of stay within the groups: knowledge worker and PhD or PostDoc student. The latter could be explained by the PhD program duration time of four years. Most students stay for a shorter period; one to three years, for example for a master's program. The difference between groups: knowledge workers, PhD or PostDoc students and students is significant using a chi-square test ($p=0.001$).

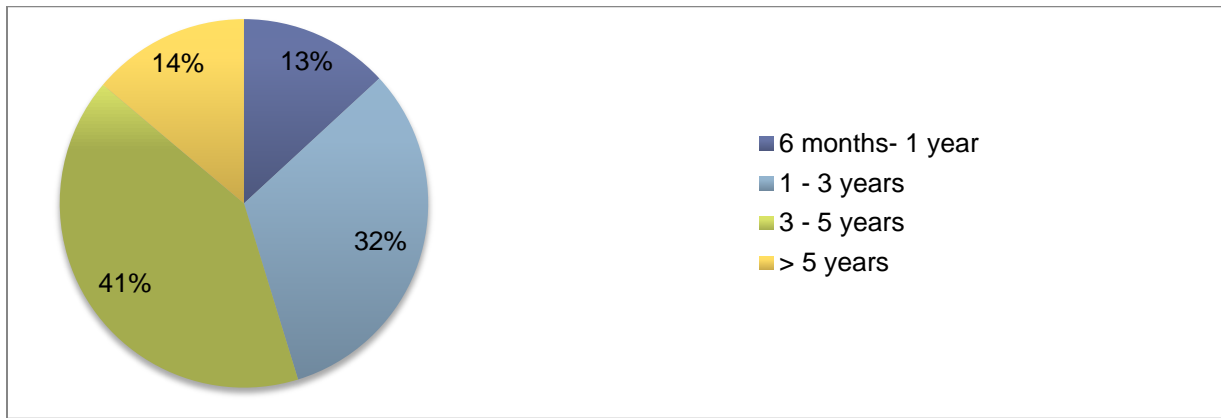


Figure 20. Intended length of stay (N=137)

Time to prepare

Most respondents (46%) indicated that they knew about their migration one to three months before departure, as is shown in figure 21. Only 10% had less than ten weeks to prepare. There are no significant differences between groups based on type of profession ($p=0.574$) or gender ($p=0.908$) using a chi-square test.

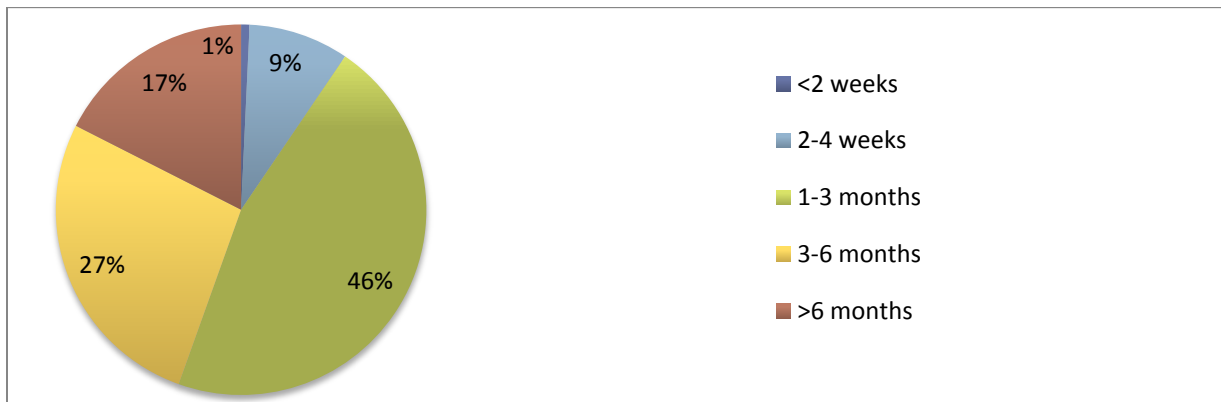


Figure 21. Time to prepare (N=137)

Pre-visits to Eindhoven

Of all respondents, 63% has never visited Eindhoven region before the migration. 32% of the people that did visit the region before did this to make pre-arrangements for their migration such as contract and housing issues, 40% visited the region for other (business) purposes and 28% for both of these reasons.

As shown in figure 22, the number of people who did make a pre-visit to the region is considerably higher within the group of knowledge workers. A chi-square test was used to see whether a difference between the displayed groups exists for either yes or no on the question if they have ever visited Eindhoven region before. A significant difference was found ($p=0.001$).

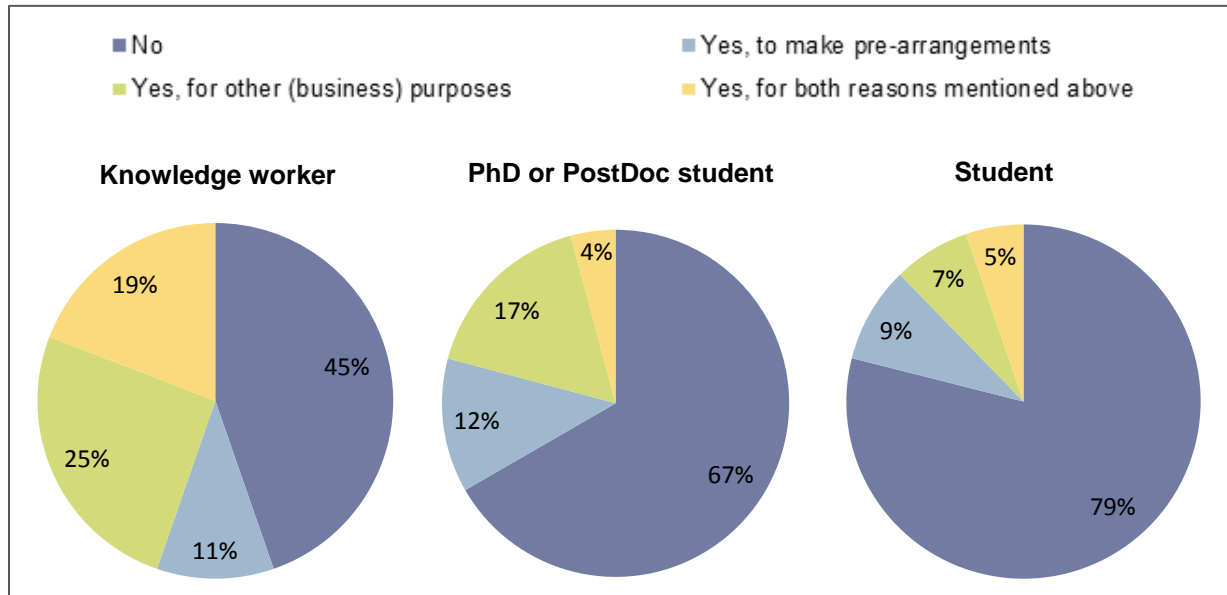


Figure 22. Pre-visits to Eindhoven by type of profession (N=137)

5.1.4. Types of expatriates

Respondents were classified into 5 categories of types of expatriates, based on the theory of Mahroum (2002) as previously described in chapter 3. According to his theory different types of expatriates can be distinguished based on the profession they were going to perform in their destination country and the main reason of their migration. Criteria as described in paragraph 4.3.4 were handled to categorize the respondents.

Table 15. Types of expatriates and their characteristics (N=128)

	Accidental tourists	Economy class passengers	Explorers	Pilgrims	Passengers
N	10	26	3	31	58
Average age	34,6	30,69	31,67	28,32	24,74
% master degree or higher	90%	81%	0	90%	22%
Current profession (Mode) (% of all cases)	Highly skilled employee (62%)	Highly skilled employee (73%)	Student (67%)	PhD or PostDoc student (68%)	Student (88%)
Household income (mode)	2500-3700	2500-3700	1900-2500	1900-2500	<1300
% married	60%	58%	33%	39%	19%
Intended length of stay (mode)	3-5 years	3-5 years	3-5 years	3-5 years	1-3 year(s)

An overview of the respondent's characteristics by type of expatriate based on the theory of Mahroum (2002) is given in table 15. In this table, the current profession is described. This could be different from the type of profession an expatriate was going to perform at the moment of migration, on which the different types of expatriates are based.

An independent-samples T test shows that there are no significant differences in the socio-demographic characteristics between the groups of profession: manager or executive or highly skilled employee using a 95% confidence level, tested for age, education, household income and marital status. Only gender shows a significant difference but since the number of managers and executives is so small (N=5), this is likely to be coincidental. Therefore it seems legit to use Mahroum's categorization in this analysis.

For further analyses by type of expatriate, the categories "Explorers" (less than 5 respondents) and "Other" (too heterogeneous group) will be excluded. Since the number of respondents in the groups: accidental tourists and economy class passengers is rather small and characteristics are quite similar, these two categories will be combined for further analyses. This leaves three groups: 1. Accidental tourists and economy class passengers (N=36); 2. Pilgrims (N=31) and 3. Passengers (N=58).

5.1.5. Conclusions

Although the number of students is a bit high, both students and international knowledge workers are well represented in the survey. Socio-demographics are related to the different types of expatriates and characteristics such as age and gender are evenly distributed. Due to intensive contacts and maybe a higher response rate within the group of academics, both students and staff from the Eindhoven University of Technology (TU/e) are largely represented. Almost half of the respondents work or study at TU/e.

Most knowledge workers have an intended length of stay from 3 to 5 years. Students, in general, stay for a shorter amount of time. Most respondents knew one to three months before departure of their migration and more than half of the people have previously visited Eindhoven before their migration.

5.2. HOUSING SEARCH PROCESS

In this chapter the attempt is made to provide an insight in the housing search process for expatriates. This housing search process will be related to different types of expatriates on the one hand and the migration process on the other hand. For all statistical tests used in this paragraph, the SPSS output is given in appendix F.

5.2.1. First housing arrangements

Broadly, three ways of arranging the first housing situation in a destination region can be distinguished: 1. Accommodation provided by employer; 2. Accommodation arranged beforehand by the expatriate itself, or 3. Accommodation still has to be arranged after arrival. As shown in figure 23, 17% of the respondents indicate that they did not have a housing situation arranged when they first arrived in

Eindhoven. Instead, they stayed the first nights at a hotel or at a friend's or family's house. Of the housing situations arranged before arrival, 47% was arranged by the expatriate's employer.

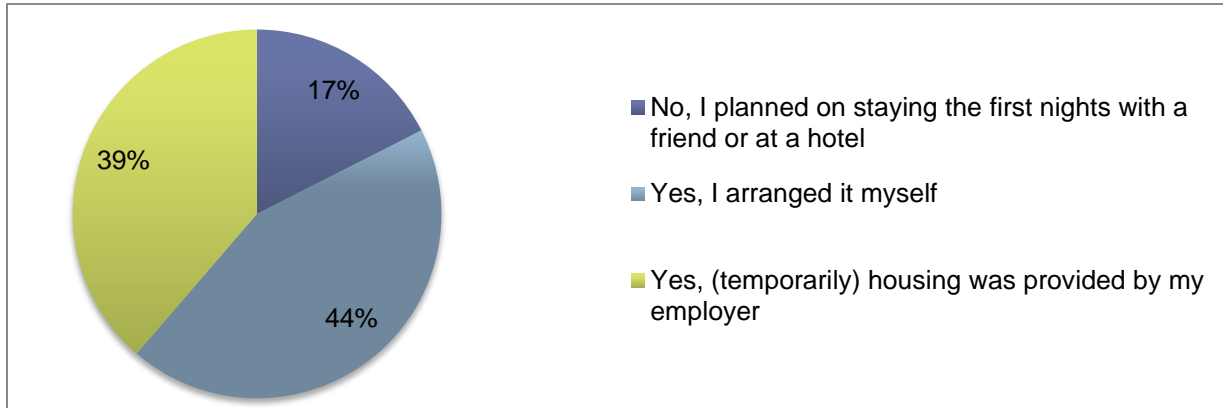


Figure 23. First housing arrangements (N=137)

A difference is noticeable between the different groups of expatriates, as is shown in figure 24. Especially for pilgrims, housing is often arranged by the employer; in 58% of the cases. Although this difference is noticeable, the difference between all groups is not significant according to a chi-square test ($p=0.261$)

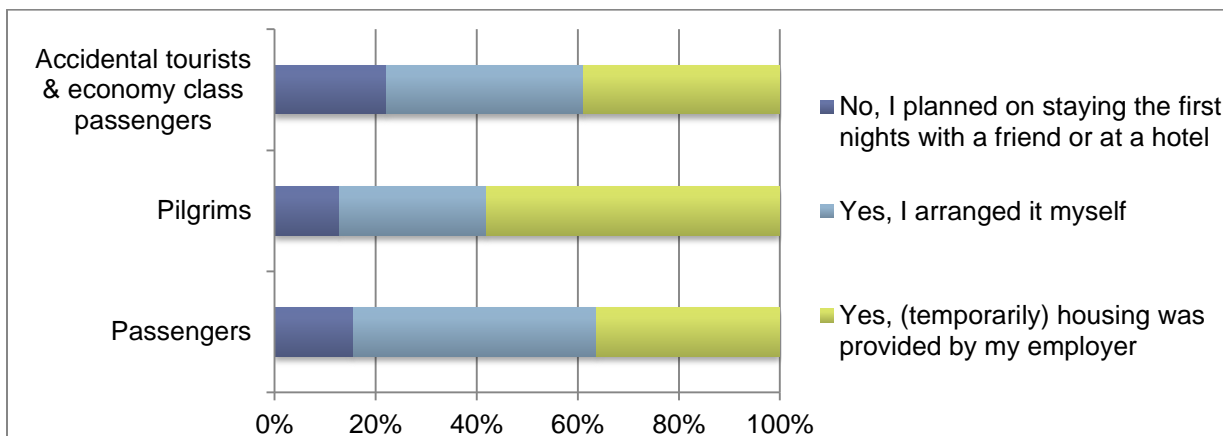


Figure 24. First housing arrangements by type of expatriate (N=125)

5.2.2. Rating the housing search process

Depending on the answer given whether housing was arranged by the employer or not, a different set of statements about the housing search process was shown.

Self-arranged

The people who indicated that they had to arrange housing themselves (N=84), had to rate the following statements on a 5-point scale, from strongly disagree to strongly agree:

1. There was sufficient information available about housing procedures in the Netherlands
2. My knowledge about the local housing market was sufficient
3. I felt like I've had enough available options to choose from
4. Expatriate organizations helped me to find suitable housing
5. Not speaking Dutch makes searching for a house difficult

The first three statements are related to the level of confidence a respondent had about his or her ability to find suitable housing (Cronbach's alpha = 0.733). Statement 4 and 5 tell something about the help or barriers that they've experienced when searching for their first house, but are not related to each other.

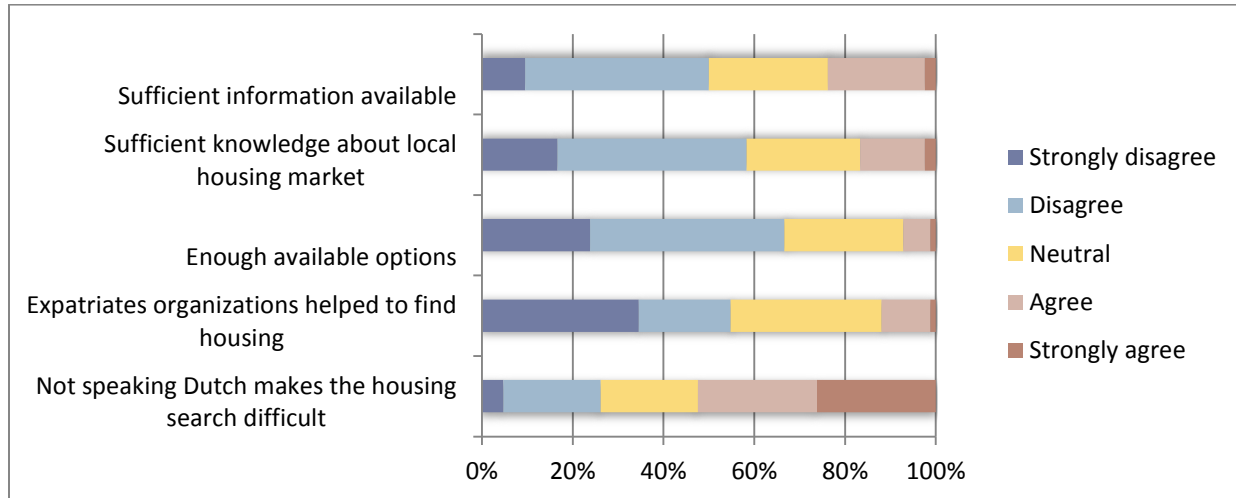


Figure 25. Housing search process according to respondents who arranged housing themselves (N=84)

As is shown in figure 25, respondents were very disappointed about the availability of options to choose from. No less than 67% disagreed with this statement. Only 17% of the respondents rated that their local market knowledge as sufficient. Overall, the housing search process is assessed as quite poor.

An independent samples T-test was used to check if there are significant differences between the people who already had housing arranged and who still had to arrange it after arrival. Significant differences were found in statement 1 about the information on housing procedures ($p=0.16$) and statement 5 about the language barrier ($p=0.05$).

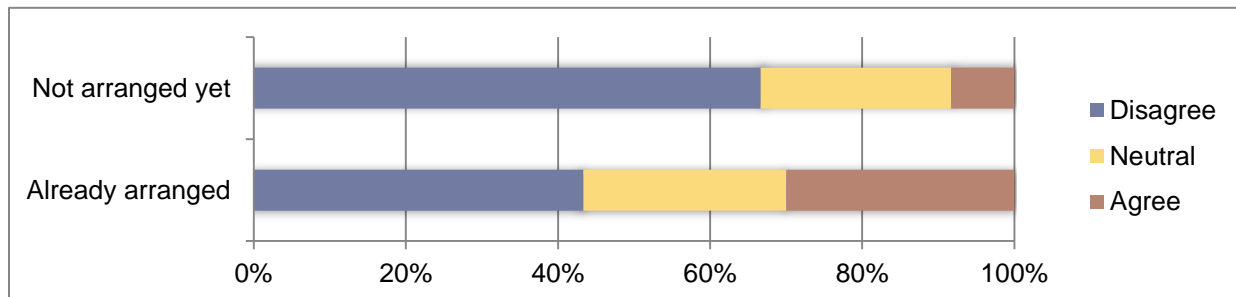


Figure 26. Statement 1: Available information about housing procedures by level of arrangement (N=84)

As shown in figure 26, the people who already arranged housing before arrival, much more often felt that information about housing procedures was sufficient. This is not surprising, since the availability of information probably has a positive effect on the chance of finding suitable housing.

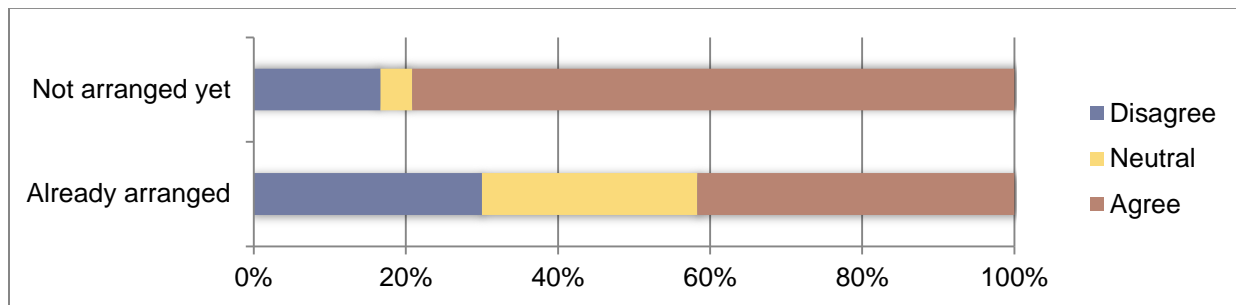


Figure 27. Statement 5: Not speaking Dutch makes searching for a house difficult (N=84)

The same reasoning could be used to explain the difference in agreeing with the fact that not speaking Dutch makes searching for a house difficult. As shown in figure 27, the people who did not have housing arranged yet agreed much more often with this statement. The fact that they did experience a language barrier probably reduced the chance of finding suitable housing.

No significant differences between different types of expatriates and the level of agreement with these statements was found, using a one-way ANOVA test with 95% confidence level.

Arranged by employer

As previously described, a different set of statements was shown to the people who indicated that their employer arranged their first housing situation (N=53).

This group also had to rate five given statements on a 5-point scale, from strongly disagree to strongly agree:

1. I was pleased that my employer arranged housing for me
2. I felt like my preferences were of influence on my housing situation
3. My employer gave me several housing options to choose from
4. The fact that housing would be arranged helped in the decision to move to Eindhoven region
5. I believe my local market knowledge would have been sufficient to arrange suitable housing myself

The first three statements are related to the level of satisfaction with the housing choice process, arranged by the employer. Although they are related, they cannot be considered as one scale (Cronbach's alpha = 0.604) Statement 1 is negatively related to statement 5 (Cronbach's alpha = -0.736). This seems logical, because people who don't believe their local market knowledge would have been sufficient to arrange housing themselves, could be extra pleased that their employer

arranged it for them. Statement 4 is not related to any of the others and is related to the consideration to migrate.

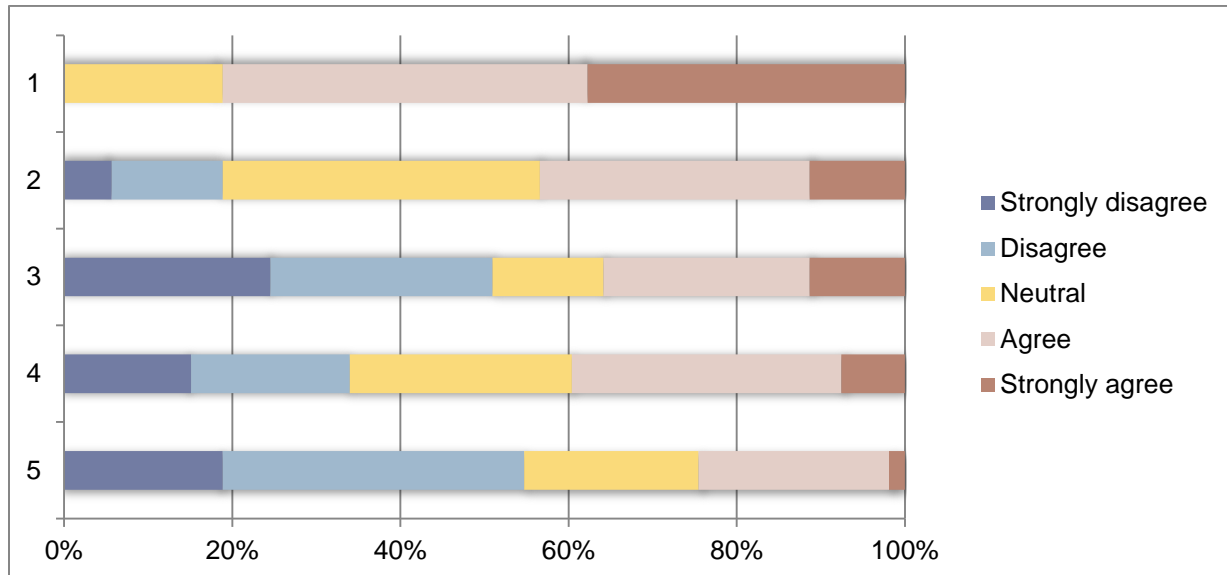


Figure 28. Housing search process according to respondents whose first housing was arranged by the employer (N=53)

As shown in figure 28, logically, no respondent disagrees with statement 1: “I was pleased that my employer arranged housing for me”. In general, they are satisfied with this process and feel like their preferences were of influence (43%), only 19% disagreed. However, most respondents (51%) indicate that they did not have several options to choose from.

Associated with the fact that 80% of the respondents were happy that their employer arranged their first housing situation, 55% of the respondents also felt like their local market would not have been sufficient if they had to arrange housing themselves.

Even though a large majority is happy with the fact that housing is arranged by their employer, 40% stated that it in fact also helped in the decision to move to Eindhoven.

Other important aspects of the housing search process

In the open comments many respondents described their poor negotiation position. Because of the insufficient supply of commercial rental dwellings in Eindhoven, especially furnished and in the lower price segment, expatriates have very little options. Since their urge to move is very high and time to prepare is short, they do not have the time to be set on a waiting list for housing arranged by the housing associations. Therefore, most expatriates have to rely on commercial real estate agents.

According to the respondents, these commercial real estate agents seem to take advantage of this position and ask very high fees (one month rent) for very poor help. Deception or poor treatment in any form by real estate agents is the most frequently mentioned comment. Furthermore, the poor availability

of information is mentioned and it is stated that many websites and even housing contracts are only available in Dutch.

A full overview of the comments placed can be found in appendix G.

5.2.3. Perspectives on the Dutch housing market

Both groups also had to answer two statements that give an indication of their general view on housing conditions in the Netherlands:

3. Housing in the Netherlands met my expectations
4. Housing conditions in the Netherlands are better than in my home country

These are interrelated with a Cronbach's alpha of 0.761.

As shown in figure 29, only 27% of the respondents stated that housing in the Netherlands met their expectations. Another remarkable result is that only 13% agrees that housing conditions in the Netherlands are better than in their home country. Using a chi-square test, no significant differences between types of expatriates were found for both statements (1. $p=0.782$; 2. $p=0.577$).

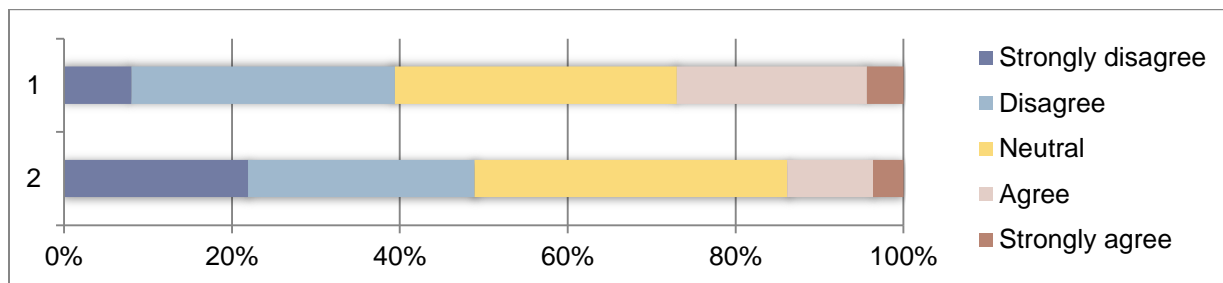


Figure 29. Satisfaction about the Dutch housing market (N=137)

To see if there is a relation between the rating of housing conditions in the Netherlands and the country of origin of the respondent (and thus the country that the respondent uses for comparison), a one-way ANOVA test was conducted. Groups by macro-geographic location as described in paragraph 5.1.2 were used and respondents from Africa and Oceania were excluded since these groups are too small ($N<5$). A significant difference ($p=0.002$) in means between groups was found.

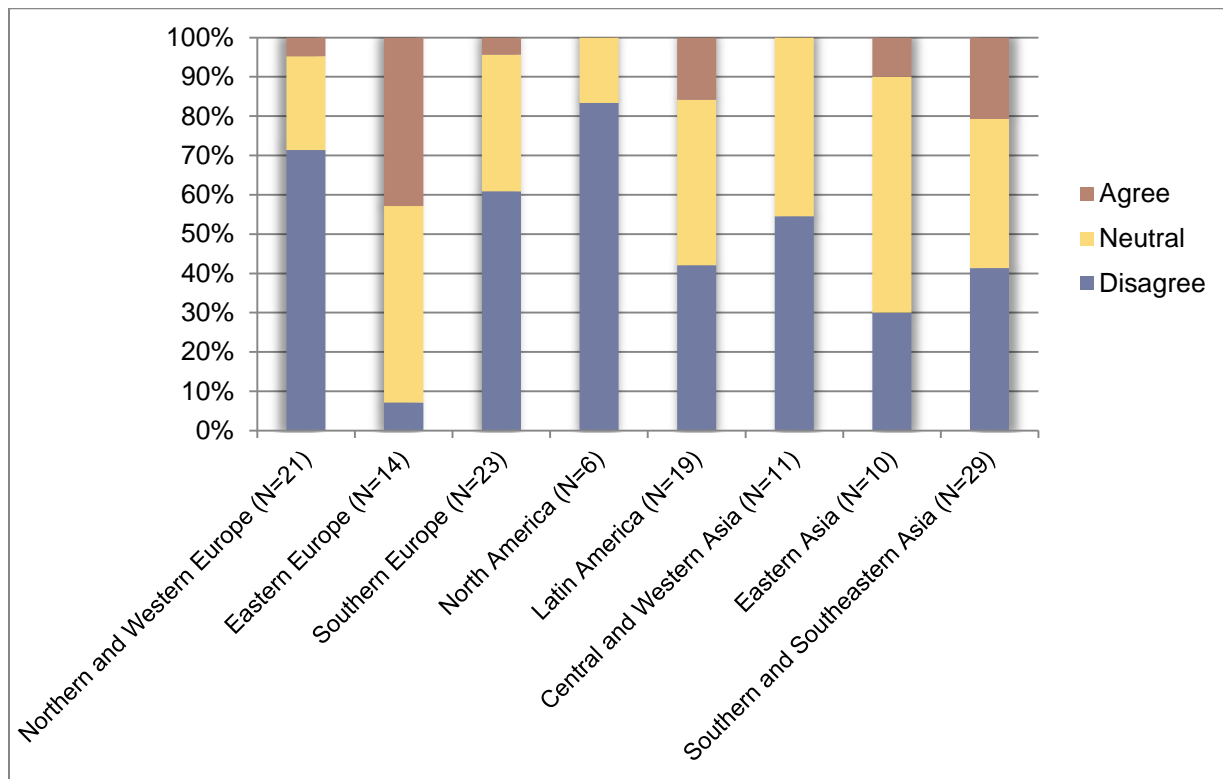


Figure 30. Comparison housing conditions in the Netherlands to home country by country of origin (N=133)

As shown in figure 30, a great difference is noticeable between people from the different European regions. People from Northern and Western Europe answered the statement similar to people from Southern Europe, but respondents from Eastern Europe agree much more often with the statement that housing conditions in the Netherlands are better than in their home country. This group shows a significant difference with all other groups except for Eastern Asia ($p < 0.05$). People from Southern and Southeastern Asia also agree more often with the given statement, but certainly not as much as people from Eastern Europe. They show a significant difference with people from all European regions. Respondents from North America and Central and Western Asia never rated housing conditions in the Netherlands better than in their home country.

An independent-samples T-test was used to check if a difference in answering both statements is noticeable between people who arranged housing themselves and people whose housing was arranged by their employer. For both statements no significant difference was found ($p = 0.546$; $p = 0.776$). According to a one-way ANOVA test for both statements, there was no significant difference between the different types of expatriates either ($p = 0.628$; $p = 0.718$).

5.2.4. Conclusions

In general, expatriates are not very satisfied about the search process of their first housing situation in the Netherlands. They feel like there are not enough available options to choose from and that their local market knowledge is insufficient. Especially the people who did not have housing arranged yet at

the time of arrival rated these aspects very negative. Logically, people whose housing situation was arranged by their employer were really pleased by this fact. Although it is highly appreciated by almost all respondents, only 40% indicated that it also helped in the decision to move to Eindhoven.

Except for the way in which housing was arranged (by the expatriate himself or by the employer), no differences between the different types of expatriates were found regarding to the housing search process.

Many respondents indicate their poor bargaining position, when finding their first housing situation. It seems almost impossible to find a suitable house for a good price, while the expatriate is still in his or her home country. Since options for furnished, rental housing are so limited and time constraints are high, the expatriate has to rely on commercial real estate agents who seem to take advantage of this situation and ask very high fees for very low service.

Overall, housing conditions in the Netherlands are rated very poorly by all types of expatriates and regardless their country of origin. Most people feel like their expectations of housing in the Netherlands were not met and only 13% of the respondents think that housing conditions in the Netherlands are better than in their home country. Only people from Eastern Europe were more positive about the Dutch housing conditions.

5.3. HOUSING PREFERENCES

In this paragraph, all housing preferences are described per type of expatriate. All mentioned preferences are the stated preferences as given in the survey. The SPSS output of this paragraph is given in appendix H.

5.3.1. Price

The majority of respondents indicate that they are maximally willing to spend 350 to 650 euros on housing per month (excluding service costs and utilities). Only 8% is willing to pay more than 950 euros.

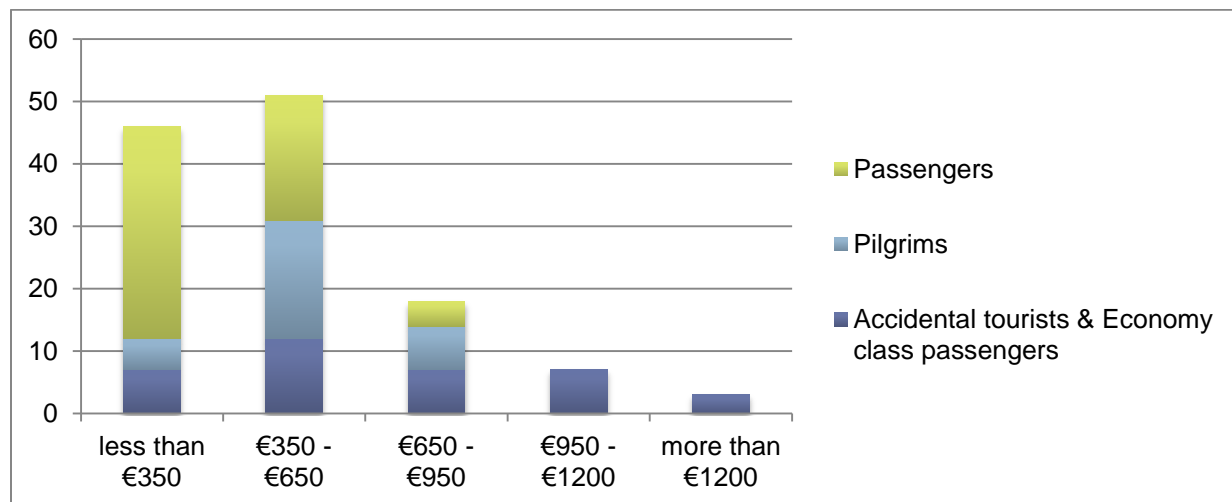


Figure 31. Maximum price willing to pay by type of expatriate (N=125)

A great difference is noticeable between the different types of expats, as shown in figure 31. Within the group of passengers (students), 59% only wants to spend less than 350 euros. Only 7% states that they are willing to spend more than 650 euros. For pilgrims, in general, 650 euros is also the maximum price that they are willing to spend. 23% is willing to go up to 950 euros. The group of accidental tourists & economy class passengers is more divided. Within these groups all price categories are mentioned, although the majority prefers to spend 350 to 650 euros. This could be regarded as quite low, considering the fact that their average household income is a lot higher than that of students and even pilgrims. A chi-square test confirms that the difference between these groups is significant ($p=0.00$).

The maximum price the respondents are willing to pay also differs between groups with a different household composition, as shown in figure 32. To test this, again a chi-square test was conducted and showed a significant difference between all groups ($p=0.00$).

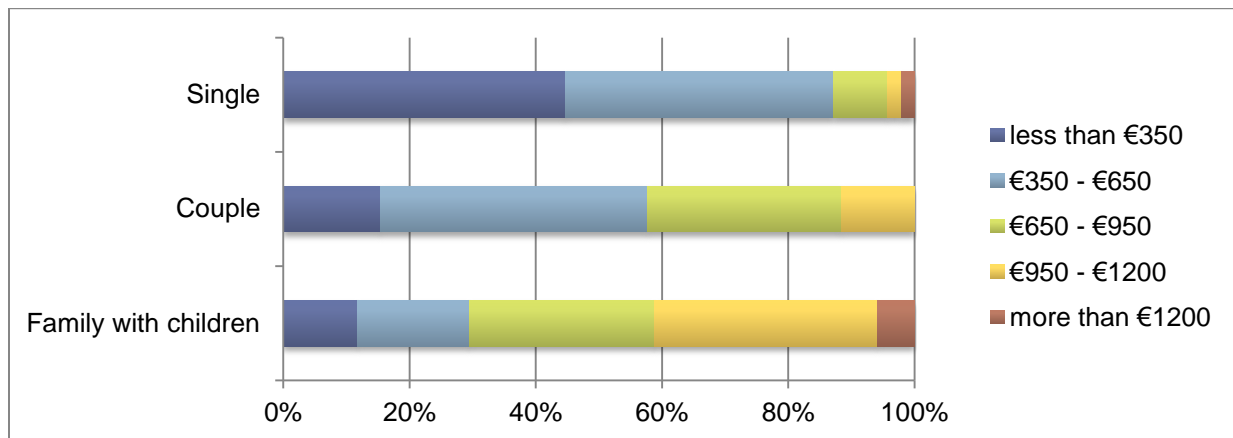


Figure 32. Maximum price willing to pay by household composition (N=137)

As could be expected, couples are willing to pay more than singles and families with children are willing to pay more than couples. Of course, this is related to the life stage in which a respondent finds himself and the household income.

5.3.2. Tenure

Figure 33 shows that a large majority (85%) of the respondents prefers a rental dwelling. Only 1 respondent indicated that he or she preferred to buy a house.

No significant differences were found between types of expatriates and the different types of households. Since the percentage of respondents who prefer anything other than a rental house is so small, no statistical tests could be used to test between groups.

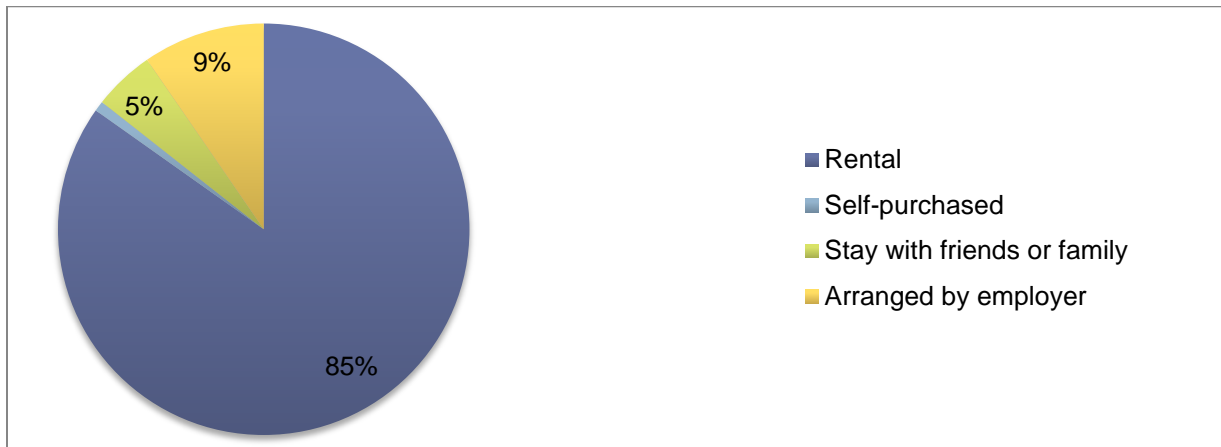


Figure 33. Tenure preference (N=137)

5.3.3. State of furnishing

As shown in figure 34, the majority prefers a furnished house. Only 9% states that he or she prefers a housing situation without any type of furnishing.

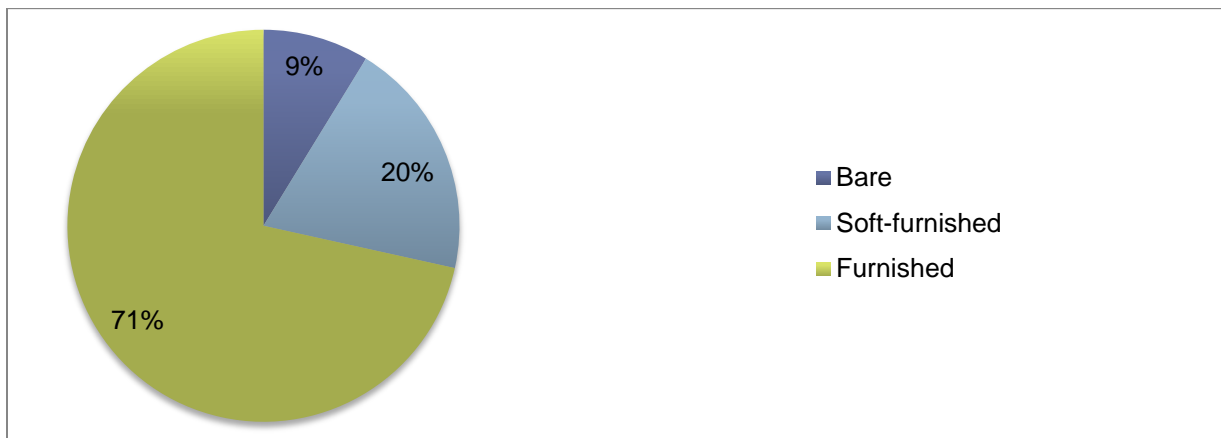


Figure 34. Preferred state of furnishing (N=137)

The conducted chi-square test showed no significant differences between groups, tested for the different types of expatriates ($p=0.543$) as well as the different types of households ($p=0.166$).

5.3.4. Type of house

The majority of respondents stated that they prefer a studio apartment, as is shown in figure 35. Contrary to what is often said, only 1% of the respondents prefers to stay in a (long stay) hotel. A semi-detached house is also unpopular. This is only preferred by 1% of the respondents.

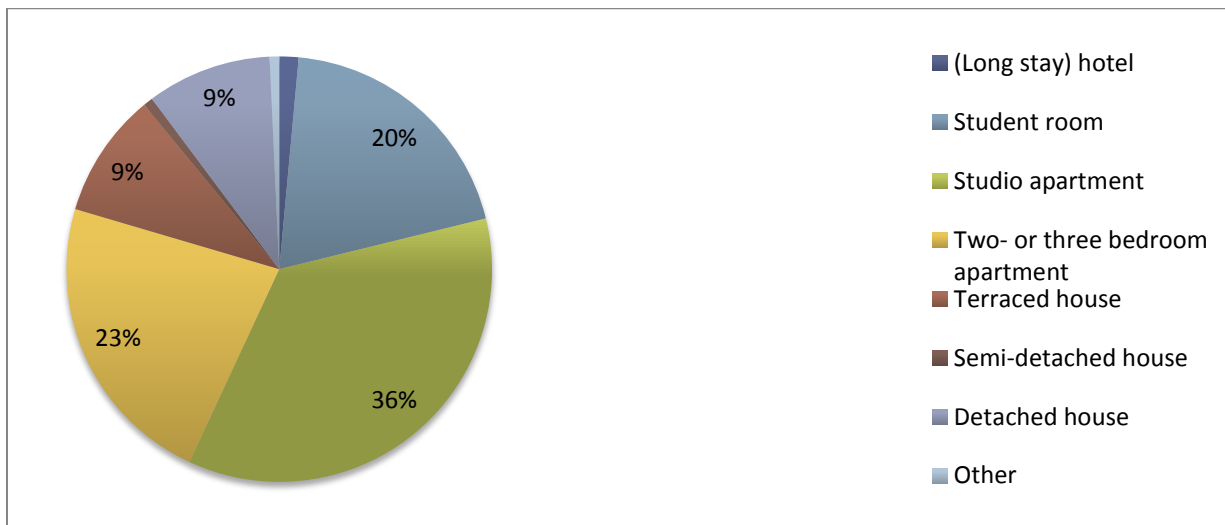


Figure 35. Preferred type of house (N=137)

A chi-square test showed a significant difference ($p=0.008$) between the different types of expats and their housing type preferences. This difference is mainly caused by the group of passengers, whose preferences are significantly different from the other two groups. As is shown in figure 36, within that group a much higher percentage prefers to live in a student room. Remarkable though, is the fact that even within the group of passengers, most people (59%) prefer an apartment instead of a student room.

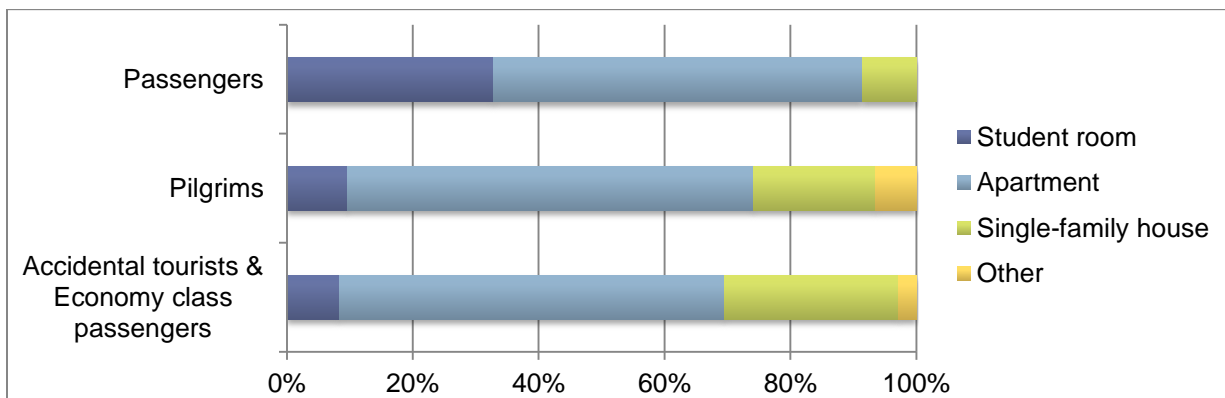


Figure 36. Housing type preferences by type of expatriate (N=125)

Another chi-square test showed to that differences between the different types of households are also significant ($p=0.000$). In this case, families with children show a different pattern. As could be expected, most of them prefer a single-family house in contrary to singles and couples. One respondent of the families with children stated that he or she prefers a student room. This seems remarkable and the question should be asked whether he or she understood the question correctly.

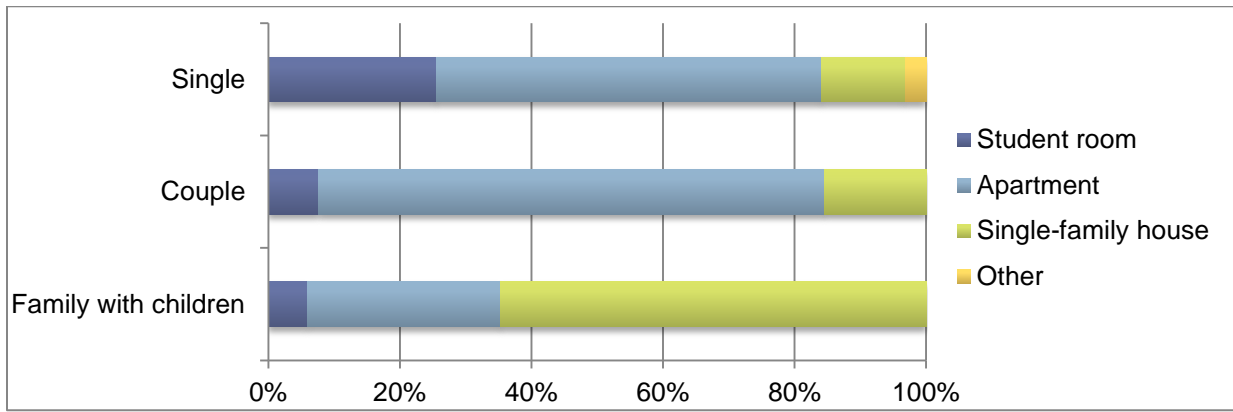


Figure 37. Housing type preferences by household composition (N=137)

5.3.5. Living environment

As shown in figure 38, the majority of respondents prefers any type of urban living environment (96%). Most popular is an urban-central living environment, followed by a green-urban living environment.

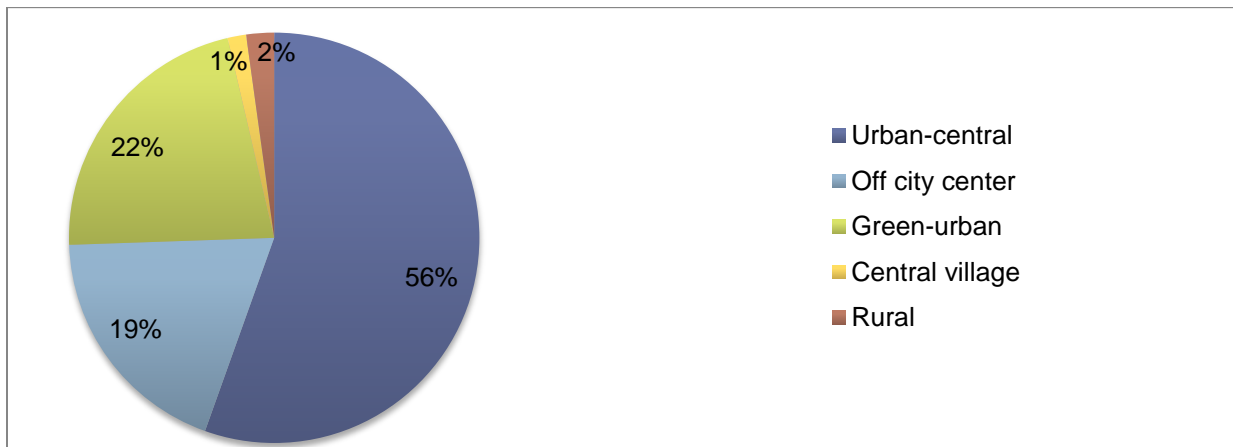


Figure 38. Preferred type of living environment (N=137)

Conducted chi-square tests show that there is no significant difference between different types of expatriates ($p=0.507$) and between different types of households ($p=0.190$).

Respondents were also asked to rate the importance of amenities on a 5-point scale, from not important (1) to very important (5).

As figure 39 shows, according to the respondents, the most important characteristics of the living environment are respectively proximity to grocery shops, distance to work or study and public transport. The least important are the availability of an (international) elementary or secondary school, presence of other expatriates and distance to family and friends.

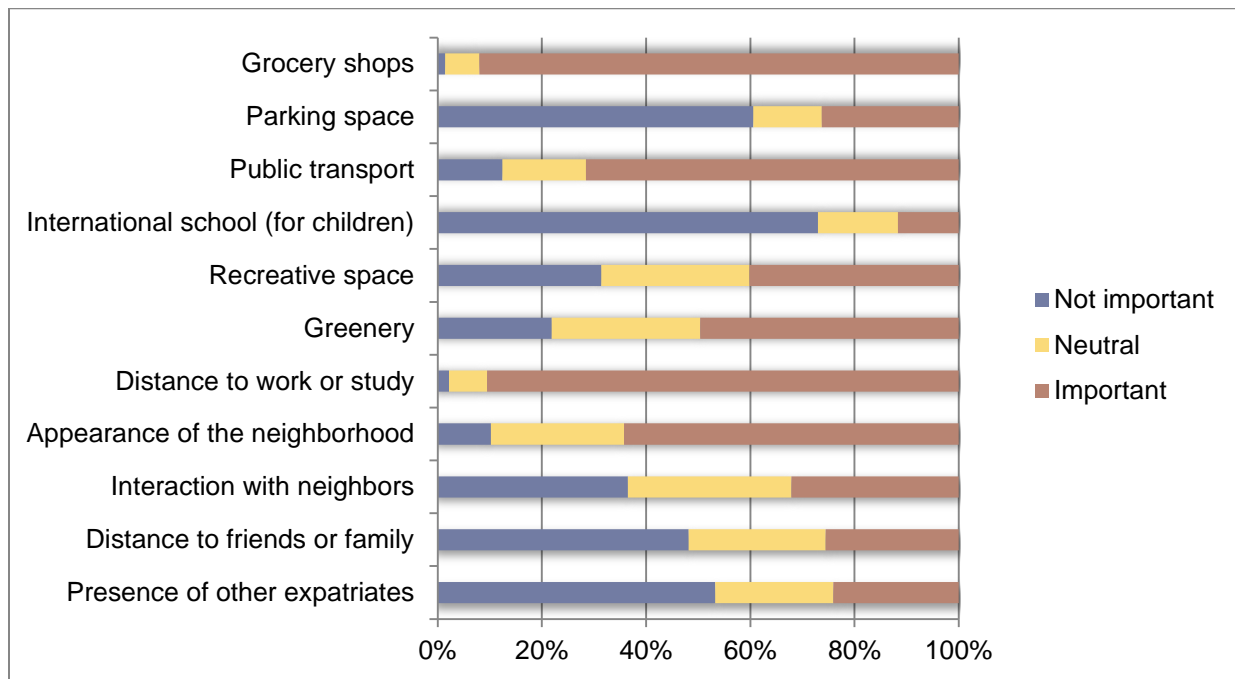


Figure 39. The importance of amenities (N=137)

Figure 40 shows the results per type of expatriate. For most amenities, these groups do not show a significant difference using a one-way ANOVA test. For parking space ($p=0.00$) and the presence of an (international) elementary or secondary school ($p=0.049$), a significant difference is found. In general accidental tourists and economy class passengers find the availability of parking space much more important than pilgrims and passengers. Also the presence of an (international) elementary or secondary school is more important to them. The latter probably goes along with the fact that in general the percentage of families with children is higher in this group and therefore the presence of a children's school is more important.

This is confirmed by an ANOVA test for the different types of households, that confirms a significant difference ($p=0.001$) in the rating of families with children in the importance of the availability of an (international) elementary or secondary school. Although this group rates the presence of a school much higher, it is still one of the least important aspects of the neighborhood. The rating of other amenities did not show any significant differences for different kinds of households.

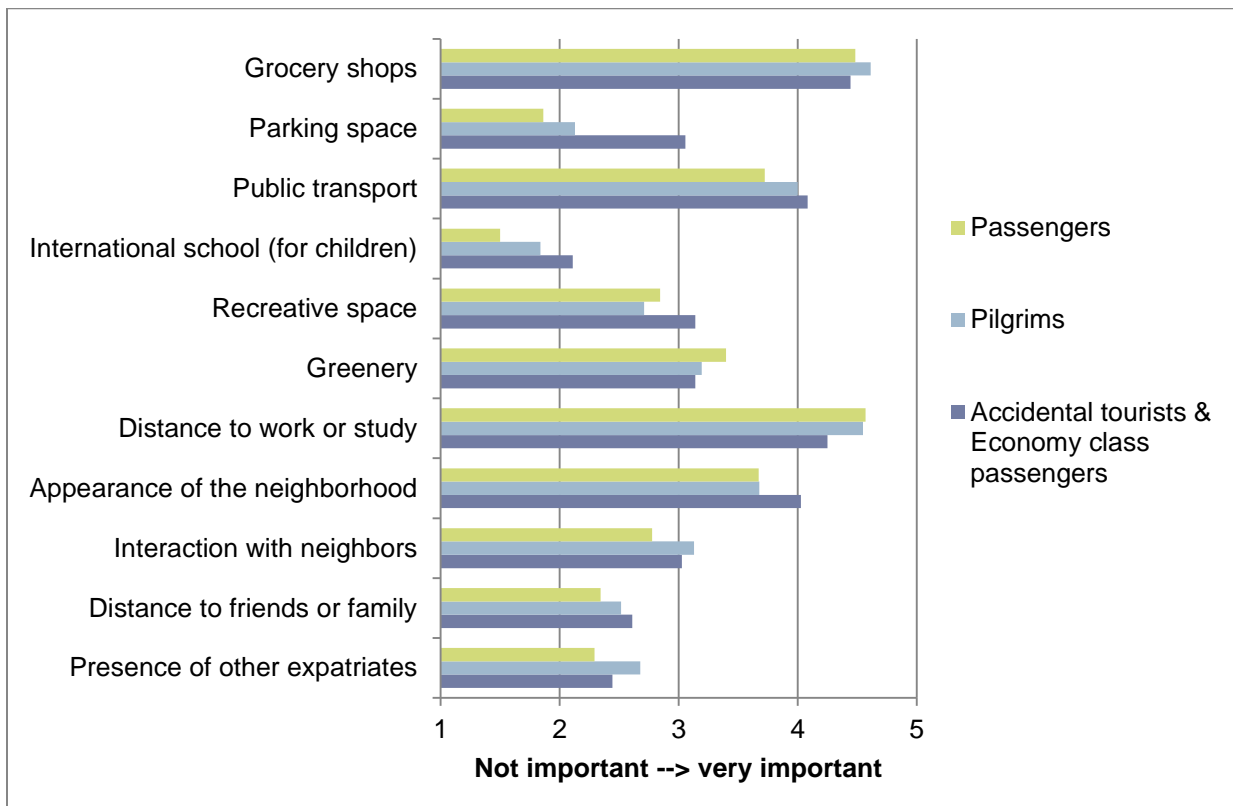


Figure 40. Importance of amenities by types of expatriates (N=125)

5.3.6. Conclusions

Overall, most expatriates show similar housing preferences. The majority prefers a furnished, rental house, mostly an apartment. However, differences in the preferred price and type of house are noticeable for the different types of expats and different types of households. As could be expected, students and single-person households have less money to spend and therefore prefer a lower priced house. Families with children on the other hand have more to spend and need a bigger house, so they more often prefer a single-family dwelling.

Furthermore, almost all respondents indicate that they prefer any type of urban living environment, mostly urban-central. The amenities that they find most important are: the proximity to grocery shops, distance to work or study and availability of public transport. Although households with children and accidental tourists and economy class passengers rate the amenities: parking space and the presence of an (international) elementary or secondary school far more important than other groups, also for them, these are still one of the least important amenities.

5.4. FIRST HOUSING CONCESSIONS

Due to insufficient supply or unrealistic demands, a person cannot always find the house that he or she is looking for. In this paragraph the stated preferences as described in paragraph 5.3, will be compared to the actual first housing situation in Brainport region. This way, a comparison between the stated and

revealed preference can be made and it will become clear on which aspects of the house or living environment expats are willing to make concessions. Output of the used statistical tests in this paragraph is given in appendix I.

5.4.1. Price

As described in paragraph 5.3.1, 35% of all respondents indicated that they were maximally willing to spend 350 euros on housing. As shown in figure 41, only 26% managed to achieve this goal, the rest had to spend more. 4% stated that they live for free. Probably, their employer pays for their housing or they are staying with friends or family.

Of all respondents, 55% found housing in the same price range as they were maximally willing to spend, since they did not show a difference in answering the questions of the preferred price and the actual price of their first housing situation. 33% of the respondents had to pay more. Of the people that had to pay more, 84% went up one price category. 12% of the respondents actually pays less than they were maximally willing to spend; mostly the actual price is one price category lower than the preferred price (in 88% of the cases). Especially the supply in the price category below 350 euros seems insufficient for the demand.

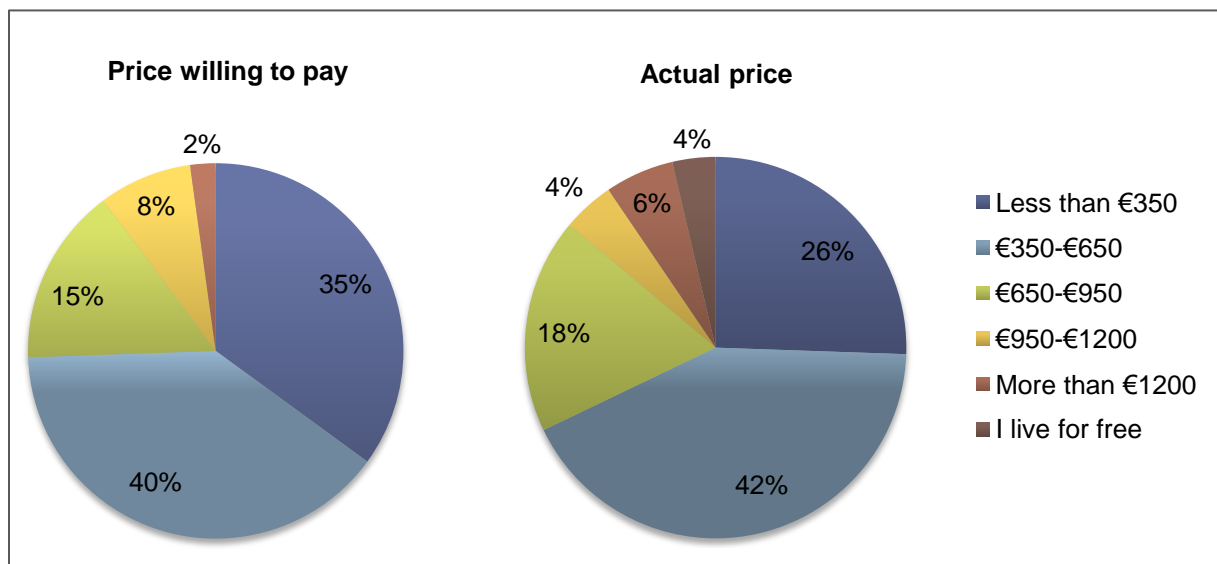


Figure 41. Preferred price versus actual price first housing situation (N=137)

As was for the price willing to pay, a difference in the actual price paid between the different types of expats is noticeable. However, in the case of the actual price; the difference is not significant anymore for all groups. Passengers and pilgrims do not show a mutual significant difference anymore. This is probably because most of the passengers (students) indicated that their maximum preferred price was less than 350 euros. As discussed before, a large part of this group had to pay more. Therefore, the group that pays 350-650 euros within the group of passengers has become larger as is in the group of pilgrims. An overview per type of expatriate is given in figure 42.

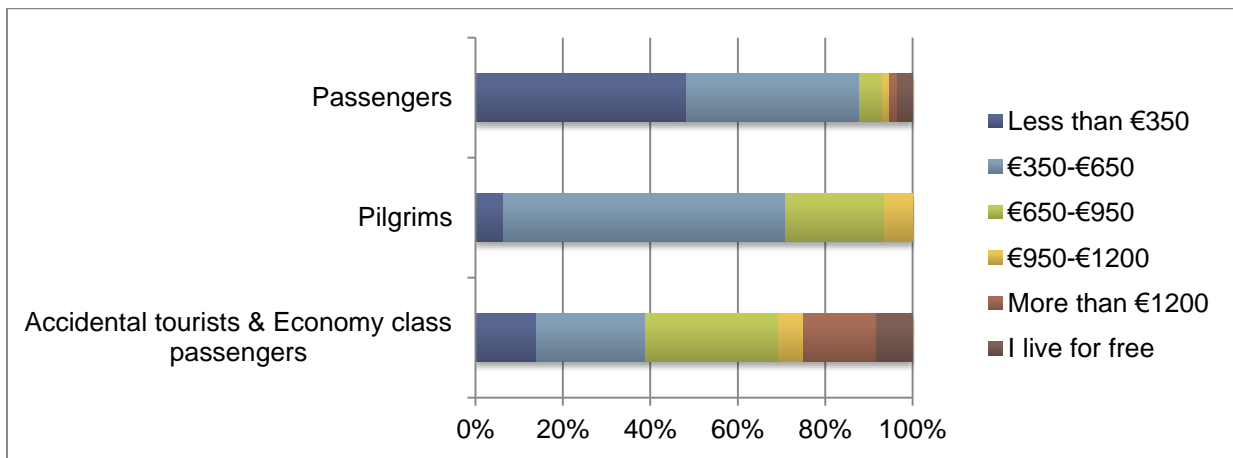


Figure 42. Actual price first housing situation by type of expatriate (N=125)

5.4.2. Tenure

As shown in figure 43, not a lot of difference in type of tenure is shown between the preferred and actual situation. It seems like tenure preference is an aspect that expats generally do not make concessions on.

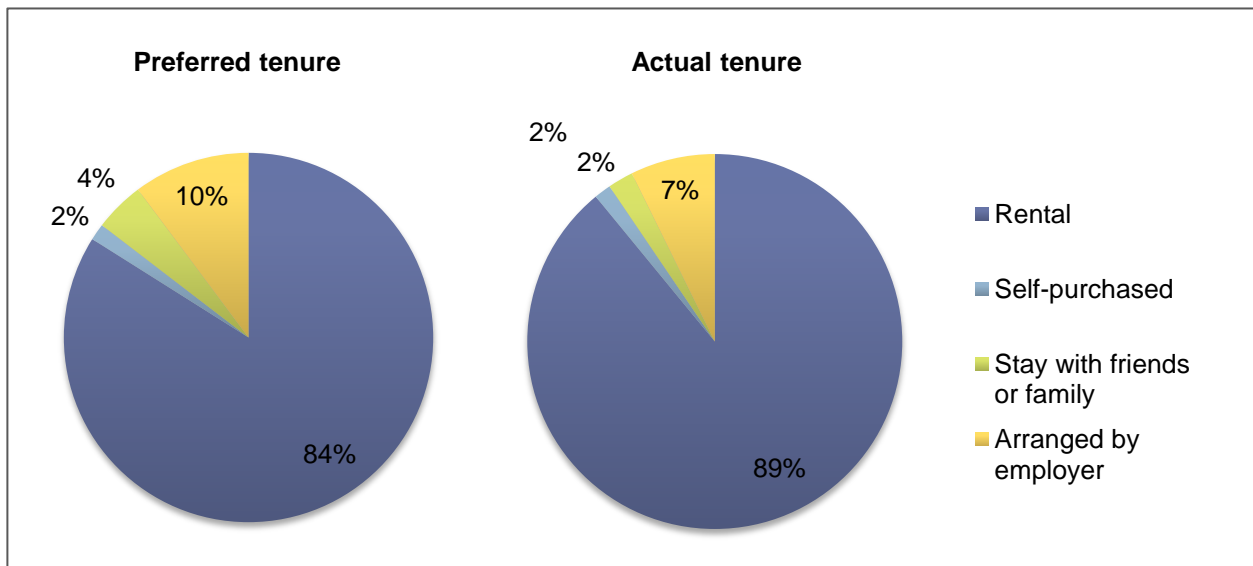


Figure 43. Preferred tenure versus actual tenure first housing situation (N=137)

5.4.3. State of furnishing

The same goes for the state of furnishing, as is shown in figure 44; the preferred state of furnishing and the actual state of furnishing in the first house are quite similar. Remarkable though, is the smaller percentage of soft-furnished housing in the actual first housing situation. Maybe, this type of furnishing is less available in the region and therefore people take a fully furnished dwelling instead.

75% of the respondents gave the same answer to the question about preferred furnishing and the type of furnishing in the actual housing situation. The largest group that showed a difference had a furnished home instead of the preferred soft-furnished home, which corresponds with the overall picture as described above.

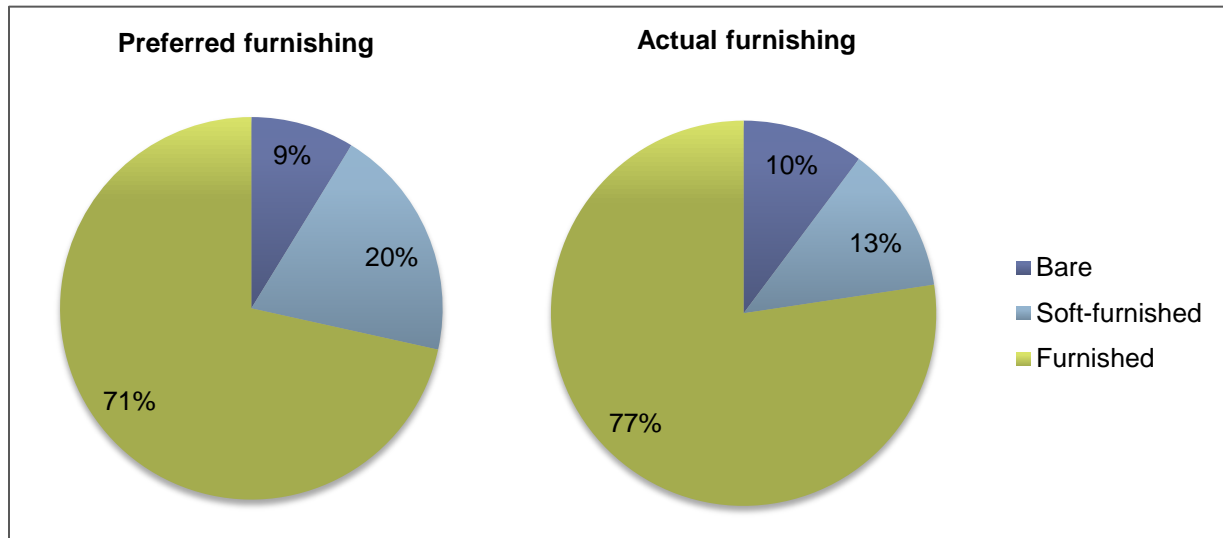


Figure 44. Preferred state of furnishing versus actual state of furnishing (N=137)

Although no significant differences between groups are found, using a chi-square test ($p=0.119$), a difference between accidental tourists & economy class passengers on the one hand and passengers on the other hand is noticeable, as is shown in figure 45. In general, accidental tourists & economy class passengers choose less frequently for a fully furnished house, 67% of this group, opposed to 81% of the pilgrims and 86% of the passengers. This could be related to the price willing to spend or the intended length of stay.

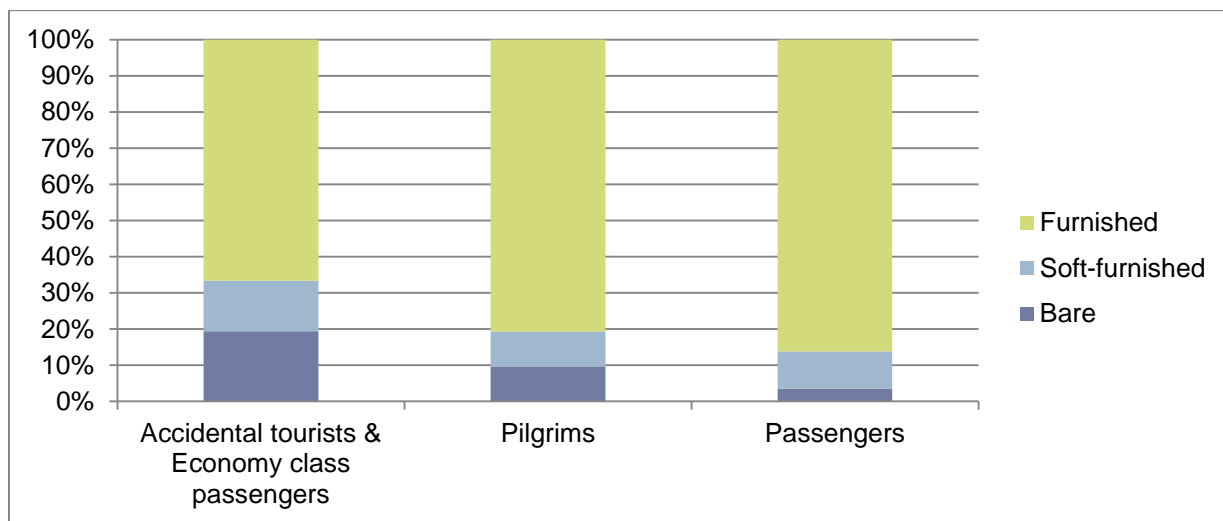


Figure 45. Actual type of furnishing by type of expatriate (N=125)

5.4.4. Type of house

Great differences are noticeable between the preferred type of house and the type of house of the actual first living situation, as shown in figure 46. Where only 1% states that he or she prefers to stay in a (long stay) hotel, in fact it is the case for 8% of the respondents. This could be a temporary solution if the expatriate has not accomplished to find a permanent housing situation yet. Another remarkable fact is the almost double share of student rooms in the actual situation compared to the preferred situation. Although most respondents preferred to live in a studio, the majority lives in student rooms. The more expensive housing types such as a detached house seem to be hard to attain as a first house.

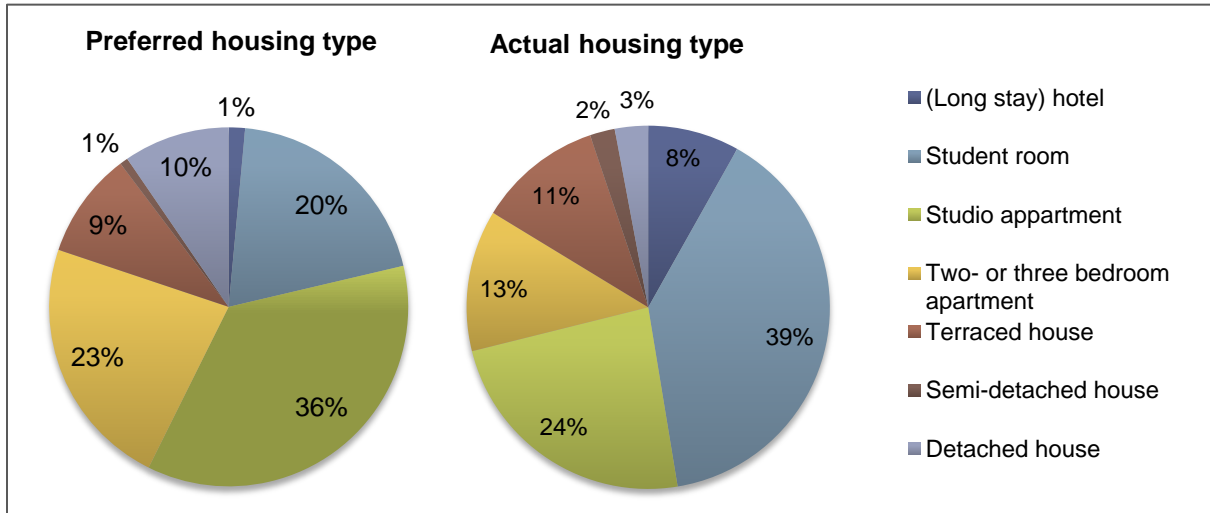


Figure 46. Preferred housing type versus actual first housing type (N=137)

Since the correlation between price and type of house is significant ($p=0.001$), the concessions in housing types could have been done because of an insufficient budget. Figure 47 shows the given answers for the broader categories of housing types by price for both the preferred and actual situation.

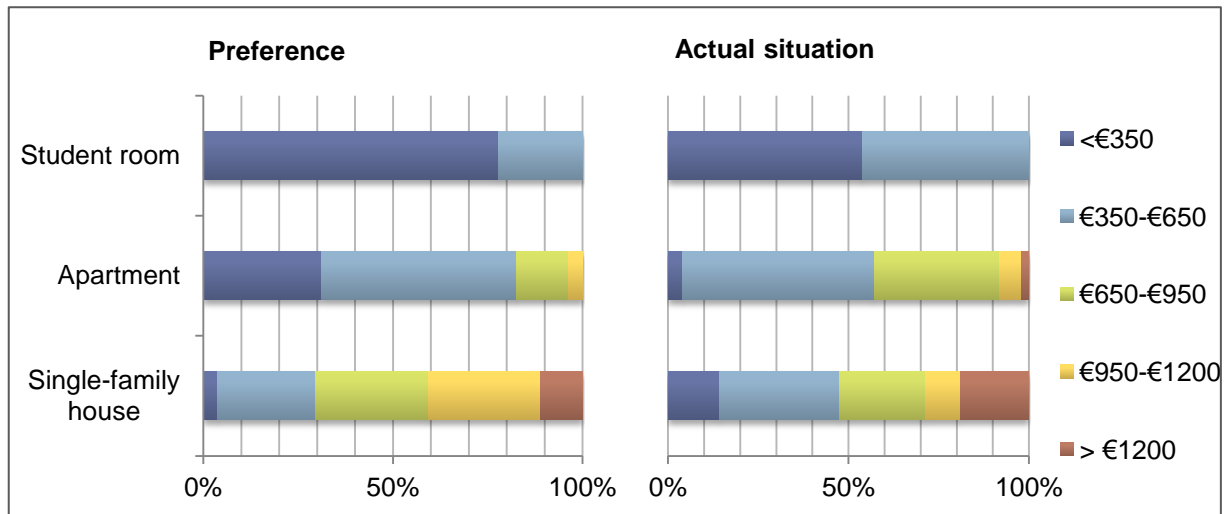


Figure 47. Type of house by price for the preferred and actual situation (N=137)

Figure 47 shows that respondents believe that they can get more value for their money as they actual can in their first housing situation. 31% of the people who prefer an apartment, believe that they can get this for under 350 euros. In reality, this does not seem achievable, since only 4% of the people who live in an apartment pay less than 350 euros. More than a third of the apartment residents even have to pay 650 to 950 euros. Also, prices for student rooms seem to be higher than expected by most expatriates. Where 78% of the respondents who prefer a student room wants to pay less than 350 euros, only 55% manages to get a student room for this price. The other 45% has to pay more. Many comments were given that stated that expatriates find housing in the Netherlands very expensive. This explains the difference in the expected situation and the actual price to quality ratio.

To see how many persons chose to live in another type of house than they preferred, again the answers of the preferred situation were compared to the answers of the first housing situation. It turned out that 65% of the respondents lives in the same housing type as they wished, so 35% made concessions. As shown in figure 48, most concessions are done by taking a student room instead of an apartment and to pay up to one scale more (27% of the respondents). 33% of the respondents had to pay more for their housing than they said they were willing to pay. Only the ones that preferred a student room did not have to make any concessions on their housing types. This is logical since a student room is in most cases the cheapest type of housing, so no better alternative can be found. 19% of this group however, did have to pay more than they were willing to; above 350 euros.

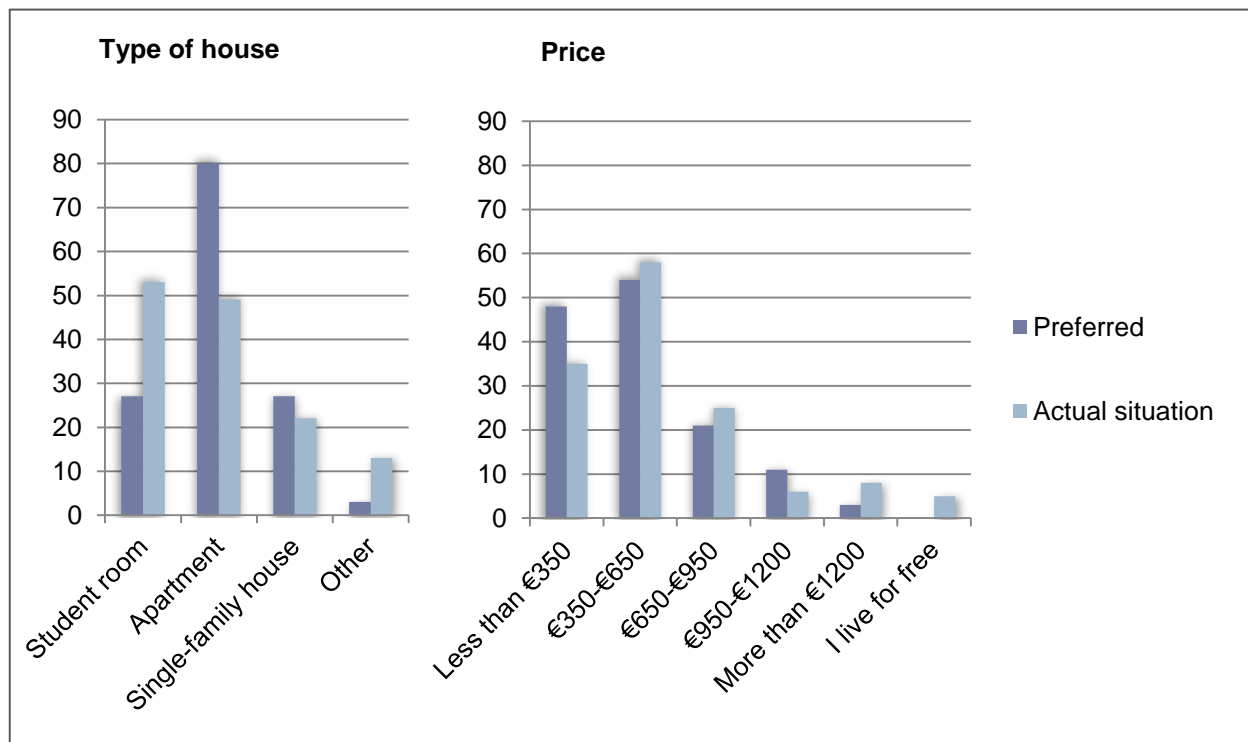


Figure 48. Preferred type of house and price versus actual situation (N=137)

5.4.5. Living environment

As shown in figure 49, most people live in an urban-central environment. However, these are less people than the ones that preferred to live in an urban-central living environment. Also, less people than preferred it, actually live in a green-urban living environment. It seems like most of these people that had to compromise, now live in a living environment that they characterize as off city center.

Almost half (47%) of all respondents do not live in the type of living environment they preferred. In most cases (19%), they live in an off city center environment instead of an urban-central environment. Of the people who preferred a green urban environment, only 23% actually lives in it.

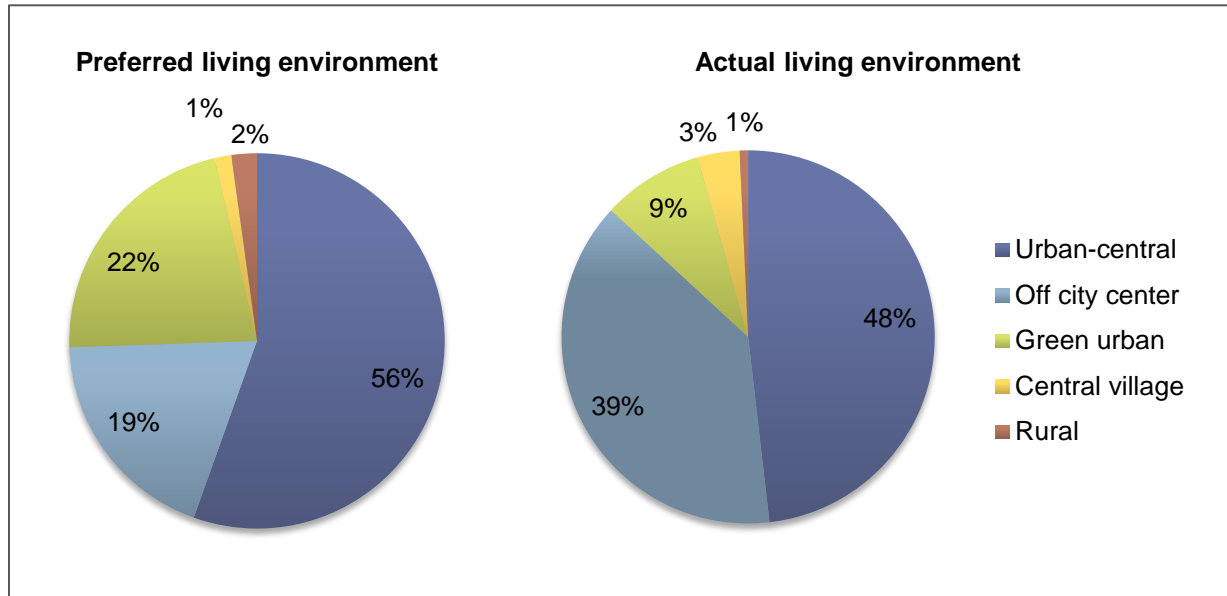


Figure 49. Preferred type of living environment versus actual type of living environment (N=137)

Using a chi-square test; in contrary to the living environment preferences, in the actual situation a significant difference ($p=0.000$) between groups is noticeable for household composition. As shown in figure 50, in all groups a fair amount of people preferred a green-urban environment. In the actual situation, generally, only the families with children live there. Most couples and singles live either in an urban-central or in an off city center environment and don't show any mutual significant differences.

It is not clear why this differences between different types of households show up, since it is not related to price and therefore income. Therefore, it does not seem true that only families with children can afford a green urban environment. Maybe, since they value the importance of greenery and recreational space higher and have to keep the needs of their children in mind, they are less willing to make concessions on the living environment.

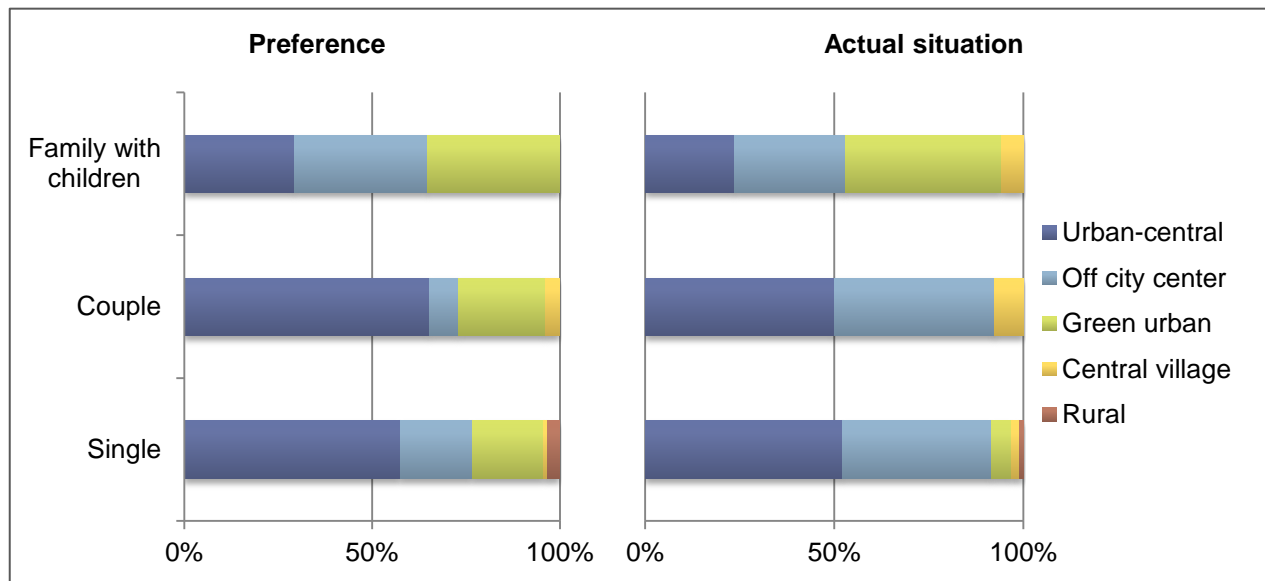


Figure 50. Type of living environment preferences versus actual situation by household composition (N=137)

5.4.6. Conclusions

It turns out that most expatriates do not have a realistic perception of the housing situations they can get for a certain price in the Netherlands. Especially when it comes to different types of housing, most respondents expect to get more value for their money. Therefore, concessions have to be made. Most concessions are made on the type of living environment and type of housing. Also, a third of the respondents had to pay more than they said they were willing to. Comments about high prices confirm the image that in general, expatriates find housing in the Netherlands very expensive.

Least concessions are made on the type of tenure and furnishing. Also, households with children seem less likely to make concessions on the living environment than other groups.

5.5. HOUSING CAREERS

To get a full insight in the housing choice behavior of expatriates, not only the first housing situation will be taken into account, but also the possible following housing situations. The SPSS output of this paragraph can be found in appendix J.

5.5.1. Number of living situations

As shown in figure 51, over half of the respondents (56%) have lived in more than one housing situation during their stay in Brainport so far. 26% has even lived in three or more housing situations.

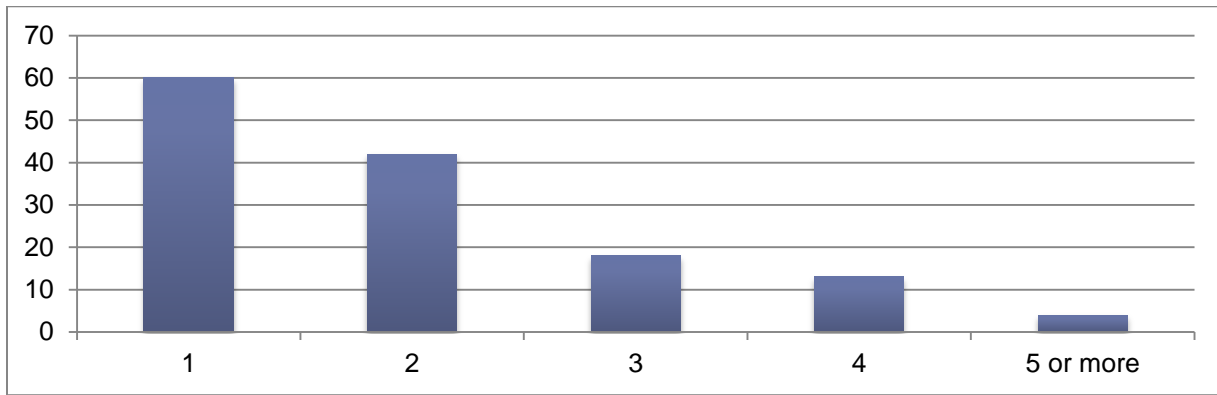


Figure 51. Number of living situations in Brainport (N=137)

The number of housing situations differs per type of expat, as shown in figure 52. This difference is significant, according to a one-way ANOVA test. Pilgrims show a significant difference between both passengers ($p=0.018$) and accidental tourists & economy class passengers ($p=0.005$). Pilgrims have much more often (65%) lived in only one housing situation. A possible reason could be that for the group of pilgrims, housing is more often arranged by the employer. Maybe, these circumstances are better than the expatriate can find on the general housing market.

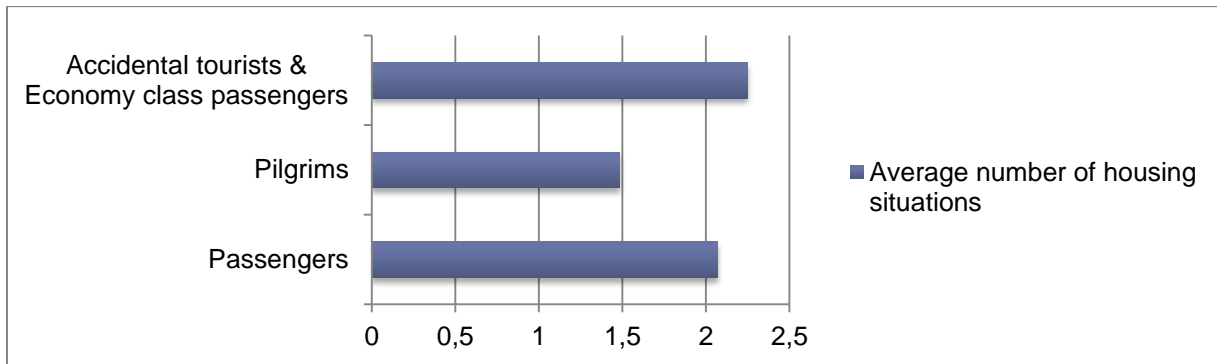


Figure 52. Number of houses by type of expatriate (N=125)

The intended length of stay in Brainport is not of influence on the number of housing situations, according to a one-way ANOVA test ($F=1.125$; $p=0.341$).

5.5.2. Satisfaction

Although most people had to make concessions regarding their preferred situation, generally, they are fairly satisfied with their first housing situation. Most people rate their satisfaction a 4 on a 5-point scale (from not at all satisfied to very satisfied), as is shown in figure 53. 27% of the respondents rate their first housing satisfaction a 1 or 2, opposed to 44% who rate their first housing situation with a 4 or 5.

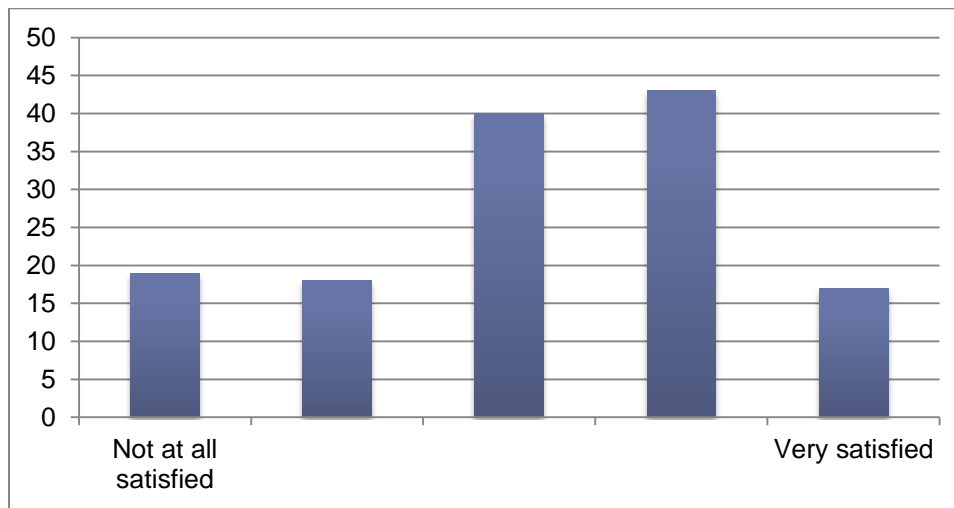


Figure 53. Satisfaction first housing satisfaction (N=137)

Logically, a significant difference ($F=10.139$; $p=0.002$) was found between people who still live in their first housing situation ($N=60$) and people who decided to move ($N=77$), using a one-way ANOVA test. The latter showed a significant lower mean (2.87), and thus a lower satisfaction rate than the first group (3.52). This is no surprise since in general; people who are not satisfied with their living situation will more likely decide to move. No differences are found between the different types of expatriates ($F=0.081$; $p=0.922$).

To see whether the people who moved got more satisfied with their new housing situation, the levels of satisfaction of all these houses were compared, as is shown in figure 54. It seems like, as someone moves and thus moves one step ahead in his or her housing career, the level of satisfaction improves. Of all the people who have lived in at least two houses, only 35% was satisfied with his or her first housing situation, where 75% is satisfied with the current housing situation.

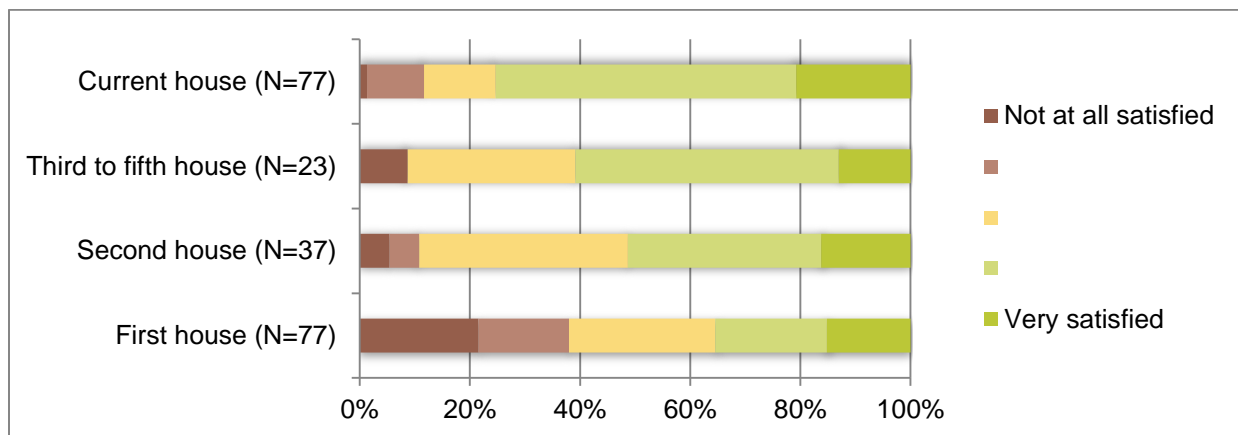


Figure 54. Satisfaction per housing situation when the respondent has lived in at least 2 houses

5.5.3. Reasons to move

At the moment, just over half of the respondents (51%) are considering moving out of their current housing situation. No difference is found between people whose current housing situation is their first housing situation and people who have lived in other houses before, using a chi-square test ($p=0.906$).

Figure 55 shows how often the proposed reasons to move were mentioned, for the housing situations that the respondents have already moved out and for the people who indicated that they are considering moving out of their current housing situation. The far most mentioned reason to move is: “I believe there are better possibilities available for the same price”. This corresponds with the mismatch between the desired and actual situation as described in paragraph 5.4.

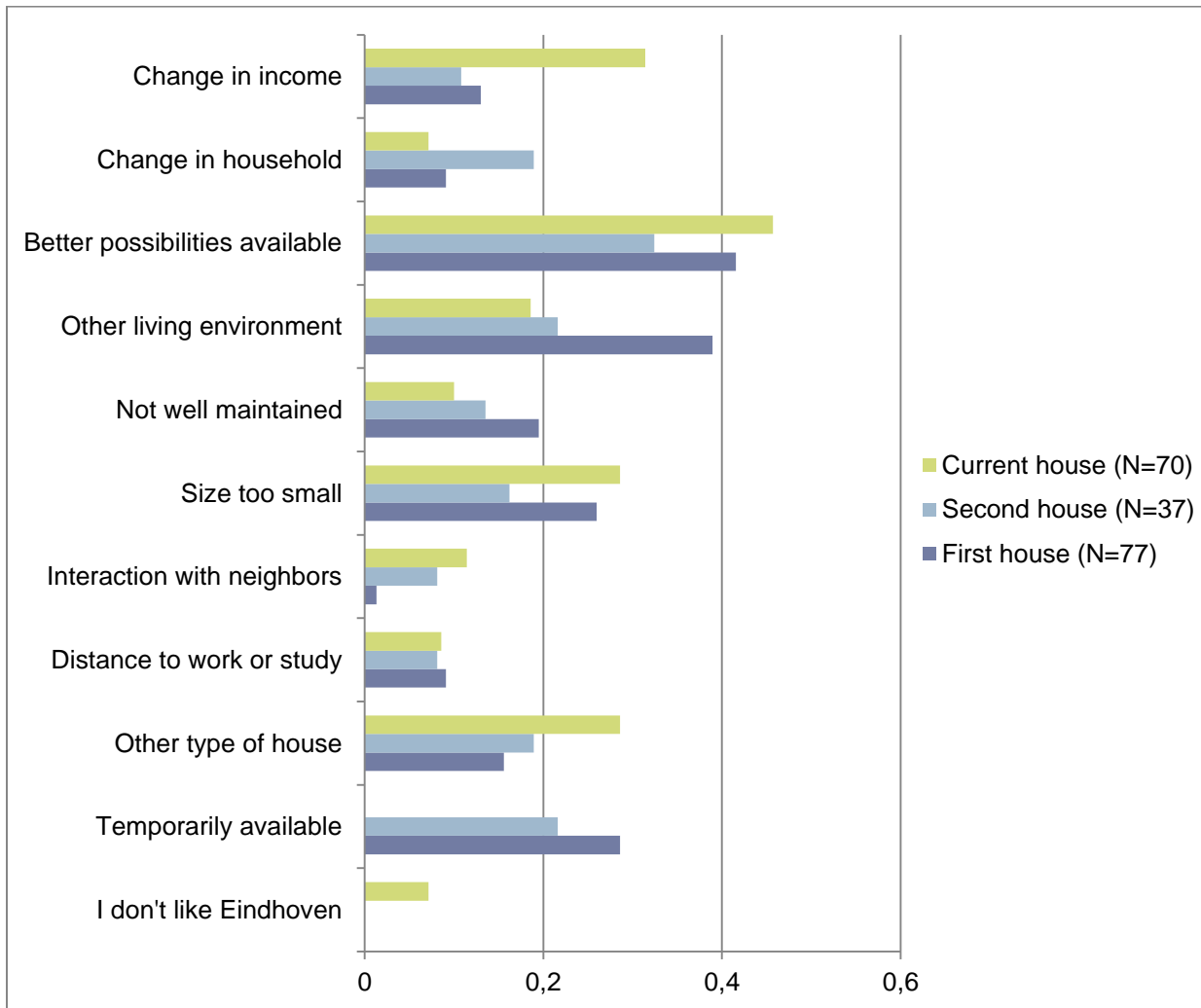


Figure 55. Reasons to move relative per housing situation

The three most mentioned reasons are all related to the housing situation itself, instead of external changes. This indicates a low satisfaction with the dwelling. To test this, an independent samples T-test was conducted to see if people who said they moved because they felt like there were better possibilities available, gave their housing situation with a lower satisfaction rate. Logically, people who

indicated this reason to move as true were significantly less satisfied with their housing situation ($p=0.000$).

Noticeable is the fact that people quite often have to move out of their housing situation because it is only temporarily available, especially for the first housing situation (29%). Choosing a temporary residence could be another way of compromising when a suitable permanent dwelling could not be found yet. Also noticeable is that the respondents much more often mention a change in income as a reason to move when they expect this to happen (31%) (in the current housing situation) than as one of the actual reasons if they have already moved (13%;11%). Although a shorter distance to work was rated as one of the most important aspects of the neighborhood, only 9% of the respondents mention this as a reason to move (9%). This could indicate that this is an aspect that expatriates are not willing to compromise on, even in the first housing situation.

In general, it seems like in most cases people move out of their first housing situation because of more primary conditions such as a bigger size, another living environment or a lower price to find something that suits their initial preferences better. Later, from the second housing situation, these are still the most important reasons, but external changes such as a higher income or a change in household composition become more important.

5.5.4. Relocation patterns

To get a better insight in the locations where expatriates live, maps are made by type of expatriate based on zip code. With each figure, the number of respondents for that housing situation is given. It includes respondents that have recorded a legit zip code value. However, not all housing situations are located in Eindhoven region and are therefore not visible at each map. Furthermore, some respondents indicated the same zip code and in that case, only one pictogram shows up. The same figures as shown in this paragraph are shown on a larger scale in appendix K.

To see what kind of living environments the respondents live in, the locations are placed on a map based on level of urbanism by CBS (2012), as is shown in figure 56. In Brainport region only the city center of Eindhoven shows parts that are very highly urbanized, most parts are indicated as highly urbanized. Some villages such as Veldhoven, Geldrop and Valkenswaard also show highly urbanized areas.

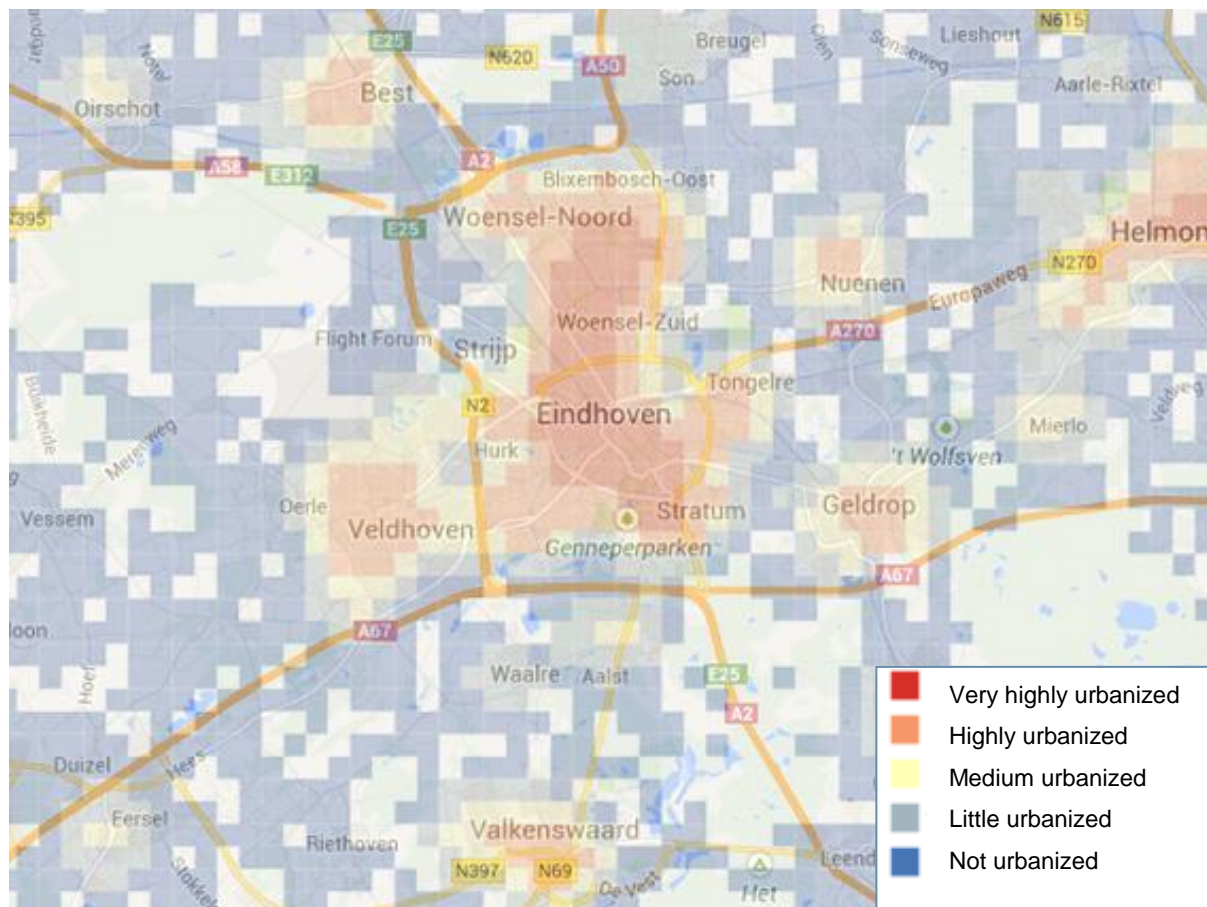


Figure 56. Level of urbanism (CBS, 2012)

It is remarkable that in the first housing situation almost everyone lives in the city center of Eindhoven as is shown in figure 57. This corresponds with the stated preference as described in paragraph 5.3. However, only 46% of the respondents assess their first living environment as urban-central. This indicates that expatriates do not rate all areas within the inner city ring as urban-central, but maybe also as off city center. Almost all people that live in the surrounding villages are accidental tourists & economy class passengers. Possibly, this is related to the higher percentage of households with children who want to live in a more quiet area.

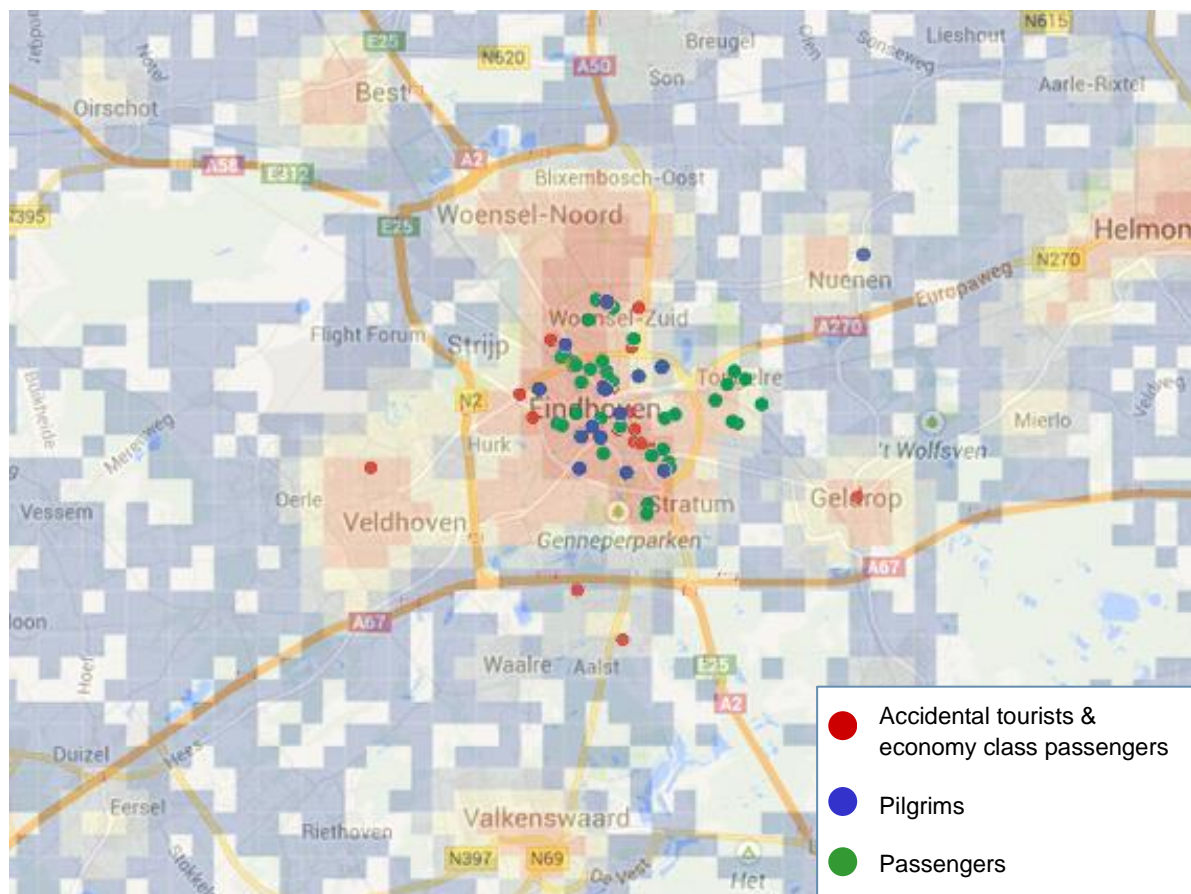


Figure 57. Locations first housing situation (N=114)

As is shown in figure 58, more expatriates tend to move out of the city center for the second housing situation. Especially urban environments that are just outside the inner city ring seem to get more popular. A possible reason could be that in general, these locations are better affordable than urban central locations.

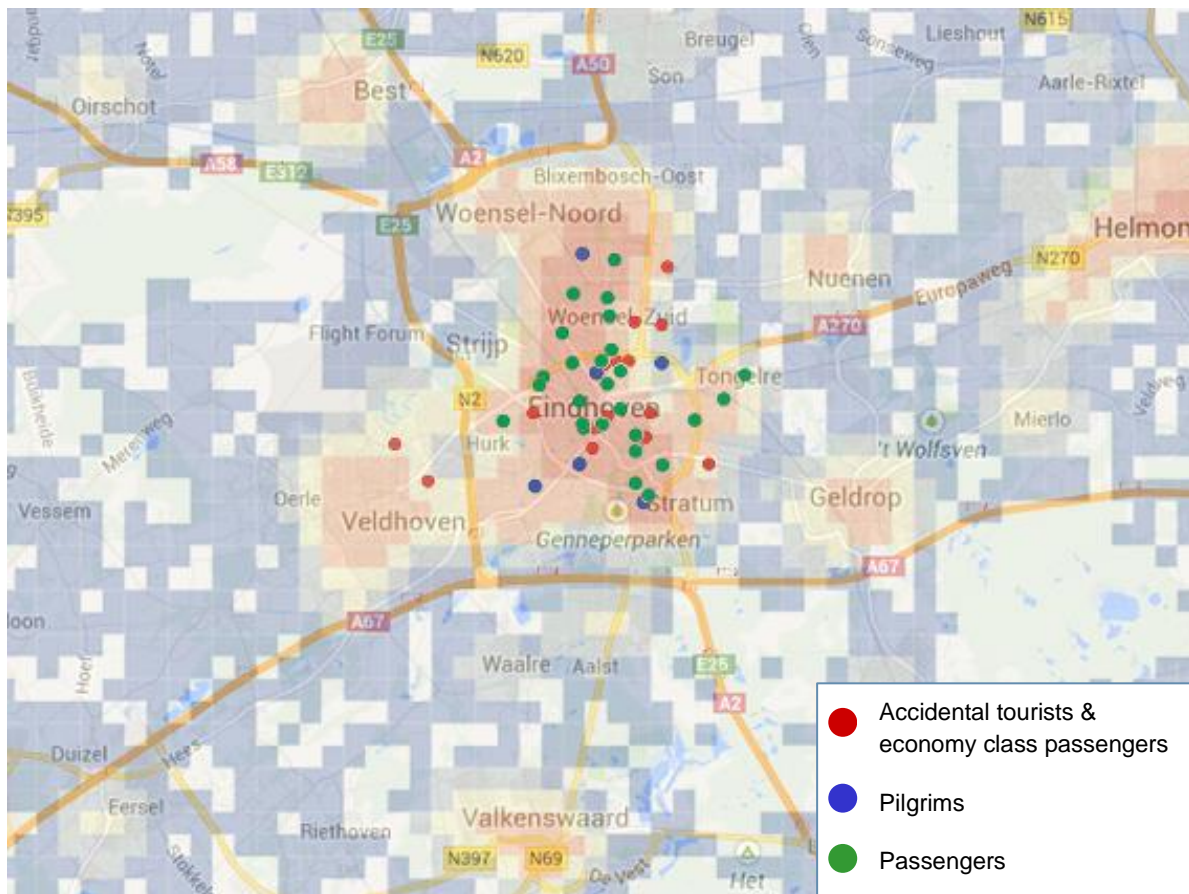


Figure 58. Locations second housing situation (N=59)

Figure 59 shows the third to fifth housing situation and clearly sketches a more diversified image of the housing locations of expatriates. Especially accidental tourists & economy class passengers tend to move out of the city center to more suburban neighborhoods and surrounding villages. Passengers tend to move to locations inside or just outside the inner city ring, probably because many affordable student rooms are located here.

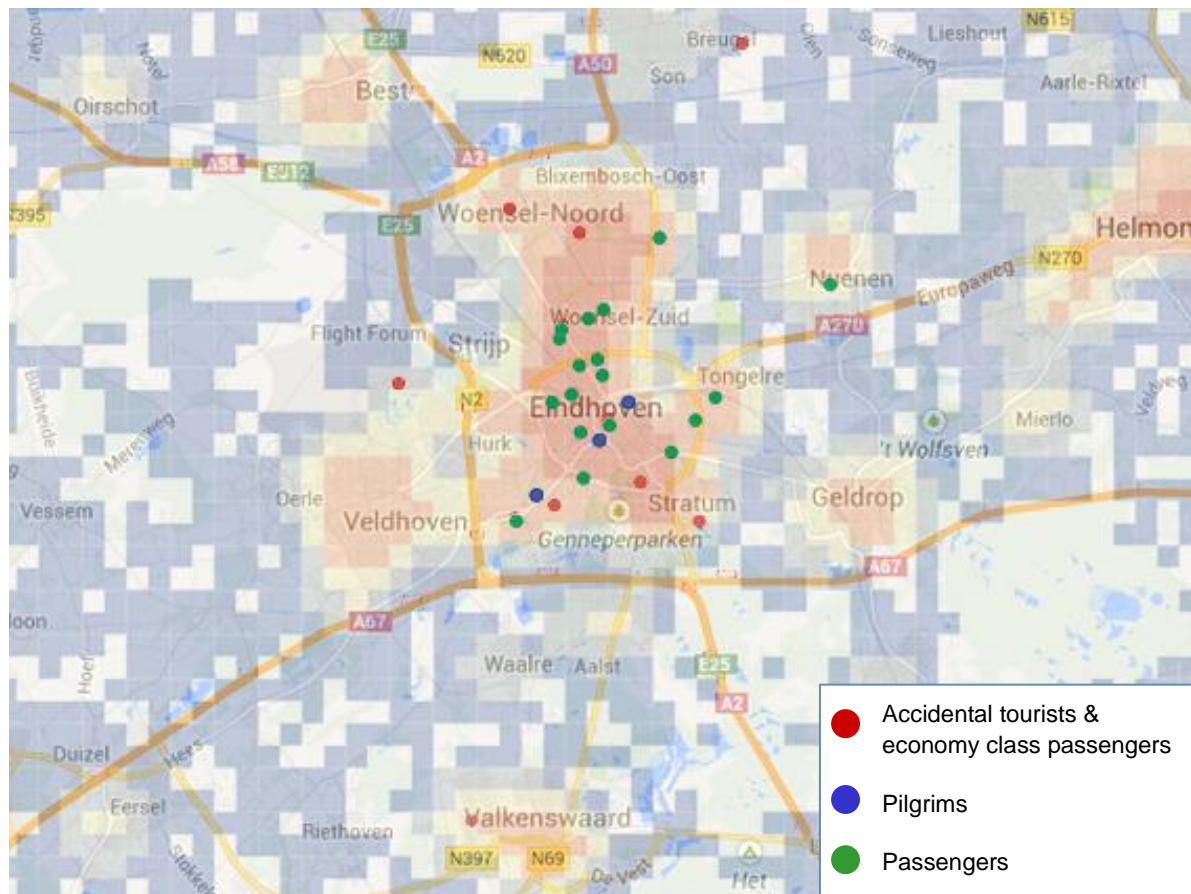


Figure 59. Locations third to fifth housing situation (N=44)

Concluding from the figures described above, it seems like expatriates more often tend to move out of the city center as the number of housing situation increases. For the first housing situation, almost all respondents live in the city center of Eindhoven. Later, more people are living in neighborhoods outside the city center, probably because they are better affordable. In the third to fifth housing situation more people seem to move to suburban neighborhoods and surrounding villages, especially accidental tourists & economy class passengers. Probably, they search for a more quiet living environment.

5.5.5. Conclusions

It seems like in many cases the first housing situation does not match the preferred situation, but it is taken anyway because a better option is not available within the set time frame. Therefore, most expatriates live in multiple housing situations during their stay in Brainport region. In most cases, they move because they are not satisfied with aspects of either the dwelling or the living environment. Also, many expatriates have lived in houses that were only temporarily available, probably because these housing situations are easier to get. After the first housing situations, life-course changes such as a change in household or income become increasingly important reasons to move. In the latter housing situations, people more often tend to choose more suburban living environments, especially accidental tourists & economy class passengers.

5.6. CONCLUSIONS

In this chapter, both quantitative and qualitative survey results are described. The housing preferences and housing careers of expatriates are mapped and the last two research questions are answered. First, it is checked whether there is a relation between the characteristics of different groups of expatriates and their housing choice behavior as stated in the following research question:

Q4. Is there a relation between the characteristics of different groups of expatriates and their housing choice behavior?

As it turns out, a strong relation between different groups of expatriates and their housing preferences was found. Although almost all expats prefer a furnished rental dwelling, differences in the preferred price and type of house are noticeable for the different types of expatriates and different types of households. As could be expected, students and single-person household have less money to spend and therefore prefer a lower priced house. Families with children on the other hand have more to spend and need a bigger house, so they more often prefer a single-family dwelling. Fewer differences were found in the preferred living environment. Almost all expatriates prefer any type of urban living environment, mostly urban-central. However, the importance of some amenities such as parking space and the presence of an international preliminary or secondary school was rated differently for the different types of households.

Although preferences are quite different, the actual situations of different types of expatriates are more similar, mostly caused by price constraints. For instance, many PhD or PostDoc students have to live in a student room, because they cannot afford the preferred studio or apartment and their housing situations become similar to that of students. However, it is different for the chosen living environments. Accidental tourists & economy class passengers more often tend to choose any type of suburban living environment, especially in the latter housing situations.

No differences were found for the different types of expatriates when it comes to general housing conditions in the Netherlands. As it turns out, housing conditions in the Netherlands are rated fairly poor by all expatriates; expectations were not met and most respondents feel like housing conditions in the Netherlands are worse than in their home country. Only people from Eastern Europe were more positive about the Dutch housing market. Furthermore, complaints are being made about incorrect behavior and high fees of commercial real estate agents.

Not only characteristics of the expatriate, but also characteristics of the migration process could influence the housing choice behavior of expatriates. To check this, the following research question is answered:

Q5. Are the characteristics of the migration process of influence on the housing choice behavior of expatriates?

As it turns out, the migration process does influence the housing choice behavior of expatriates. Especially at the start of the migration period, expatriates are not adjusted yet and do not have a realistic perception of the housing situations they can get for a certain price in the Netherlands. Especially when it comes to different types of housing, most respondents expect to get more value for their money and need to make concessions on roughly price, size or location.

The increasing level of satisfaction per subsequent housing situation seems to show that an adjustment period in Brainport is necessary in order to know where to find things and be able to find suitable housing. The overall very negative ratings of the housing search process of the first housing situation seem to confirm this. It turns out to be very difficult to find suitable housing when the expatriate is still in the home country, because many arrangements have to be made in person and the expatriate cannot see the property before he has to make the final decision and payment. Furthermore, it turns out that expats have quite a short period of time to prepare for their migration and make housing arrangements. Therefore, they are often forced to accept the first option that is offered.

In general, people have to make a few steps in their housing career to attain a housing situation that they are satisfied with; the overall satisfaction level increases with each subsequent housing situation. It seems like when the length of stay in Brainport gets longer and primary housing needs are met, life-course and external changes become more important in the decision to move and the housing careers of expatriates become more similar to that of Dutch inhabitants.

Besides answering the last sub research questions, the following objectives are obtained in this chapter:

- *Gain insight in the different stages of the housing career of expatriates in Brainport Region*
- *Gain insight in the housing preferences of expatriates during the different stages of the housing career*
- *Find out to what extent the preferences meet the actual situation, given the fact that the preferred situation is not always available*

Now that all sub questions are answered, overall conclusions can be drawn and the main research question can be answered in the next chapter:

Are there different stages in the housing careers of expatriates distinguishable and do these stages and the expatriate's characteristics affect the housing choice behavior of expatriates in Brainport Region?

6. CONCLUSIONS & DISCUSSION

In this study, insight is gained in the different aspects of the housing careers of expatriates such as: characteristics of different types of expatriates, the migration process and the housing choice behavior of expatriates by means of a literature study. Later, the housing careers of expatriates in Brainport were mapped and relations between the individual aspects of the housing careers were tested using in depth interviews and a survey held among expatriates in Brainport. In this chapter the main research question will be answered:

Are there different stages in the housing careers of expatriates distinguishable and do these stages and the expatriate's characteristics affect the housing choice behavior of expatriates in Brainport Region?

Furthermore, external sources will be assessed to reflect on the conclusions of this study and to put the most remarkable findings into perspective. Finally, research limitations are discussed and recommendations are given for both practical implementation and for future research.

6.1. CONCLUSIONS

As described in the literature study, three major stages in the housing careers of expatriates can be distinguished, related to the stages of the migration process based on the theory of Bhughra (2001). First, the pre-migration stage where expatriates make pre-arrangements for their migration and start to think about housing preferences. Second, the migration stage where the actual migration takes place and the first housing situation in Brainport has to be found. Finally, the third stage of post-migration where cultural adaption takes place and the expatriate gets a better feel of the Dutch housing market.

For the different types of expatriates three groups are distinguished, based on the theory of Mahroum (2002):

- Accidental tourists & economy class passengers:
Highly skilled employees that work for different kinds of commercial companies. They mostly migrate because of specific opportunities a region has to offer or because their migration is initiated by their employer.
- Pilgrims:
Academics and scientists who work for universities or specific research institutes. This category also includes PhD and PostDoc students
- Passengers:
Students who follow a higher education program or an exchange period, mostly for their personal development.

As it turns out, the housing choice behavior of expatriates differs per type of expatriate and changes during the different stages of the housing careers.

Pre-migration stage

In the first stage: the one of pre-migration, differences per type of expatriate are found for housing preferences and the way in which housing is provided.

The various types of expatriates show different housing preferences, especially for the preferred type of house and maximum price willing to pay. This seems to be mostly caused by socio-demographics such as household composition, age and income which are not specific for expatriates and could be the same for Dutch knowledge workers. However, because of a higher job and place insecurity, expatriates want to be flexible and have an extreme preference for rental dwellings, mostly furnished.

Furthermore, almost all respondents indicate that they prefer any type of urban living environment, mostly urban-central. The amenities that they find most important are: the proximity to grocery shops, distance to work or study and availability of public transport. Although households with children and accidental tourists and economy class passengers rate the amenities: parking space and the presence of an (international) elementary or secondary school far more important than other groups, also for them, these are still one of the least important amenities.

The first housing situation is either arranged by the employer or by the expatriate him or herself. A difference is noticeable between the different groups of expatriates, especially for pilgrims, housing is more often arranged by the employer.

Migration stage

During the second stage: the migration stage, the actual migration takes place and the first housing situation in Brainport has to be found. As it turns out, in this stage two major problems occur:

- Because of general scarcity of the preferred type of housing (furnished, rental dwellings), it is difficult to find affordable and suitable dwellings
- A high urge to move and time constraints lead to a very poor position of expatriates in the housing search process

The preferred type of house: a furnished rental puts expatriates in a difficult position where they have to search for housing in a very small share of the housing market with great scarcity. As in any market where the demand is high and supply is low, prices are high. As it turns out, most respondents do not have a realistic perception of the Dutch housing market as it comes to which price they have to pay for a certain type of housing. Almost all respondents expected to get more value for their money than they actually did. This is also one of the reasons that the Dutch housing market is rated very poorly in general by the respondents.

Besides general problems with finding housing in a scarcity market, characteristics of the migration process make it even more difficult for expatriates to attain a suitable dwelling. Since most expatriates only know shortly before their migration that they are going to move to a different country, time constraints are huge. This goes along with the fact that finding a new house is required, because

distances are too far to travel, in contrary to Dutch knowledge workers who could shuttle between home and workplace for a while.

This high urge to move and the long distance ensure that expatriates have to rely on commercial real estate agents to find their first housing situation, since any other form of rental dwelling seems unattainable, due to long waiting lists for dwellings offered by the housing associations and a required attendance in person for many private-owned dwellings and student rooms. According to the respondents, these real estate agents seem to have a monopoly position where they can ask very high fees for low services and some expatriates have even experienced a feeling of deception. Furthermore, many expatriates experience a language barrier when searching for their first housing situation. As they state, most housing websites and even contracts are only available in Dutch.

The problems mentioned especially apply to expatriates with a lower income, such as pilgrims and passengers. Since scarcity is even higher in the affordable housing market, they almost always have to make concessions on some parts. Most concessions are made on the type of living environment and type of housing. Besides compromising on the house, many expatriates also pay more than they were willing to. Least concessions are made on the type of tenure and furnishing. Also, households with children seem less likely to make concessions on the living environment than other groups.

Post-migration stage

In the third stage of the housing career, cultural adaption takes place and the expatriate gets a better feel of the Dutch housing market. In most cases the decision to move is a freestanding choice since the expatriate already lives in Brainport. Therefore, the decision to move is caused by the evaluation of the current house and in most cases moving only occurs if an improvement in the housing situation takes place.

As the length of stay gets longer and expatriates get more adjusted to the new culture, the housing search process seems to go more smoothly. In general, the expatriates have to make a few steps in their housing career to attain a housing situation that their satisfied with; the overall satisfaction level increases with each subsequent housing situation. Hence, the majority of expatriates have lived in more than one house during their stay. The number of housing situations differs per type of expat. In general, pilgrims have much more often lived in only one housing situation than accidental tourists & economy class passengers and passengers.

It seems like, as an expatriate has moved up a few housing career steps and primary housing needs are met, life-course and external changes become more important in the decision to move. The living environment seems to become more important in the latter housing situations. Especially accidental tourists & economy class passengers more often tend to move out of the city center into more quiet neighborhoods and surrounding villages.

All in all, during the whole housing career the housing preferences differ per type of expatriate. These differences are mostly caused by socio-demographic characteristics as is for any group of housing seekers. However, all groups of expatriates prefer a furnished rental dwelling at the time of migration. In the Netherlands, this type of housing is rarely available. Because of scarcity in this segment on the one hand and a high urge to move on the other hand, major problems occur in the housing search process for the first housing situation. This results in a low satisfaction level. However, the most important constraints in the housing search process of expatriates are not applicable when the expatriate already lives in Brainport. Due to fewer constraints and a better understanding of the Dutch housing system, it seems like the housing choice behavior of expatriates becomes more similar to that of Dutch inhabitants as the length of stay in Brainport gets longer. Furthermore, after the first housing situation, the decision to move is in most cases a voluntarily choice and only occurs when the housing situation is improving. This results in an increasing satisfaction level for each subsequent housing situation.

6.2. REFLECTION & DISCUSSION

As described in chapter 0, some interesting results were found from the survey. In this paragraph, the aim is to place certain remarkable conclusions into perspective and to give a broader interpretation. Therefore, multiple external sources were assessed.

6.2.1. The first housing search process

As previously described in paragraph 5.2, circumstances for expatriates in finding their first housing situation are very poor. Based on the given comments described in appendix L, this is mainly caused by three issues:

- A high urge to move within a very short time frame
- Low availability of the preferred furnished, rental dwellings
- Long distance communication and language barriers (expatriates cannot see their possible houses before signing the contract and websites and contracts are mostly only offered in Dutch)

To interpret these results, a Facebook discussion was started on 7 November 2013 to find out what issues cause these poor ratings. The complete list of answers can be found in appendix M. The following question was asked: "First survey results about the housing careers of expats indicate that almost half of you say that housing conditions in the Netherlands are worse than in your home country. What is it about housing in the Netherlands that bothers you the most?"

It turns out that most of these problems are not related to housing characteristics, but to characteristics of the housing search process. The issues mentioned above, make it harder for international people to find suitable housing than for Dutch knowledge workers and students, at least for the first housing situation as they are still living in their home country during the search process and cannot visit properties and attend meetings.

Again, the poor position of expatriates when they have to find a first housing situation is described. Long waiting lists make it impossible for them to have access to housing arranged by housing associations and because they cannot go to a “meeting night” for student rooms where the roommates choose a new candidate, most commercial rented student houses are not an option either.

This ensures that commercial real estate agents almost have a monopoly position in renting out houses for expatriates. This allows them to take advantage of their position and ask very high fees for very low services. Besides the poor circumstances for finding first housing in the Netherlands, comments are made that housing in the Netherlands is extremely expensive.

6.2.2. The Dutch housing market in perspective

Of course, the previously described monopoly situation can only exist because of a very tight commercial rental market, where the demand exceeds the supply.

Shortage of commercial rental dwellings

It seems like commercial rental dwellings are very scarce in Eindhoven and the Netherlands in general. To put this in an international perspective, tenure ratios of different countries have been compared.

Table 16. *International tenure comparison (Scanlon & Whitehead, 2004)*

	Owner-occupation	Social renting	Private renting	Others	Year
Hungary	92	4	3	1	2003
Lithuania	84	4	5	7	2002
Slovenia	82	7	3	9	2002
Greece	80	0	20	0	2001
Iceland	78	2	5	16	2003
Portugal	76	7	15	2	1999
Belgium	74	7	16	3	1999
Australia	70	5	20	5	1999
United Kingdom	70	20	10	0	2001/02
United States	68	3	30	0	2002
Canada	66	6	28	0	2001
Finland	64	17	15	4	2001
Austria	57	23	17	3	2001
France	56	17	21	6	2002
Sweden	55	21	24	0	1997
Denmark	53	19	18	9	1999
Netherlands	53	35	12	0	1998
Czech Republic	47	19	10	24	2001
Germany	41	6	49	5	2001
Averages	67	12	17	5	

As shown in table 16, the Netherlands belong to the group with the lowest owner-occupied rate. Remarkable however, is the very high percentage (74%) of social rented dwellings within the rental sector. In general, only the Eastern European countries have a lower rate of private renting. The 35% of social renting in the Netherlands is the largest amount of regulated housing stock of the countries included in the study, long before the following countries with 23% in Austria and 21% in Sweden.

Eindhoven has a higher percentage (52%) rental dwellings than nationally. But also in Eindhoven 75% of the rental dwellings is reserved for the social sector (Gemeente Eindhoven, 2013).

Since most expatriates have a strong preference for rental housing and do not have access to social-rentals by housing associations, the small amount of private renting in the Netherlands and Eindhoven (12%) in particular could form a problem. Within this small amount of commercial rental dwellings, the amount of furnished dwellings is even less.

Housing costs in relation to income

Another often mentioned problem is the price of housing in the Netherlands. Many expatriates find this very expensive. To check whether this assumption is true, an international comparison of the housing costs/income ratio is made.

As is stated in an article by NVM (2011) based on research by ING about the financial knowledge and skills of inhabitants of ten different countries around the world, a large amount of income in the Netherlands is spent on housing, no less than 31%. Only in the United States, people spend relatively more on housing costs; 34% of their income. This is very much compared to for example Belgium (24%) and Koreans (16%).

Therefore, the assumption made by the respondents that housing in the Netherlands is very expensive seems to be true in relation to other countries.

Average rents per type of dwelling

The high amount of income spent on housing in the Netherlands, could be an explanation for the fact that expatriates expected to get better value for their money. As described in paragraph 5.4, most people were maximally willing to spend 350 to 650 euro a month. For this price, 52% wanted a studio and 24% even expected to get a two- or three bedroom apartment.

According to statistics by Omroep Brabant (Ummels, 2013), this is not realistic. As they state, the average price for a studio in Eindhoven on the commercial market is 622 euros. For an apartment, the average price is even 1113 euro. In the stated preference analyses, only 6.5% of the respondents that prefer an apartment were willing to spend more than 950 euro.

6.2.3. Discussion

It turns out that expatriates do not have a realistic perspective on the Dutch housing market at the time of migration. They expect to get more value for their money. This is probably caused by the fact that the Netherlands has one of the highest amounts of income spent on housing in the world and rental prices

are very high due to scarcity on the commercial rental market. Since expatriates do not have many other options than to rent on this market and have high time constraints, in most cases they need to spend more on housing than they feel comfortable with.

As it turned out, a shortage of furnished, commercial rental dwellings exists in Brainport. However, the question could be raised if creating this kind of housing, only focusing on expatriates is very sustainable in the long run. Maybe, concepts that suggest agglomerations of expatriates' housing within a city such as an "Expat boulevard" or "Expat building" are not the only and right solution. It should be considered if integrating with all inhabitants of Brainport is not more important than living with likeminded people and if the wishes of expatriates cannot be partly fulfilled with adjustments to the current housing stock. Confirmatory, according to the survey results, the need to live together with other expatriates is not big. Only 24% of the respondents find it important to live close to other expatriates. And even within this small number, the question should be raised what living close to each other means in a relatively small city like Eindhoven.

Due to the scarcity on the commercial rental market, the housing search process has become very intransparent and service fees of third parties are very high. This does not either benefit the landlords or the housing seekers. Therefore, a good first step could be to create a housing search engine for rental dwellings where all parties such as housing associations, real estate agents, employers and individual landlords can work together and combine supply and demand via one comprehensive website. Although these types of search engines already exist for owner-occupied housing in the Netherlands, it is not well available for the rental market.

6.3. RECOMMENDATIONS

6.3.1. Practical implementation

As described in the previous paragraph two major problems occur with the housing of expatriates. The first is a problem of general scarcity of commercial rental dwellings in the Netherlands that does not only affect expatriates. As regulations for housing associations change and major changes have taken place in the Dutch owner-occupied market, a bigger need for commercial rental dwellings arises. If the market share of this type of housing increases, the housing search process of expatriates will become a bit easier as well. However, in contrary to Dutch knowledge workers, most expatriates prefer any type of furnished dwelling. To anticipate on the increasing amount of expatriates in Eindhoven, more furnished dwellings have to be developed. This could only work under the condition that it is still affordable, since the mismatch between demand and supply is mostly caused by the high rents.

To solve the second problem, the monopoly position of commercial real estate agents in the housing of expatriates has to be broken. It could be beneficial for both tenants and landlords if a good working, comprehensible housing search engine will be developed where they direct contact can be made and the housing search process will become more transparent. Not only expatriates could benefit from such a housing search engine, but also Dutch inhabitants who are looking for commercial rentals.

Furthermore, it does not only ease the housing search process, but also makes the market better accessible for new entrants such as individual home-owners who want to rent out their home. To make these dwellings suitable for expatriates as well, a flexible concept could be developed where the type of furnishing can be adapted to the preferences of the tenant.

Furthermore, it is very important that Brainport as a region anticipates on the increasing internationalization in order to retain and even gain more international knowledge workers and keep its extraordinary high-tech reputation. Therefore, the main condition is to make all important information and agreements available in English. In order to make this work, all parties involved could make joint agreements, perhaps coordinated by the municipality or Brainport Development.

6.3.2. Limitations and future research

This research could be seen as a first step in the quantitative research of the housing careers of expatriates in Brainport. In order to get a complete overview of all important aspects, further research has to be conducted. In retro perspective, some issues in this research could have been addressed differently. Furthermore, because of the exploratory character of the survey not all aspects have been handled in detail and inaccuracy of some issues is inevitable. This limitations offer opportunities for further research.

First, the survey did not anticipate on expatriates who had not only lived in Brainport but also in other regions in the Netherlands. A few respondents reported this and for them it was difficult to fill in the survey since some of the questions were applicable to the Dutch housing market in general and some questions were specifically focused on the situation in Brainport. In future research a distinction should be made between people who first move to the Netherlands and people who have moved from within the Netherlands since their perception on the Dutch housing market will probably be different already.

Second, further research could be conducted focusing on process issues, especially the way in which housing is offered and via which channels. Although this was not originally part of the study, thanks to open comments, it turned out to be one of the most frustrating aspects of the housing search process for expatriates. It might be useful to study the cause of this frustration, maybe even focusing on cross-cultural communication.

Furthermore, to get a complete image of the housing choice behavior of expatriates, more research has to be conducted. A larger sample is needed to draw conclusions for specific groups of expatriates and the overall impact would be bigger. Probably, a larger sample is only possible if all major employers work together and participate in the study and effectively distribute the survey among their employees. If possible, it would be good to conduct a similar kind of survey, focusing on the specific situations a certain employer offers. This way, employers could learn from each other and find out which ways are the most effective to attract international knowledge workers. Overall, this would help to attract new international knowledge workers and create a stronger position for Brainport in general.

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APPENDICES

A.	NOTES INTERVIEWS AND EXPAT MEETINGS.....	125
B.	SURVEY DISTRIBUTION.....	127
C.	INVITATION EXAMPLE	129
D.	SURVEY.....	131
E.	SPSS OUTPUT - DESCRIPTIVES	159
F.	SPSS OUTPUT – HOUSING SEARCH PROCESS	165
G.	OPEN COMMENTS HOUSING SEARCH PROCESS	179
H.	SPSS OUTPUT – HOUSING PREFERENCES.....	183
I.	SPSS OUTPUT – FIRST HOUSING CONCESSIONS.....	197
J.	SPSS OUTPUT – HOUSING CAREERS	201
K.	RELOCATION PATTERNS (LARGE SCALE).....	205
L.	REMARKS AT END OF QUESTIONNAIRE.....	209
M.	FACEBOOK DISCUSSIONS.....	211

A. NOTES INTERVIEWS AND EXPAT MEETINGS

Joep Berghuis, Municipality of Eindhoven, 4 juli 2013, Eindhoven

- Representative of the municipality of Eindhoven
- Verwijzing naar onderzoek Jan Vriens:
 - Checken karakteristieken beschreven met eigen onderzoekspopulatie
 - Werkgevers regelen vaak huisvesting, maar alleen voor de eerste periode
 - Resumerend kan over de woonwensen van ikw'ers gezegd worden dat de voorkeurslocatie het centrum is. Men zoekt dus vooral huurwoningen, zelfstandig, appartementen en studio's. Alles inclusief, dus gemeubileerd, met internet en telefoonaansluiting en energie- en servicekosten inbegrepen. De huurprijzen die men daar voor over heeft variëren van € 550 voor de ikw'ers verbonden aan de onderwijsinstellingen (als we de studenten buiten beschouwing laten) via € 700, voor de onderzoekers verbonden aan de andere kennisinstellingen tot zelfs € 1.000 of € 1.500 toe voor de andere ikw'ers verbonden aan het bedrijfsleven. Dit alles geldt voor de aanvangsperiode. Als ikw'ers langer blijven c.q. zich wellicht blijvend vestigen, verschuiven de woonwensen in de richting van de Nederlandse woningzoekende.
 - Ervaren problemen:
 - Voornamelijk problemen werknemers van kennisinstellingen
 - Krimp gesignaleerd in het aantal aangeboden gemeubileerde appartementen voor short term lease
 - De publiciteit / communicatie naar kenniswerkers toe zou wel iets kunnen worden verbeterd. De website <http://www.settlink.com> is een goed initiatief maar vaak nog onvoldoende bekend bij ikw'ers op het moment dat zij nog in eigen land zijn.
 - Groot tekort voor ikwers verbonden aan onderwijsinstellingen
 - Hoge inkomens: vinden prijzen te hoog, zouden zo'n 700 euro willen betalen. In het centrum is dat moeilijk of niet te vinden, met corporaties zijn er nauwelijks contacten
 - ikw'ers behoren niet tot de 'traditionele' doelgroep. Van woningcorporaties en is ook vrij moeilijk door hoge kosten en 90% norm
- Geen duidelijke uitkomsten omdat groep heel breed is en het proces niet duidelijk in beeld is! Focus!

AnkeSweere, HBO Nederland & Ballast Nedam, Inspiration lecture, 24 september 2013, the Hub Eindhoven

Programma:

- 14.30 - 15.10 Ontvangst (*gastheer Joost van Dijk*)
- 15.00 - 15.05 Welkomstwoord
- 15.05 - 15.30 Presentatie onderzoeksresultaten (*Anke Sweere*)
- 15.30 - 16.00 Advisor internationalization (*Willem van Hoorn*)
- 16.00 - 16.30 Ervaring als expat
- 16.30 - 17.00 "Expatriate-Boulevard" (*Arie van Rangelrooy*)
- 17.00 - 18.00 Afsluiting & Napraten

- Wensen, huur, gemeubileerd, binnenstad
- De vraag van expats is anders op het gebied van: Is dat zo? Wil ik ook niet liever een luchtkasteel? Huidige woonaanbod voldoende? Maar niet op de gewenste locatie, met de gewenste oppervlakte en voor de gewenste huurprijs
- expat gebouw: appartementencomplex alleen voor alleenstaanden en expat stellen
 - Samenleven met gelijkgestemden
 - Mogelijkheden tot tijdelijk huren
 - De kracht van de regio versterken
 - Gemakkelijker en toegankelijker woonruimte vinden
 - Direct in contact met andere expats

Willem van Hoorn, personal interview, 22 August 2013, Eindhoven

- Thuisvoelen, succesfactoren vaak niet werkgerelateerd
- Interactie vooral ook met autochtone Nederlanders, integratie
- Partner programma, vaak terugkeer omdat partner zich niet thuisvoelt
- Culturele verschillen

Introduction day TU/e, 6 september 2013, Eindhoven

- Zoveel aan hun hoofd: eerste woning is een must, zien daarna wel verder
- Huisvesting moeilijk te regelen vanuit thuisland

B. SURVEY DISTRIBUTION

Organization	Type of media and members	1 st distribution 22-10-2013	2 nd distribution 5-11-2013	Discussion 7-11-2013
Holland expat center	Facebook page <i>1267 likes</i>	X	X	
	LinkedIn Group <i>649 members</i>	X	X	
	Online newsletter <i>1800 recipients</i>		X	
The Hub Eindhoven	Facebook page <i>616 likes</i>	X	X	X
TU/e	Facebook page <i>1877 members (students)</i>	X	X	X
	LinkedIn Group <i>973 students & employees</i>	X	X	
	Online newsletter <i>1500 international employees</i>		X	
	Direct mailing <i>31 employees</i>		X	
	FB Group Get/Keep in Touch <i>Spouses of int. employees</i>	X		
Fontys students	Mailing to few students		X	
High Tech Campus	Facebook page <i>217 likes</i>	X		
	LinkedIn Group <i>4625 members (also Dutch)</i>	X	X	
ASML	Mailing to international students <i>67 students</i>		X	
Brainport Development (Brainport international community)	Facebook page <i>917 likes</i>	X	X	
	LinkedIn Group <i>556 members</i>	X	X	
	Mailing few persons in own network + international school	X		
Eindhoven Housing	Facebook Group <i>1216 members</i>	X	X	X
Get together Eindhoven!	Facebook Group <i>1957 members</i>	X	X	
International students Eindhoven	Facebook page <i>920 likes (not active)</i>	X		
Design Academy students	Facebook Group <i>686 members (also Dutch)</i>	X	X	
Expats in Eindhoven	Facebook Group <i>297 members</i>	X	X	X
Foreigners in Eindhoven	Facebook Group <i>194 members</i>	X	X	
Cosmos TU/e	Facebook Group <i>517 members (also Dutch)</i>	X		
TVO	Facebook Group <i>149 members (also Dutch)</i>	X	X	

C. INVITATION EXAMPLE



Invitation to participate in a survey about the housing careers of international knowledge workers

A graduation student of the TU/e Department of the Built Environment is carrying out her final thesis about the housing careers of international knowledge workers. Part of this thesis is a large-scale survey aiming at mapping these housing careers and at gaining insight in the migration process with regard to housing.

By providing information about your (previous) housing situations, you can help her find out if and why a mismatch between the actual and desired situation occurs. And see to what extent this is related to different aspects of the migration process.

The student kindly invites you to participate in her survey. This will take approximately 10 minutes of your time.

Click here for the survey
Or copy and paste this URL into your browser: vragen1.ddss.nl/expatriates

By participating you have a chance at winning one of the three gift cards worth 50 euros for a dinner at Usine restaurant !



Table of contents

Choices in the Conditions of Employment Selection Model: notify them by 8 November!	›
A new car? Change your registration plate number in My TU/e!	›
Free OBP training in 2013; no extra costs for departments/services and staff	›
Not yet logged-in to Youforce to check your salary details? Register now!	›
'Child care is more than just enabling parents to work'	›
Is your pension in order? Check it now!	›
Dutch courses for spouses	›
Invitation to participate in a survey about the housing careers of international knowledge workers	›

Newsletter

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Links

[Intranet DPO](#)

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[Login Youforce](#)

[ABP](#)

[Courses for TU/e employees](#)

[Kinderdagverblijf De Tuimelaar \(Daycare\)](#)

[Internal vacancies](#)

D. SURVEY



Housing choice behavior of expatriates in Brainport region

Are you an international working, studying or living in Eindhoven region?

Contribute to better housing possibilities for expats in Brainport and have a chance at winning one of the three gift cards worth 50 euros for dinner at Usine restaurant !

To understand the housing choice process of expatriates in Eindhoven region, TU/e and TiasNimbas business school conduct a large-scale survey among both international employees and students to map their housing careers. The aim is to find out if and why a mismatch between the actual and desired situation occurs and to what extent this relates to different aspects of the migration process.

The survey consists of several parts where we ask you to fill in information about your (previous) housing situations. This will take approximately 10 minutes of your time, depending on the amount of housing situations you've lived in.

Of course, all information provided is anonymous and will be treated confidentially.

Thank you very much for being part of this research,

Janneke Koeleman
Graduation student
Department of the Built Environment, TU/e
TiasNimbas business school
j.koeleman@tiasnimbas.edu

[Go to the survey](#)

Housing choice behavior of expatriates in Brainport region

What is your country of origin?

Other country of origin:

Are you working or studying in the Eindhoven region?

(Defined as one of the following municipalities: Asten, Bergeijk, Best, Bladel, Cranendonck, Deurne, Eersel, Eindhoven, Geldrop-Mierlo, Gemert-Bakel, Heeze-Leende, Helmond, Laarbeek, Nuenen c.a., Oirschot, Reusel-De Mierden, Someren, Son en Breugel, Valkenswaard, Veldhoven and Waalre)

- Yes
 No

Are you living in the Eindhoven Region?

(Defined as one of the following municipalities: Asten, Bergeijk, Best, Bladel, Cranendonck, Deurne, Eersel, Eindhoven, Geldrop-Mierlo, Gemert-Bakel, Heeze-Leende, Helmond, Laarbeek, Nuenen c.a., Oirschot, Reusel-De Mierden, Someren, Son en Breugel, Valkenswaard, Veldhoven and Waalre)

- Yes
 No

Next

Housing choice behavior of expatriates in Brainport region

In order to understand the housing choice process of expatriates, we would like to take you back to the moment you decided to move to the Netherlands. Please fill in the following questions as you felt at the time.

Previous

Next

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Housing choice behavior of expatriates in Brainport region

Pre-migration



What was the main reason for your migration?

- Assignment initiated by employer
- To start up a new business or business location
- Better job opportunities than in home country
- My skills will be valued better due to the specific knowledge available in the region
- To experience a period abroad for my personal development
- Because of the expatriation (job opportunities) of my partner
- Other, namely..

Which type of profession would you perform in Eindhoven region?

- Manager or executive
- Highly skilled employee
- Entrepreneur
- PhD or PostDoc student
- Academic or scientist
- Student
- Volunteer
- Unemployed
- Other, namely...

Where did you live before coming to Eindhoven Region?

Other country:

How long before departure did you know about your migration?

(How much time did you get to prepare?)

- <2 weeks
- 2-4 weeks
- 1-3 months
- 3-6 months
- >6 months

What was the intended length of stay in Eindhoven Region?

- <6 months
- 6 months- 1 year
- 1 - 3 years
- 3 - 5 years
- > 5 years

Had you visited Eindhoven region before your migration?

Multiple answers possible

- No
- Yes, to make pre-arrangements for my migration such as contract and housing issues
- Yes, for other (business) purposes
- Yes, for both reasons mentioned above

[Previous](#)

[Next](#)

Housing choice behavior of expatriates in Brainport region

Pre-migration



At the time of migration, what was the composition of your household? (still living in your home country) Fill in including yourself.

Include family members (partner and children) living with you, do NOT include roommates in student houses

<input type="text"/>	Number of adults
<input type="text"/>	Number of children (age 12-18)
<input type="text"/>	Number of children (age 4-12)
<input type="text"/>	Number of children (younger than 4)

Was housing arranged before arrival in the Netherlands?

- No, I planned on staying the first nights with a friend or at a hotel
- Yes, I arranged it myself
- Yes, (temporarily) housing was provided by my employer

[Previous](#)[Next](#)

Housing choice behavior of expatriates in Brainport region



The following questions concern the ideal housing situation you would have **preferred** when migrating to the Netherlands

Previous

Next

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Housing choice behavior of expatriates in Brainport region

Housing preferences before migration



When you were orientating on housing in the Netherlands, which of the following characteristics did you prefer ideally?

Which housing type did you prefer?

- (Long stay) hotel
- Student room (*shared facilities*)
- Studio apartment (*1 bedroom*)
- Two- or three bedroom apartment
- Terraced house (*Multiple single-family houses built attached in a row*)
- Semi-detached house (*2 single-family houses under 1 roof*)
- Detached house (*1 free standing single-family house*)
- Other, namely...

Which state of furnishing did you prefer?

- Bare (*no carpets, curtains, light fittings etc.*)
- Soft-furnished (*includes carpets and curtains*)
- Furnished (*also includes furniture, cutlery, crockery, bed linen etc.*)

Which type of tenure did you prefer?

- Rental
- Self-purchased
- Stay with friends or family
- Arranged by employer

How much were you willing to spend on housing per month maximally? (excluding service costs and utilities)

- less than €350
- €350 - €650
- €650 - €950
- €950 - €1200
- more than €1200

[Previous](#)[Next](#)

Housing choice behavior of expatriates in Brainport region

Housing preferences before migration



When you were orientating on housing in the Netherlands, which of the following characteristics of the living environment did you prefer ideally?

Which type of living environment would you most like to live in?

- Urban-central
(Historical) city centers and some new urban centers in a central location and with a high density
- Off city center
Monofunctional and compact areas surrounding the city center
- Green-urban
Monofunctional living environment with spacious structures and greenery in larger municipalities
- Central village
Multifunctional (historical) centers in smaller municipalities
- Rural
Low density in a mainly green area with few amenities

Which of the following did you consider important to be close to your home?

	Not important				Very important
Grocery shops	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parking space	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public transport	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(International) elementary or secondary school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recreative space	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Greenery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distance to work or study	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appearance of the neighborhood	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interaction with neighbors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distance to other family members and friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other expatriates (with the same cultural background)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Previous

Next

Housing choice behavior of expatriates in Brainport region

The housing search process



When you were searching for your first housing situation in Eindhoven region, to what extent did you agree with the following?

To what extent do you agree with the following statements?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
There was sufficient information available about housing procedures in the Netherlands	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
My knowledge about the local housing market was sufficient	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like I've had enough available options to choose from	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Expatriate organizations helped me to find suitable housing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not speaking Dutch makes searching for a house difficult	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Housing in the Netherlands met my expectations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Housing conditions in the Netherlands are better than in my home country	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Did you experience any other obstacles during the search of your first housing situation in the Eindhoven region?

Previous

Next

Housing choice behavior of expatriates in Brainport region

The housing search process



You've indicated that your employer arranged your first housing situation. To what extent do you agree with the following statements about this process?

To what extent do you agree with the following statements?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I was pleased that my employer arranged housing for me	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt like my preferences were of influence on my housing situation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My employer gave me several housing options to choose from	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The fact that housing would be arranged helped in the decision to move to Eindhoven region	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe my local market knowledge would have been sufficient to arrange suitable housing myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Housing in the Netherlands met my expectations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Housing conditions in the Netherlands are better than in my home country	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Is there anything else you would like to mention about your housing search when moving to the Netherlands?

Previous

Next

Housing choice behavior of expatriates in Brainport region



Thanks for filling in your preferences. In order to map the housing process of expatriates, we would like you to fill in some information about your (previous) housing situation(s)

In how many housing situations have you lived during your expatriation in the Netherlands? (Hotels, guest addresses etc. also included)

Including my current house, I've lived in house(s)

Previous

Next

Housing choice behavior of expatriates in Brainport region



The following questions concern the housing situation(s) that you've **actually lived in** in the Netherlands

Previous

Next

Housing choice behavior of expatriates in Brainport region



You have indicated that you have had multiple living situations in the Netherlands. Please fill in the following questions with regard to your **first housing situation** after migration.

Previous

Next

Housing choice behavior of expatriates in Brainport region

Your first housing situation



When first moving to Eindhoven region, which of the following housing characteristics applied to your situation?

What was your zipcode? (e.g. 5612AA)

Numbers: Letters:

What was the composition of your household when living in this house? Fill in including yourself.

Include family members (partner and children) living with you, do NOT include roommates in student houses

Number of adults
 Number of children (age 12-18)
 Number of children (age 4-12)
 Number of children (younger than 4)

How long have you lived in this house?

- <6 months
- 6 months- 1 year
- 1 - 3 years
- 3 - 5 years
- > 5 years

Previous

Next

Housing choice behavior of expatriates in Brainport region

Your first housing situation



Which type of housing describes your housing condition best?

- (Long stay) hotel
- Student room (*shared facilities*)
- Studio apartment (*1 bedroom*)
- Two- or three bedroom apartment
- Terraced house (*Multiple single-family houses built attached in a row*)
- Semi-detached house (*2 single-family houses under 1 roof*)
- Detached house (*1 free standing single-family house*)
- Other

In which state of furnishing did you get this house?

- Bare (*no carpets, curtains, light fittings etc.*)
- Soft-furnished (*includes carpets and curtains*)
- Furnished (*also includes furniture, cutlery, crockery, bed linen etc.*)

What type of tenure describes your housing condition best?

- Rental
- Self-purchased
- Stay with friends or family
- Arranged by employer

How much did you monthly spend on housing? (Excluding service costs and utilities)

- less than €350
- €350 - €650
- €650 - €950
- €950 - €1200
- more than €1200
- I live for free

How would you describe your living environment?

- Urban-central
(*Historical*) city centers and some new urban centers in a central location and with a high density
- Off city center
Monofunctional and compact areas surrounding the city center
- Green-urban
Monofunctional living environment with spacious structures and greenery in larger municipalities
- Central village
Multifunctional (historical) centers in smaller municipalities
- Rural
Low density in a mainly green area with few amenities

Previous

Next

Housing choice behavior of expatriates in Brainport region

Your first housing situation

How satisfied were you with your first housing situation?

Not at all satisfied				Very satisfied
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Why did you move?

Multiple answers possible

- I got more financial resources, and therefore better housing possibilities
- There was a household change (for example, getting a new baby or spouse getting over)
- I felt like there were better housing possibilities available for the same price
- I was not satisfied with this living environment
- The housing complex was not well managed or maintained
- The size of this housing situation was too small
- I wanted to have more interaction with my neighbors
- Travel distance to work was too far
- I wanted another type of dwelling (e.g. apartment, detached house etc.)
- This house was only temporarily available

Other...

Previous

Next

House#2, house#3... et cetera

Housing choice behavior of expatriates in Brainport region



Please fill in the following questions with regard to your **current housing situation**

Previous

Next

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Housing choice behavior of expatriates in Brainport region

Your current housing situation



Which of the following housing characteristics apply to your current housing situation?

What is your zipcode? (e.g. 5612AA)

Numbers: Letters:

What is the composition of your household? Fill in including yourself.

Include family members (partner and children) living with you, do NOT include roommates in student houses

Number of adults
 Number of children (age 12-18)
 Number of children (age 4-12)
 Number of children (younger than 4)

How long do you live in this house right now?

- <6 months
- 6 months- 1 year
- 1 - 3 years
- 3 - 5 years
- > 5 years

Previous

Next

Housing choice behavior of expatriates in Brainport region

Your current housing situation

Which type of housing describes your current housing condition best?

- (Long stay) hotel
- Student room (*shared facilities*)
- Studio apartment (*1 bedroom*)
- Two- or three bedroom apartment
- Terraced house (*Multiple single-family houses built attached in a row*)
- Semi-detached house (*2 single-family houses under 1 roof*)
- Detached house (*1 free standing single-family house*)
- Other

In which state of furnishing did you get this house?

- Bare (*no carpets, curtains, light fittings etc.*)
- Soft-furnished (*includes carpets and curtains*)
- Furnished (*also includes furniture, cutlery, crockery, bed linen etc.*)

What type of tenure describes yours best?

- Rental
- Self-purchased
- Stay with friends or family
- Arranged by employer

How much do you monthly spend on housing? (Excluding service costs and utilities)

- less than €350
- €350 - €650
- €650 - €950
- €950 - €1200
- more than €1200
- I live for free

[Previous](#)[Next](#)

Housing choice behavior of expatriates in Brainport region

Your current housing situation



How would you describe your living environment?

- Urban-central
(Historical) city centers and some new urban centers in a central location and with a high density
- Off city center
Monofunctional and compact areas surrounding the city center
- Green-urban
Monofunctional living environment with spacious structures and greenery in larger municipalities
- Central village
Multifunctional (historical) centers in smaller municipalities
- Rural
Low density in a mainly green area with few amenities

How do you rate the availability of the following characteristics of your living environment?

	Very poor				Very good
Grocery shops	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parking space	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public transport	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(International) school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recreative space	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Greenery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distance to work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appearance of the neighborhood	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interaction with neighbors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distance to other family members and friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other expatriates (with the same cultural background)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Previous

Next

Housing choice behavior of expatriates in Brainport region

Your current housing situation



How satisfied are you with your current housing situation?

Not at all satisfied				Very satisfied
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Are you considering moving in the near future?

- Yes
- No

Previous

Next

Housing choice behavior of expatriates in Brainport region

Your current housing situation



Why do you consider moving?

Multiple answers possible

- I expect to have more financial resources, and therefore better housing possibilities, in the near future
- I expect a household change (for example, getting a new baby or spouse getting over)
- I feel like there are better housing possibilities available for the same price
- I am not satisfied with my current living environment
- The housing complex is not clean
- The size of my current housing situation is too small
- I would like to have more interaction with my neighbors
- Travel distance to work is too far
- I do not like Eindhoven region
- I would like another type of dwelling (e.g. apartment, detached house etc.)

Other...

Previous

Next

Housing choice behavior of expatriates in Brainport region

Socio-demographic information



Thank you for filling in information about your housing situations in the Netherlands. The survey is almost finished. In order to analyze the results, we ask you to fill in the following socio-demographic information

What is your gender?

- Male
- Female

What is your age?

What is your highest level of completed education?

- Grammar school
- High school or equivalent
- Vocational technical school (2 year education)
- Some college
- Bachelors degree
- Masters degree
- Doctoral degree
- Professional degree (MD, JD etc.)

What is your current type of profession?

- Manager or executive
- Highly skilled employee
- Entrepreneur
- PhD or PostDoc student
- Academic or scientist
- Student
- Volunteer
- Unemployed
- Other, namely...

Do you work or study at any of the following companies?

What is your current gross household income?

(Income per month before tax deduction)

- < €1300
- €1300 - €1900
- €1900 - €2500
- €2500 - €3700
- €3700 - €5000
- > €5000

What is your current marital status?

- Married/ living together with partner
- Single

Previous

Next

Berg Enquête System © 2007 Design Systems

Housing choice behavior of expatriates in Brainport region

Socio-demographic information partner

What is the highest level of completed education by your partner?

- Grammar school
- High school or equivalent
- Vocational technical school (2 year education)
- Some college
- Bachelors degree
- Masters degree
- Doctoral degree
- Professional degree (MD, JD etc.)

What is the country of origin of your partner?

Other country of origin:

Which daily occupation does your partner currently perform?

- Manager or executive
- Highly skilled employee
- Entrepreneur
- PhD or PostDoc student
- Academic or scientist
- Student
- Volunteer
- Unemployed
- Other, namely...

Does your partner work or study at any of the following companies?

Previous

Next

Housing choice behavior of expatriates in Brainport region

End of questionnaire

Thank you very much for participating in this research and for filling in the questionnaire! Please use the space below if you have any comments about this questionnaire and/or your housing choice process during your stay in the Netherlands.

Optional comments:

Optional email address:

If you like to know about the results of this research and/or want to have a chance at winning one of the three **dinner cheques** at Usine restaurant, please fill in your email address.

This will be kept private and will only be used for one email where we inform you of the results and will be deleted afterwards

Previous

End survey

E. SPSS OUTPUT - DESCRIPTIVES

Crosstable current profession and household income

SD_Curr_prof3 * SD_Household_income Crosstabulation

		SD_Household_income						Total
		€1300	€1300 - €1900	€1900 - €2500	€2500 - €3700	€3700 - €5000	>€5000	
Knowledge worker	Count	3	3	4	11	13	5	39
	% within SD_Curr_prof3	7,7%	7,7%	10,3%	28,2%	33,3%	12,8%	100,0%
PhD or PostDoc student	Count	1	4	16	2	1	0	24
	% within SD_Curr_prof3	4,2%	16,7%	66,7%	8,3%	4,2%	0,0%	100,0%
Student	Count	49	4	3	1	0	1	58
	% within SD_Curr_prof3	84,5%	6,9%	5,2%	1,7%	0,0%	1,7%	100,0%
Total	Count	53	11	23	14	14	6	121
	% within SD_Curr_prof3	43,8%	9,1%	19,0%	11,6%	11,6%	5,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	125,620 ^a	10	,000
Likelihood Ratio	125,616	10	,000
Linear-by-Linear Association	69,518	1	,000
N of Valid Cases	121		

a. 10 cells (55,6%) have expected count less than 5. The minimum expected count is 1,19.

Crosstable marital status and household income

SD_Marital_status * SD_Household_income Crosstabulation

		SD_Household_income						Total
		€1300	€1300 - €1900	€1900 - €2500	€2500 - €3700	€3700 - €5000	>€5000	
Married/ living together with partner	Count	7	5	9	8	16	7	52
	% within SD_Marital_status	13,5%	9,6%	17,3%	15,4%	30,8%	13,5%	100,0%
Single	Count	51	7	15	8	2	2	85
	% within SD_Marital_status	60,0%	8,2%	17,6%	9,4%	2,4%	2,4%	100,0%
Total	Count	58	12	24	16	18	9	137
	% within SD_Marital_status	42,3%	8,8%	17,5%	11,7%	13,1%	6,6%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	43,452 ^a	5	,000
Likelihood Ratio	46,843	5	,000
Linear-by-Linear Association	39,142	1	,000
N of Valid Cases	137		

a. 2 cells (16,7%) have expected count less than 5. The minimum expected count is 3,42.

Crosstable reason migration and profession at time of migration

PM_prof_cat * PM_RM_categories Crosstabulation

		PM_RM_categories				Total
		Specific task/program	Region's opportunities	Personal development	Other	
Knowledge worker	Count	14	17	8	8	47
	% within PM_prof_cat	29,8%	36,2%	17,0%	17,0%	100,0%
	Count	1	12	10	1	24
PhD or PostDoc student	% within PM_prof_cat	4,2%	50,0%	41,7%	4,2%	100,0%
	Count	21	11	24	2	58
	% within PM_prof_cat	36,2%	19,0%	41,4%	3,4%	100,0%
Student	Count	1	0	1	6	8
	% within PM_prof_cat	12,5%	0,0%	12,5%	75,0%	100,0%
	Count	37	40	43	17	137
Total	% within PM_prof_cat	27,0%	29,2%	31,4%	12,4%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	53,749 ^a	9	,000
Likelihood Ratio	47,119	9	,000
Linear-by-Linear Association	1,304	1	,254
N of Valid Cases	137		

a. 5 cells (31,3%) have expected count less than 5. The minimum expected count is ,99.

Crosstable intended length of stay and profession at time of migration

PM_prof * PM_Intendedlos Crosstabulation

		PM_Intendedlos				Total
		6 months- 1 year	1 - 3 years	3 - 5 years	> 5 years	
Knowledge worker	Count	5	12	18	12	47
	% within PM_prof	10,6%	25,5%	38,3%	25,5%	100,0%
PhD or PostDoc student	Count	1	6	17	0	24
	% within PM_prof	4,2%	25,0%	70,8%	0,0%	100,0%
Student	Count	9	26	18	5	58
	% within PM_prof	15,5%	44,8%	31,0%	8,6%	100,0%
Total	Count	15	44	53	17	129
	% within PM_prof	11,6%	34,1%	41,1%	13,2%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21,699 ^a	6	,001
Likelihood Ratio	23,302	6	,001
Linear-by-Linear Association	7,481	1	,006
N of Valid Cases	129		

a. 2 cells (16,7%) have expected count less than 5. The minimum expected count is 2,79.

Crosstable time to prepare and profession at time of migration

PM_prof * PM_Time_before_departure Crosstabulation

		PM_Time_before_departure					Total
		<2 weeks	2-4 weeks	1-3 months	3-6 months	>6 months	
Knowledge worker	Count	1	6	19	12	9	47
	% within PM_prof	2,1%	12,8%	40,4%	25,5%	19,1%	100,0%
PhD or PostDoc student	Count	0	2	13	8	1	24
	% within PM_prof	0,0%	8,3%	54,2%	33,3%	4,2%	100,0%
Student	Count	0	4	26	16	12	58
	% within PM_prof	0,0%	6,9%	44,8%	27,6%	20,7%	100,0%
Total	Count	1	12	58	36	22	129
	% within PM_prof	0,8%	9,3%	45,0%	27,9%	17,1%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6,662 ^a	8	,574
Likelihood Ratio	7,873	8	,446
Linear-by-Linear Association	,812	1	,368
N of Valid Cases	129		

a. 6 cells (40,0%) have expected count less than 5. The minimum expected count is ,19.

Crosstable time to prepare and gender

SD_Gender * PM_Time_before_departure Crosstabulation

		PM_Time_before_departure					Total
		<2 weeks	2-4 weeks	1-3 months	3-6 months	>6 months	
Male	Count	1	7	33	20	13	74
	% within SD_Gender	1,4%	9,5%	44,6%	27,0%	17,6%	100,0%
Female	Count	0	5	30	17	11	63
	% within SD_Gender	0,0%	7,9%	47,6%	27,0%	17,5%	100,0%
Total	Count	1	12	63	37	24	137
	% within SD_Gender	0,7%	8,8%	46,0%	27,0%	17,5%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1,009 ^a	4	,908
Likelihood Ratio	1,390	4	,846
Linear-by-Linear Association	,065	1	,799
N of Valid Cases	137		

a. 2 cells (20,0%) have expected count less than 5. The minimum expected count is ,46.

Crosstable previsit and profession at time of migration**PM_prof * PM_previsit_Yes_no Crosstabulation**

		PM_previsit_Yes_no		Total
		No	Yes	
Knowledge worker	Count	21	26	47
	% within PM_prof	44,7%	55,3%	100,0%
PhD or PostDoc student	Count	16	8	24
	% within PM_prof	66,7%	33,3%	100,0%
Student	Count	45	12	57
	% within PM_prof	78,9%	21,1%	100,0%
Total	Count	82	46	128
	% within PM_prof	64,1%	35,9%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13,225 ^a	2	,001
Likelihood Ratio	13,337	2	,001
Linear-by-Linear Association	12,924	1	,000
N of Valid Cases	128		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 8,63.

Independent samples t-test for manager or executive and highly skilled employee by socio-demographic characteristics

Group Statistics

	SD_Current_profession	N	Mean	Std. Deviation	Std. Error Mean
SD_Gender	Manager or executive	5	2,00	,000	,000
	Highly skilled employee	25	1,36	,490	,098
SD_Age	Manager or executive	5	34,80	13,480	6,028
	Highly skilled employee	25	31,84	5,632	1,126
SD_Education	Manager or executive	5	5,20	2,588	1,158
	Highly skilled employee	25	6,12	,440	,088
SD_Household_income	Manager or executive	5	3,40	2,302	1,030
	Highly skilled employee	25	4,48	1,085	,217
SD_Marital_status	Manager or executive	5	1,80	,447	,200
	Highly skilled employee	25	1,32	,476	,095

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Dif.	95% Confidence Interval of the Difference	
									Lower	Upper
SD_Gender	Equal variances assumed	54,857	,000	2,880	28	,008	,640	,222	,185	1,095
	Equal variances not assumed			6,532	24,000	,000	,640	,098	,438	,842
SD_Age	Equal variances assumed	20,774	,000	,829	28	,414	2,960	3,572	-4,356	10,276
	Equal variances not assumed			,483	4,283	,653	2,960	6,133	-13,632	19,552
SD_Education	Equal variances assumed	18,254	,000	-1,772	28	,087	-,920	,519	-1,983	,143
	Equal variances not assumed			-,792	4,046	,472	-,920	1,161	-4,129	2,289
SD_Household_income	Equal variances assumed	10,485	,003	-1,659	28	,108	-1,080	,651	-2,413	,253
	Equal variances not assumed			-1,026	4,362	,358	-1,080	1,052	-3,908	1,748
SD_Marital_status	Equal variances assumed	1,559	,222	2,075	28	,047	,480	,231	,006	,954
	Equal variances not assumed			2,167	5,968	,074	,480	,222	-,063	1,023

F. SPSS OUTPUT – HOUSING SEARCH PROCESS

Crosstable housing arrangement by type of expatriate

Type_expatriate * PM_Housing_arranged Crosstabulation

		PM_Housing_arranged			Total
		No, I planned on staying the first nights with a friend or at a hotel	Yes, I arranged it myself	Yes, (temporarily) housing was provided by my employer	
Accidental tourists & Ec. class passengers	Count	8	14	14	36
	% within Type_expatriate	22,2%	38,9%	38,9%	100,0%
Pilgrims	Count	4	9	18	31
	% within Type_expatriate	12,9%	29,0%	58,1%	100,0%
Passengers	Count	9	28	21	58
	% within Type_expatriate	15,5%	48,3%	36,2%	100,0%
Total	Count	21	51	53	125
	% within Type_expatriate	16,8%	40,8%	42,4%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5,269 ^a	4	,261
Likelihood Ratio	5,155	4	,272
Linear-by-Linear Association	,003	1	,958
N of Valid Cases	125		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 5,21.

Reliability analysis for statement 1-3 for the self-arranged housing

Reliability Statistics

Cronbach's Alpha	N of Items
,733	3

Item Statistics

	Mean	Std. Deviation	N
HS1_Information_procedures	2,67	,998	84
HS1_Knowledge_market	2,44	1,010	84
HS1_Available_options	2,18	,907	84

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
HS1_Information_procedures	4,62	2,576	,619	,569
HS1_Knowledge_market	4,85	2,735	,539	,670
HS1_Available_options	5,11	3,085	,517	,693

Independent samples T-test by housing already arranged or not (self-arranged)

Group Statistics

	PM_Housing_arranged	N	Mean	Std. Deviation	Std. Error Mean
HS1_Information_procedures	>= 2	60	2,82	1,033	,133
	< 2	24	2,29	,806	,165
HS1_Knowledge_market	>= 2	60	2,52	1,049	,135
	< 2	24	2,25	,897	,183
HS1_Available_options	>= 2	60	2,17	,977	,126
	< 2	24	2,21	,721	,147
HS1_Help_organizations	>= 2	60	2,28	1,166	,151
	< 2	24	2,13	,850	,174
HS1_Language	>= 2	60	2,75	1,216	,157
	< 2	24	1,96	1,083	,221

Independent Samples Test

		Levene's Test for		t-test for Equality of Means						
		Equality of Variances		t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Difference	
		F	Sig.						Lower	Upper
HS1_Information	Equal variances assumed	3,503	,065	2,230	82	,029	,525	,235	,057	,993
_procedures	Equal variances not assumed			2,478	54,036	,016	,525	,212	,100	,950
HS1_Knowledge	Equal variances assumed	3,230	,076	1,094	82	,277	,267	,244	-,218	,751
_market	Equal variances not assumed			1,171	49,327	,247	,267	,228	-,191	,724
HS1_Available_o	Equal variances assumed	3,276	,074	-,189	82	,851	-,042	,220	-,480	,397
ptions	Equal variances not assumed			-,215	57,174	,831	-,042	,194	-,430	,346
HS1_Help_organ	Equal variances assumed	6,697	,011	,603	82	,548	,158	,262	-,364	,680
zations	Equal variances not assumed			,689	57,849	,493	,158	,230	-,302	,618
HS1_Language	Equal variances assumed	2,009	,160	2,777	82	,007	,792	,285	,225	1,359
	Equal variances not assumed			2,920	47,370	,005	,792	,271	,246	1,337

One-way ANOVA test housing search process statements by type of expatriate (self-arranged)

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
HS1_Information_procedures	Between Groups	,586	2	,293	,267	,766
	Within Groups	75,733	69	1,098		
	Total	76,319	71			
HS1_Knowledge_market	Between Groups	2,854	2	1,427	1,448	,242
	Within Groups	68,021	69	,986		
	Total	70,875	71			
HS1_Available_options	Between Groups	,488	2	,244	,277	,759
	Within Groups	60,789	69	,881		
	Total	61,278	71			
HS1_Help_organizations	Between Groups	,143	2	,072	,062	,940
	Within Groups	79,732	69	1,156		
	Total	79,875	71			
HS1_Language	Between Groups	7,064	2	3,532	2,415	,097
	Within Groups	100,922	69	1,463		
	Total	107,986	71			

Descriptives

	N	Mean	Std. Dev.	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	
					Lower Bound	Upper Bound			
					HS1_Information _procedures	Accidental tourists & Economy class			22
	Pilgrims	13	2,46	,877	,243	1,93	2,99	1	4
	Passengers	37	2,70	1,175	,193	2,31	3,09	1	5
	Total	72	2,65	1,037	,122	2,41	2,90	1	5
HS1_Knowledge _market	Accidental tourists & Economy class	22	2,59	,908	,194	2,19	2,99	1	4
	Pilgrims	13	2,00	,707	,196	1,57	2,43	1	3
	Passengers	37	2,38	1,114	,183	2,01	2,75	1	5
	Total	72	2,38	,999	,118	2,14	2,61	1	5
HS1_Available_o ptions	Accidental tourists & Economy class	22	2,32	,716	,153	2,00	2,64	1	4
	Pilgrims	13	2,15	,899	,249	1,61	2,70	1	3
	Passengers	37	2,14	1,058	,174	1,78	2,49	1	5
	Total	72	2,19	,929	,109	1,98	2,41	1	5
HS1_Help_organ izations	Accidental tourists & Economy class	22	2,27	,767	,164	1,93	2,61	1	3
	Pilgrims	13	2,15	1,068	,296	1,51	2,80	1	4
	Passengers	37	2,19	1,221	,201	1,78	2,60	1	5
	Total	72	2,21	1,061	,125	1,96	2,46	1	5
HS1_Language	Accidental tourists & Economy class	22	2,50	1,012	,216	2,05	2,95	1	4
	Pilgrims	13	3,15	1,144	,317	2,46	3,84	1	5
	Passengers	37	2,30	1,331	,219	1,85	2,74	1	5
	Total	72	2,51	1,233	,145	2,22	2,80	1	5

Reliability analysis for statement 1-3 for the housing arranged by employer**Reliability Statistics**

Cronbach's Alpha	N of Items
,604	3

Item Statistics

	Mean	Std. Deviation	N
HS2_pleased_employer_arranged	4,19	,735	53
HS2_influence	3,30	1,030	53
HS2_Options_to_choose	2,72	1,378	53

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
HS2_pleased_employer_arranged	6,02	4,173	,382	,581
HS2_influence	6,91	2,933	,529	,336
HS2_Options_to_choose	7,49	2,255	,412	,579

Reliability analysis for statement 1 and 5 for the housing arranged by employer**Reliability Statistics**

Cronbach's Alpha ^a	N of Items
-,736	2

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

Item Statistics

	Mean	Std. Deviation	N
HS2_pleased_employer_arranged	4,19	,735	53
HS2_Knowledge_market	2,53	1,103	53

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
HS2_pleased_employer_arranged	2,53	1,216	-,291	.
HS2_Knowledge_market	4,19	,541	-,291	.

Reliability analysis for the statements about perspectives on the Dutch housing market

Reliability Statistics

Cronbach's Alpha	N of Items
,761	2

Item Statistics

	Mean	Std. Deviation	N
HS12_expectations	2,84	1,009	137
HS12_comparison	2,47	1,058	137

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
HS12_expectations	2,47	1,118	,615	.
HS12_comparison	2,84	1,018	,615	.

Chi-square test perspectives on the Dutch housing market by type of expatriate**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
HS12_expectations * Type_expatriate	125	91,2%	12	8,8%	137	100,0%

HS12_expectations * Type_expatriate Crosstabulation

Count

		Type_expatriate			Total
		Accidental tourists & Economy class passengers	Pilgrims	Passengers	
HS12_expectations	Strongly disagree	1	3	4	8
	Disagree	12	9	21	42
	Neutral	13	12	17	42
	Agree	7	7	13	27
	Strongly agree	3	0	3	6
Total		36	31	58	125

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	4,767 ^a	8	,782
Likelihood Ratio	6,224	8	,622
Linear-by-Linear Association	,360	1	,548
N of Valid Cases	125		

a. 6 cells (40,0%) have expected count less than 5. The minimum expected count is 1,49.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
HS12_comparison * Type_expatriate	125	91,2%	12	8,8%	137	100,0%

HS12_comparison * Type_expatriate Crosstabulation

Count

		Type_expatriate			Total
		Accidental tourists & Economy class passengers	Pilgrims	Passengers	
HS12_comparison	Strongly disagree	8	7	12	27
	Disagree	12	5	14	31
	Neutral	11	14	23	48
	Agree	4	5	5	14
	Strongly disagree	1	0	4	5
Total		36	31	58	125

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6,628 ^a	8	,577
Likelihood Ratio	7,668	8	,467
Linear-by-Linear Association	,575	1	,448
N of Valid Cases	125		

a. 5 cells (33,3%) have expected count less than 5. The minimum expected count is 1,24.

One-way ANOVA test perspectives on the Dutch housing market by macro-geographical location**Descriptives**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	
					Lower Bound	Upper Bound			
HS12_expectations	Northern and Western Europe	21	2,71	1,189	,260	2,17	3,26	1	5
	Eastern Europe	14	3,50	,760	,203	3,06	3,94	2	5
	Southern Europe	23	2,61	,891	,186	2,22	2,99	1	5
	North America	6	2,83	,753	,307	2,04	3,62	2	4
	Latin America	19	2,79	1,228	,282	2,20	3,38	1	5
	Central and Western Asia	11	2,64	1,027	,310	1,95	3,33	1	4
	Eastern Asia	10	2,90	,568	,180	2,49	3,31	2	4
	Southern and Southeastern Asia	29	2,90	,976	,181	2,53	3,27	1	5
	Total	133	2,84	,999	,087	2,67	3,01	1	5
	HS12_comparison	Northern and Western Europe	21	2,00	,894	,195	1,59	2,41	1
Eastern Europe		14	3,43	,756	,202	2,99	3,87	2	5
Southern Europe		23	2,17	1,029	,215	1,73	2,62	1	5
North America		6	2,00	,632	,258	1,34	2,66	1	3
Latin America		19	2,53	1,172	,269	1,96	3,09	1	5
Central and Western Asia		11	2,18	,874	,263	1,59	2,77	1	3
Eastern Asia		10	2,70	,823	,260	2,11	3,29	1	4
Southern and Southeastern Asia		29	2,72	1,099	,204	2,31	3,14	1	5
Total		133	2,48	1,049	,091	2,30	2,66	1	5

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.	
HS12_expectations	Between Groups	8,294	7	1,185	1,200	,308
	Within Groups	123,390	125	,987		
	Total	131,684	132			
HS12_comparison	Between Groups	24,204	7	3,458	3,572	,002
	Within Groups	120,999	125	,968		
	Total	145,203	132			

Multiple Comparisons

Dependent Variable: HS12_comparison

LSD

(I)	(J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Northern and Western Europe	Eastern Europe	-1,429 [*]	,339	,000	-2,10	-,76
	Southern Europe	-,174	,297	,559	-,76	,41
	North America	,000	,455	1,000	-,90	,90
	Latin America	-,526	,312	,094	-1,14	,09
	Central and Western Asia	-,182	,366	,620	-,91	,54
	Eastern Asia	-,700	,378	,066	-1,45	,05
	Southern and Southeastern Asia	-,724 [*]	,282	,011	-1,28	-,17
	Northern and Western Europe	1,429 [*]	,339	,000	,76	2,10
Eastern Europe	Southern Europe	1,255 [*]	,334	,000	,59	1,91
	North America	1,429 [*]	,480	,004	,48	2,38
	Latin America	,902 [*]	,347	,010	,22	1,59
	Central and Western Asia	1,247 [*]	,396	,002	,46	2,03
	Eastern Asia	,729	,407	,076	-,08	1,53
	Southern and Southeastern Asia	,704 [*]	,320	,030	,07	1,34
	Northern and Western Europe	,174	,297	,559	-,41	,76
Southern Europe	Eastern Europe	-1,255 [*]	,334	,000	-1,91	-,59
	North America	,174	,451	,700	-,72	1,07
	Latin America	-,352	,305	,250	-,96	,25
	Central and Western Asia	-,008	,361	,983	-,72	,71
	Eastern Asia	-,526	,373	,161	-1,26	,21
	Southern and Southeastern Asia	-,550 [*]	,275	,047	-1,09	-,01
	Northern and Western Europe	,000	,455	1,000	-,90	,90
North America	Eastern Europe	-1,429 [*]	,480	,004	-2,38	-,48
	Southern Europe	-,174	,451	,700	-1,07	,72
	Latin America	-,526	,461	,255	-1,44	,39
	Central and Western Asia	-,182	,499	,716	-1,17	,81
	Eastern Asia	-,700	,508	,171	-1,71	,31
	Southern and Southeastern Asia	-,724	,441	,103	-1,60	,15
	Asia					

Latin America	Northern and Western Europe	,526	,312	,094	-.09	1,14
	Eastern Europe	-,902*	,347	,010	-1,59	-,22
	Southern Europe	,352	,305	,250	-.25	,96
	North America	,526	,461	,255	-.39	1,44
	Central and Western Asia	,344	,373	,357	-.39	1,08
	Eastern Asia	-,174	,384	,652	-.93	,59
	Southern and Southeastern Asia	-,198	,290	,497	-.77	,38
	Central and Western Asia	Northern and Western Europe	,182	,366	,620	-.54
Eastern Europe		-1,247*	,396	,002	-2,03	-,46
Southern Europe		,008	,361	,983	-.71	,72
North America		,182	,499	,716	-.81	1,17
Latin America		-,344	,373	,357	-1,08	,39
Eastern Asia		-,518	,430	,230	-1,37	,33
Southern and Southeastern Asia		-,542	,348	,122	-1,23	,15
Eastern Asia		Northern and Western Europe	,700	,378	,066	-.05
	Eastern Europe	-,729	,407	,076	-1,53	,08
	Southern Europe	,526	,373	,161	-.21	1,26
	North America	,700	,508	,171	-.31	1,71
	Latin America	,174	,384	,652	-.59	,93
	Central and Western Asia	,518	,430	,230	-.33	1,37
	Southern and Southeastern Asia	-,024	,361	,947	-.74	,69
	Southern and Southeastern Asia	Northern and Western Europe	,724*	,282	,011	,17
Eastern Europe		-,704*	,320	,030	-1,34	-,07
Southern Europe		,550*	,275	,047	,01	1,09
North America		,724	,441	,103	-.15	1,60
Latin America		,198	,290	,497	-.38	,77
Central and Western Asia		,542	,348	,122	-.15	1,23
Eastern Asia		,024	,361	,947	-.69	,74

*. The mean difference is significant at the 0.05 level.

Independent samples T- test perspectives on the Dutch housing market by way in which housing was arranged (by employer or not)

Group Statistics

	PM_Housing_arranged	N	Mean	Std. Deviation	Std. Error Mean
HS12_expectations	>= 3	53	2,77	1,012	,139
	< 3	84	2,88	1,011	,110
HS12_comparison	>= 3	53	2,43	1,118	,154
	< 3	84	2,49	1,024	,112

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Difference	
									Lower	Upper
HS12_expectations	Equal variances assumed	,027	,869	-,605	135	,546	-,107	,177	-,458	,244
	Equal variances not assumed			-,605	110,592	,546	-,107	,177	-,459	,244
HS12_comparison	Equal variances assumed	,976	,325	-,291	135	,772	-,054	,186	-,422	,314
	Equal variances not assumed			-,285	103,423	,776	-,054	,190	-,431	,323

*One-way ANOVA test perspectives on the Dutch housing market by type of expatriate***Descriptives**

		N	Mean	Std. Dev.	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
HS12_expectations	Accidental tourists & Economy class passengers					36	2,97		
	Pilgrims	31	2,74	,930	,167	2,40	3,08	1	4
	Passengers	58	2,83	1,028	,135	2,56	3,10	1	5
	Total	125	2,85	,992	,089	2,67	3,02	1	5
HS12_comparison	Accidental tourists & Economy class passengers	36	2,39	1,050	,175	2,03	2,74	1	5
	Pilgrims	31	2,55	1,028	,185	2,17	2,93	1	4
	Passengers	58	2,57	1,126	,148	2,27	2,86	1	5
	Total	125	2,51	1,075	,096	2,32	2,70	1	5

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
HS12_expectations	Between Groups	,928	2	,464	,467	,628
	Within Groups	121,184	122	,993		
	Total	122,112	124			
HS12_comparison	Between Groups	,775	2	,387	,332	,718
	Within Groups	142,457	122	1,168		
	Total	143,232	124			

G. OPEN COMMENTS HOUSING SEARCH PROCESS

First housing arranged by the expatriate him or herself:

- Our first temporary furnished rental turned out to be a smoker's house - strong cigarette-smoke smell/ yellow ceilings. We only stayed one night and moved on to a hotel until finding another temporary furnished rental. Rental agencies have told us that smoking is generally not prohibited in rental homes as long as the renter leaves the home as it was when he moved in. This has posed the biggest challenge for our family (including our 5-month-old). We do not feel that a home that has been smoked in can be totally smoke-free unless it gets totally gutted (new floors, walls, etc. - even then I am still concerned that turning on the ventilation system in a home would expose previous smoking). We are currently still searching for a long-term unfurnished home, but knowing that smoking is not prohibited in homes and not always noticing previous smoking when viewing an apartment (but possibly after moving in and having spent some time in the home) is making this process very tough for us. We are not just worried ab
- In general it is quite a difficult process
- Finding a furnished home that was an was commute for my daughter to get to the International school on her own. I wanted a safe environment for m daughter and I and to feel comfortable walking locally
- housing Agency in Endhoven cheated us by taking more money from us while renting in the beggening.
- Yes-your form has a fault - no more text than this
- cigarette smoking in homes is a big issue - the smell as well as the toxins from previous smoking housing quality is not that good for the price not a lot of options on the free market - waiting lists subsidized housing not fair for foreigners earning above a certain level (people don't have to update their income from student to employee and thus qualify for subsidized housing even though they shouldn't)
- construction got delayed.
- No aces to housing offers outside housing agencies.
- Contracts in Dutch
- when I first went to the agents (Rotsvast), they said there is no room for rent! and lots of website for housing are in Dutch
- The initial contract is quite expensive.
- Choice of houses and availability of information
- Dutch estate agents are lazy and difficult.
- The payment only through account bank transfer.
- I could only check houses on Vestide only a month in advance my arrival
- I am still searching.

- Little offer
- 2 years waiting list in Vestide = ridiculous
- It's really hard to do any research if you are not at the moment in Eindhoven, for example, almost impossible to register for a house.
- A bunch of dirty lies from the rental agency.
- Lack of availability Too expensive
- Yes, The student agency namely Friendly Eindhoven or student Eindhoven is big time thugs. They overcharge students, dupe them of the rent and their deposit also. I would request you to take strong action against them and carefully monitor them because each year many international students are victimized by them.
- Searching for a place to live was a living nightmare thanks to the housing agencies that have complete control over the market (if you are not Dutch). They charged unreasonable agency fees just for opening the door of a house and giving you the contract to sign. They charged thousands of euros just for doing nothing. Also they want to sell you the ugliest property first and they keep the good ones cause they know they will be rented easier than the bad ones. To be more specific, the agency Domic tried to do that to me, I told them that I wanted to see a nice studio that just appeared that day, and they only showed me 3 crappy apartments. I asked them: hey what about the one I told you I wanted to see?, and they answered me : no, no that apartment is more or less rented out. And then the next day I saw the same apartment but with another agency and they told me it was available, so I went , saw the place and signed the contract right away. I mean it's not easy getting to a new country, and this housing situation
- No. But it was very hard to find suitable housing because some online offers were already taken, but listed online as available - that made me waste a lot of time.
- Difficult interaction with landlord
- everything had to be NOW and HERE, it's a business, so landlords and agencies don't care for the client. Of course because there is a large demand. Poorly renovated buildings with high rents. Large agency fee for a tiny room. ETC. very low service, had to beg forever to get things fixed, but when it came to paying the rent they were more than interested to get things done on time.
- It was handled by the university through a housing company called Vestide. Their houses are terribly dirty, they don't care about the tenants and they don't help tenants at all.

First housing arranged by employer:

- First housing was temporary (long-stay hotel). Employer arranged for several days of house searches with a rental agency to find a fully-furnished house within the city (walking distance to train station).
- The employer could not find an accommodation in Eindhoven and I had to live in Boxtel for 2.5 years before I found a decent place to live. The other part which is not desirable are the costs charged by commercial agencies through which one can find a house. Paying a month's rent and

contract charges is expensive (maybe a part of the rent, but one of month rent for the agency is too much for what they do)

- 1. Employer's should have a pact with some rental agencies who can give various options for choosing the house. 2. Providing only furnished housing will be beneficial. 3. Putting a video of the house available will be useful in shortlisting of houses. Also, a video of what our surrounding look like from the entrance and back of house. 4. May also include (only clear description) the grocery shops and what the surrounding market looks like.
- It was extremely difficult to find housing due to the fact that the Vestide had little or no long stay contracts. Thus my employer arranged a short stay accommodation and I found a rather expensive apartment thereafter.
- Bieng a student on arrival the housing was arranged by school
- Living in Eindhoven is too expensive for a non-working (yet) student.
- Only one option was provided, if I decided not to take it I needed to arrange it by myself. Not knowing anything about Eindhoven influenced my decision to take this option, without knowing how good this decision was.
- We brought our two cats with us, and they made the housing search significantly more difficult. The reason that I say the housing is not as nice as in the US is because of prices, they are significantly higher here.
- expats have to pay unnecessary extra rent. real state agencies don't pay fair role and don't show proper houses suitable to our need.
- I planned from the beginning to use housing arranged by the university just as a temporary arrangement and I began searching for more suitable housing immediately.
- The neighborhood situation was not explained by the agency.

H. SPSS OUTPUT – HOUSING PREFERENCES

Chi-square test preferred price by type of expatriate

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Pref_Price * Type_expatriate	125	91,2%	12	8,8%	137	100,0%

Pref_Price * Type_expatriate Crosstabulation

Count

	Type_expatriate			Total
	Accidental tourists & Economy class passengers	Pilgrims	Passengers	
less than â,-350	7	5	34	46
â,-350 - â,-650	12	19	20	51
Pref_Price â,-650 - â,-950	7	7	4	18
â,-950 - â,-1200	7	0	0	7
more than â,-1200	3	0	0	3
Total	36	31	58	125

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	47,367 ^a	8	,000
Likelihood Ratio	47,873	8	,000
Linear-by-Linear Association	31,460	1	,000
N of Valid Cases	125		

a. 7 cells (46,7%) have expected count less than 5. The minimum expected count is ,74.

Chi-square test preferred price by household composition

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Pref_Price * Firsthouse_HH	137	100,0%	0	0,0%	137	100,0%

Pref_Price * Firsthouse_HH Crosstabulation

Count

	Firsthouse_HH			Total
	Single	Couple	Family with children	
less than â,-350	42	4	2	48
â,-350 - â,-650	40	11	3	54
Pref_Price â,-650 - â,-950	8	8	5	21
â,-950 - â,-1200	2	3	6	11
more than â,-1200	2	0	1	3
Total	94	26	17	137

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	41,262 ^a	8	,000
Likelihood Ratio	37,082	8	,000
Linear-by-Linear Association	28,108	1	,000
N of Valid Cases	137		

a. 7 cells (46,7%) have expected count less than 5. The minimum expected count is ,37.

Chi-square test preferred type of furnishing by type of expatriate**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Pref_Furnishing * Type_expatriate	125	91,2%	12	8,8%	137	100,0%

Pref_Furnishing * Type_expatriate Crosstabulation

Count

		Type_expatriate			Total
		Accidental tourists & Economy class passengers	Pilgrims	Passengers	
Pref_Furnishing	Bare	4	2	3	9
	Soft-furnished	5	8	9	22
	Furnished	27	21	46	94
Total		36	31	58	125

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	3,091 ^a	4	,543
Likelihood Ratio	2,901	4	,574
Linear-by-Linear Association	,773	1	,379
N of Valid Cases	125		

a. 3 cells (33,3%) have expected count less than 5. The minimum expected count is 2,23.

Chi-square test preferred type of furnishing by household composition**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Pref_Furnishing * Firsthouse_HH	137	100,0%	0	0,0%	137	100,0%

Pref_Furnishing * Firsthouse_HH Crosstabulation

Count

		Firsthouse_HH			Total
		Single	Couple	Family with children	
Pref_Furnishing	Bare	7	1	4	12
	Soft-furnished	17	6	4	27
	Furnished	70	19	9	98
Total		94	26	17	137

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6,480 ^a	4	,166
Likelihood Ratio	5,400	4	,249
Linear-by-Linear Association	3,348	1	,067
N of Valid Cases	137		

a. 3 cells (33,3%) have expected count less than 5. The minimum expected count is 1,49.

Chi-square test preferred type of house by type of expatriate

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Pref_type_categories * Type_expatriate	125	91,2%	12	8,8%	137	100,0%

Pref_type_categories * Type_expatriate Crosstabulation

Count

		Type_expatriate			Total
		Accidental tourists & Economy class passengers	Pilgrims	Passengers	
Pref_type_categories	Student room	3	3	19	25
	Apartment	22	20	34	76
	Single-family house	10	6	5	21
	Other	1	2	0	3
Total		36	31	58	125

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17,485 ^a	6	,008
Likelihood Ratio	18,589	6	,005
Linear-by-Linear Association	12,943	1	,000
N of Valid Cases	125		

a. 3 cells (25,0%) have expected count less than 5. The minimum expected count is ,74.

Chi-square test preferred type of house by household composition

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Pref_type_categories * Firsthouse_HH	137	100,0%	0	0,0%	137	100,0%

Pref_type_categories * Firsthouse_HH Crosstabulation

Count

		Firsthouse_HH			Total
		Single	Couple	Family with children	
Pref_type_categories	Student room	24	2	1	27
	Apartment	55	20	5	80
	Single-family house	12	4	11	27
	Other	3	0	0	3
Total		94	26	17	137

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	30,529 ^a	6	,000
Likelihood Ratio	26,642	6	,000
Linear-by-Linear Association	11,464	1	,001
N of Valid Cases	137		

a. 5 cells (41,7%) have expected count less than 5. The minimum expected count is ,37.

Chi-square test preferred living environment by type of expatriate

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Pref_Type_LE * Type_expatriate	125	91,2%	12	8,8%	137	100,0%

Pref_Type_LE * Type_expatriate Crosstabulation

Count

		Type_expatriate			Total
		Accidental tourists & Economy class passengers	Pilgrims	Passengers	
Pref_Type_LE	Urban-central	19	18	32	69
	Off city center	6	8	11	25
	Green-urban	8	4	14	26
	Central village	2	0	0	2
	Rural	1	1	1	3
Total		36	31	58	125

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	7,277 ^a	8	,507
Likelihood Ratio	7,413	8	,493
Linear-by-Linear Association	,367	1	,545
N of Valid Cases	125		

a. 6 cells (40,0%) have expected count less than 5. The minimum expected count is ,50.

Chi-square test preferred living environment by household composition**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Pref_Type_LE * Firsthouse_HH	137	100,0%	0	0,0%	137	100,0%

Pref_Type_LE * Firsthouse_HH Crosstabulation

Count

		Firsthouse_HH			Total
		Single	Couple	Family with children	
Pref_Type_LE	Urban-central	54	17	5	76
	Off city center	18	2	6	26
	Green-urban	18	6	6	30
	Central village	1	1	0	2
	Rural	3	0	0	3
Total		94	26	17	137

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11,209 ^a	8	,190
Likelihood Ratio	12,265	8	,140
Linear-by-Linear Association	,838	1	,360
N of Valid Cases	137		

a. 9 cells (60,0%) have expected count less than 5. The minimum expected count is ,25.

One-way ANOVA test importance of amenities by type of expatriate

Descriptives

		N	Mean	Std. Dev.	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Pref_LE_Grocery_shops	Accidental tourists & Economy class passengers					36	4,44		
	Pilgrims	31	4,61	,615	,110	4,39	4,84	3	5
	Passengers	58	4,48	,883	,116	4,25	4,72	1	5
	Total	125	4,50	,747	,067	4,37	4,64	1	5
Pref_LE_Parking_space	Accidental tourists & Economy class passengers	36	3,06	1,548	,258	2,53	3,58	1	5
	Pilgrims	31	2,13	1,360	,244	1,63	2,63	1	5
	Passengers	58	1,86	1,277	,168	1,53	2,20	1	5
	Total	125	2,27	1,461	,131	2,01	2,53	1	5
Pref_LE_Public_transport	Accidental tourists & Economy class passengers	36	4,08	1,052	,175	3,73	4,44	1	5
	Pilgrims	31	4,00	1,238	,222	3,55	4,45	1	5
	Passengers	58	3,72	1,268	,166	3,39	4,06	1	5
	Total	125	3,90	1,204	,108	3,68	4,11	1	5
Pref_LE_School	Accidental tourists & Economy class passengers	36	2,11	1,214	,202	1,70	2,52	1	5
	Pilgrims	31	1,84	1,319	,237	1,35	2,32	1	5
	Passengers	58	1,50	1,064	,140	1,22	1,78	1	5
	Total	125	1,76	1,194	,107	1,55	1,97	1	5
Pref_LE_Recreative_space	Accidental tourists & Economy class passengers	36	3,14	1,222	,204	2,73	3,55	1	5
	Pilgrims	31	2,71	1,442	,259	2,18	3,24	1	5
	Passengers	58	2,84	1,254	,165	2,52	3,17	1	5
	Total	125	2,90	1,294	,116	2,67	3,13	1	5
Pref_LE_Greenery	Accidental tourists & Economy class passengers	36	3,14	1,334	,222	2,69	3,59	1	5
	Pilgrims	31	3,19	1,138	,204	2,78	3,61	1	5
	Passengers	58	3,40	1,199	,157	3,08	3,71	1	5
	Total	125	3,27	1,221	,109	3,06	3,49	1	5
Pref_LE_Distance_work	Accidental tourists & Economy class passengers	36	4,25	,770	,128	3,99	4,51	2	5
	Pilgrims	31	4,55	,675	,121	4,30	4,80	3	5
	Passengers	58	4,57	,652	,086	4,40	4,74	2	5
	Total	125	4,47	,702	,063	4,35	4,60	2	5

Expatriates housing choice behavior

Pref_LE_Appearance	Accidental tourists & Economy class passengers	36	4,03	,941	,157	3,71	4,35	1	5
	Pilgrims	31	3,68	1,194	,214	3,24	4,12	1	5
	Passengers	58	3,67	,998	,131	3,41	3,93	1	5
	Total	125	3,78	1,038	,093	3,59	3,96	1	5
Pref_LE_Interaction_neighbors	Accidental tourists & Economy class passengers	36	3,03	1,276	,213	2,60	3,46	1	5
	Pilgrims	31	3,13	1,310	,235	2,65	3,61	1	5
	Passengers	58	2,78	1,155	,152	2,47	3,08	1	5
	Total	125	2,94	1,230	,110	2,72	3,15	1	5
Pref_LE_Distance_friends	Accidental tourists & Economy class passengers	36	2,61	1,248	,208	2,19	3,03	1	5
	Pilgrims	31	2,52	1,288	,231	2,04	2,99	1	5
	Passengers	58	2,34	1,278	,168	2,01	2,68	1	5
	Total	125	2,46	1,267	,113	2,24	2,69	1	5
Pref_LE_Other_expatriates	Accidental tourists & Economy class passengers	36	2,44	1,252	,209	2,02	2,87	1	5
	Pilgrims	31	2,68	1,423	,256	2,16	3,20	1	5
	Passengers	58	2,29	1,271	,167	1,96	2,63	1	5
	Total	125	2,43	1,303	,117	2,20	2,66	1	5

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Pref_LE_Grocery_shops	Between Groups	,522	2	,261	,463	,631
	Within Groups	68,726	122	,563		
	Total	69,248	124			
Pref_LE_Parking_space	Between Groups	32,483	2	16,241	8,531	,000
	Within Groups	232,269	122	1,904		
	Total	264,752	124			
Pref_LE_Public_transport	Between Groups	3,312	2	1,656	1,146	,321
	Within Groups	176,336	122	1,445		
	Total	179,648	124			
Pref_LE_School	Between Groups	8,551	2	4,275	3,100	,049
	Within Groups	168,249	122	1,379		
	Total	176,800	124			
Pref_LE_Recreative_space	Between Groups	3,352	2	1,676	1,001	,371
	Within Groups	204,296	122	1,675		
	Total	207,648	124			
Pref_LE_Greenery	Between Groups	1,728	2	,864	,576	,564
	Within Groups	183,024	122	1,500		
	Total	184,752	124			
Pref_LE_Distance_work	Between Groups	2,500	2	1,250	2,601	,078
	Within Groups	58,652	122	,481		
	Total	61,152	124			
Pref_LE_Appearance	Between Groups	3,206	2	1,603	1,498	,228
	Within Groups	130,522	122	1,070		
	Total	133,728	124			
Pref_LE_Interaction_neighbors	Between Groups	2,946	2	1,473	,974	,381
	Within Groups	184,542	122	1,513		
	Total	187,488	124			
Pref_LE_Distance_friends	Between Groups	1,687	2	,844	,521	,595
	Within Groups	197,401	122	1,618		
	Total	199,088	124			
Pref_LE_Other_expatriates	Between Groups	2,992	2	1,496	,879	,418
	Within Groups	207,680	122	1,702		
	Total	210,672	124			

*One-way ANOVA test importance of amenities by household composition***Descriptives**

		N	Mean	Std. Dev.	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
						Pref_LE_Grocery_shops	Single		
	Couple	26	4,31	,679	,133	4,03	4,58	3	5
	Family with children	17	4,59	,618	,150	4,27	4,91	3	5
	Total	137	4,49	,749	,064	4,36	4,62	1	5
Pref_LE_Parking_space	Single	94	2,24	1,464	,151	1,94	2,54	1	5
	Couple	26	2,31	1,350	,265	1,76	2,85	1	5
	Family with children	17	3,18	1,667	,404	2,32	4,03	1	5
	Total	137	2,37	1,490	,127	2,12	2,62	1	5
Pref_LE_Public_transport	Single	94	3,86	1,197	,123	3,62	4,11	1	5
	Couple	26	4,08	1,164	,228	3,61	4,55	1	5
	Family with children	17	3,94	1,088	,264	3,38	4,50	2	5
	Total	137	3,91	1,172	,100	3,71	4,11	1	5
Pref_LE_School	Single	94	1,64	1,096	,113	1,41	1,86	1	5
	Couple	26	1,92	1,262	,248	1,41	2,43	1	5
	Family with children	17	2,82	1,551	,376	2,03	3,62	1	5
	Total	137	1,84	1,244	,106	1,63	2,05	1	5
Pref_LE_Recreative_space	Single	94	2,80	1,349	,139	2,52	3,07	1	5
	Couple	26	3,04	1,148	,225	2,57	3,50	1	5
	Family with children	17	3,59	,870	,211	3,14	4,04	2	5
	Total	137	2,94	1,282	,110	2,72	3,16	1	5
Pref_LE_Greenery	Single	94	3,26	1,244	,128	3,00	3,51	1	5
	Couple	26	3,19	1,132	,222	2,74	3,65	1	5
	Family with children	17	3,94	1,029	,250	3,41	4,47	1	5
	Total	137	3,33	1,213	,104	3,12	3,53	1	5
Pref_LE_Distance_work	Single	94	4,50	,699	,072	4,36	4,64	2	5
	Couple	26	4,46	,859	,169	4,11	4,81	2	5
	Family with children	17	4,12	,600	,146	3,81	4,43	3	5
	Total	137	4,45	,727	,062	4,32	4,57	2	5
Pref_LE_Appearance	Single	94	3,68	1,119	,115	3,45	3,91	1	5
	Couple	26	3,85	,834	,164	3,51	4,18	2	5
	Family with children	17	4,18	,951	,231	3,69	4,67	2	5
	Total	137	3,77	1,057	,090	3,60	3,95	1	5
Pref_LE_Interaction_neighbors	Single	94	2,84	1,221	,126	2,59	3,09	1	5
	Couple	26	2,88	1,336	,262	2,34	3,42	1	5
	Family with children	17	3,59	,795	,193	3,18	4,00	2	5
	Total	137	2,94	1,217	,104	2,74	3,15	1	5

Pref_LE_Distance_fri ends	Single	94	2,57	1,291	,133	2,31	2,84	1	5
	Couple	26	2,00	1,020	,200	1,59	2,41	1	4
	Family with children	17	2,82	1,425	,346	2,09	3,56	1	5
	Total	137	2,50	1,278	,109	2,28	2,71	1	5
Pref_LE_Other_expatriates	Single	94	2,48	1,318	,136	2,21	2,75	1	5
	Couple	26	2,46	1,104	,216	2,02	2,91	1	4
	Family with children	17	2,12	1,364	,331	1,42	2,82	1	5
	Total	137	2,43	1,282	,110	2,21	2,65	1	5

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Pref_LE_Grocery_shops	Between Groups	1,120	2	,560	,999	,371
	Within Groups	75,114	134	,561		
	Total	76,234	136			
Pref_LE_Parking_space	Between Groups	12,633	2	6,317	2,925	,057
	Within Groups	289,381	134	2,160		
	Total	302,015	136			
Pref_LE_Public_transport	Between Groups	,959	2	,480	,346	,708
	Within Groups	185,989	134	1,388		
	Total	186,949	136			
Pref_LE_School	Between Groups	20,448	2	10,224	7,210	,001
	Within Groups	190,019	134	1,418		
	Total	210,467	136			
Pref_LE_Recreative_space	Between Groups	9,294	2	4,647	2,907	,058
	Within Groups	214,239	134	1,599		
	Total	223,533	136			
Pref_LE_Greenery	Between Groups	7,367	2	3,683	2,559	,081
	Within Groups	192,852	134	1,439		
	Total	200,219	136			
Pref_LE_Distance_work	Between Groups	2,113	2	1,057	2,031	,135
	Within Groups	69,726	134	,520		
	Total	71,839	136			
Pref_LE_Appearance	Between Groups	3,705	2	1,852	1,674	,191
	Within Groups	148,281	134	1,107		
	Total	151,985	136			
Pref_LE_Interaction_neighbors	Between Groups	8,155	2	4,077	2,825	,063
	Within Groups	193,378	134	1,443		
	Total	201,533	136			
Pref_LE_Distance_friends	Between Groups	8,799	2	4,399	2,762	,067
	Within Groups	213,449	134	1,593		
	Total	222,248	136			
Pref_LE_Other_expatriates	Between Groups	1,908	2	,954	,577	,563
	Within Groups	221,684	134	1,654		
	Total	223,591	136			

I. SPSS OUTPUT – FIRST HOUSING CONCESSIONS

Chi-square test first house price by type of expatriate

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
firsthouse_price * Type_expatriate	125	91,2%	12	8,8%	137	100,0%

firsthouse_price * Type_expatriate Crosstabulation

Count

	firsthouse_price	Type_expatriate			Total
		Accidental tourists & Economy class passengers	Pilgrims	Passengers	
	<350	5	2	28	35
	350-650	9	20	23	52
	650-950	11	7	3	21
	950-1200	2	2	1	5
	>1200	6	0	1	7
	I live for free	3	0	2	5
Total		36	31	58	125

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	47,480 ^a	10	,000
Likelihood Ratio	50,122	10	,000
Linear-by-Linear Association	22,641	1	,000
N of Valid Cases	125		

a. 9 cells (50,0%) have expected count less than 5. The minimum expected count is 1,24.

Correlation between type of house and price

		firsthouse_price	firsthouse_type
firsthouse_price	Pearson Correlation	1	,276**
	Sig. (2-tailed)		,001
	N	137	137
firsthouse_type	Pearson Correlation	,276**	1
	Sig. (2-tailed)	,001	
	N	137	137

** . Correlation is significant at the 0.01 level (2-tailed).

Paired samples T-test price and type of house for the preferred and actual situation

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pref_Price	2,03	137	1,014	,087
	Pref_type_categories	2,04	137	,695	,059
Pair 2	firsthouse_price	2,34	137	1,273	,109
	Firsthouse_type_categorie	1,96	137	,966	,083

		N	Correlation	Sig.
Pair 1	Pref_Price & Pref_type_categories	137	,572	,000
	firsthouse_price & Firsthouse_type_categorie	137	,572	,000

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Pref_Price - Pref_type_categories	-,015	,840	,072	-,157	,127	-,203	136	,839
	firsthouse_price - Firsthouse_type_categorie	,372	1,071	,092	,191	,553	4,068	136	,000

Chi-square test first living environment by type of expatriate**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
firsthouse_LE *	137	100,0%	0	0,0%	137	100,0%
Firsthouse_HH						

firsthouse_LE * Firsthouse_HH Crosstabulation

Count

		Firsthouse_HH			Total
		Single	Couple	Family with children	
firsthouse_LE	Urban-central	49	13	4	66
	Off city center	37	11	5	53
	Green urban	5	0	7	12
	Central village	2	2	1	5
	Rural	1	0	0	1
Total		94	26	17	137

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	29,337 ^a	8	,000
Likelihood Ratio	22,683	8	,004
Linear-by-Linear Association	7,618	1	,006
N of Valid Cases	137		

a. 8 cells (53,3%) have expected count less than 5. The minimum expected count is ,12.

J. SPSS OUTPUT – HOUSING CAREERS

One-way ANOVA test number of houses by type of expatriate

Descriptives

No_houses

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Accidental tourists & Economy class passengers	36	2,25	1,180	,197	1,85	2,65	1	5
Pilgrims	31	1,48	,769	,138	1,20	1,77	1	4
Passengers	58	2,07	1,183	,155	1,76	2,38	1	5
Total	125	1,98	1,125	,101	1,78	2,18	1	5

ANOVA

No_houses

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	10,712	2	5,356	4,469	,013
Within Groups	146,216	122	1,198		
Total	156,928	124			

Multiple Comparisons

Dependent Variable: No_houses

LSD

(I) Type_expatriate	(J) Type_expatriate	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Accidental tourists & Economy class passengers	Pilgrims	,766*	,268	,005	,24	1,30
	Passengers	,181	,232	,437	-,28	,64
Pilgrims	Accidental tourists & Economy class passengers	-,766*	,268	,005	-1,30	-,24
	Passengers	-,585*	,244	,018	-1,07	-,10
Passengers	Accidental tourists & Economy class passengers	-,181	,232	,437	-,64	,28
	Pilgrims	,585*	,244	,018	,10	1,07

*. The mean difference is significant at the 0.05 level.

One-way ANOVA test number of houses by intended length of stay

Descriptives

No_houses

	N	Mean	Std. Dev.	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
6 months- 1 year	18	2,28	1,526	,360	1,52	3,04	1	5
1 - 3 years	44	1,93	,974	,147	1,64	2,23	1	5
3 - 5 years	56	1,82	1,011	,135	1,55	2,09	1	4
> 5 years	19	2,21	1,182	,271	1,64	2,78	1	5
Total	137	1,97	1,104	,094	1,78	2,16	1	5

ANOVA

No_houses

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4,104	3	1,368	1,125	,341
Within Groups	161,779	133	1,216		
Total	165,883	136			

One-way ANOVA test satisfaction first housing situation by number of houses

Descriptives

firsthouse_Satisfaction

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
No	60	3,52	,911	,118	3,28	3,75	1	5
Yes	77	2,87	1,351	,154	2,56	3,18	1	5
Total	137	3,15	1,218	,104	2,95	3,36	1	5

ANOVA

firsthouse_Satisfaction

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	14,096	1	14,096	10,139	,002
Within Groups	187,685	135	1,390		
Total	201,781	136			

One-way ANOVA test satisfaction first housing situation by type of expatriate**Descriptives**

firsthouse_Satisfaction

	N	Mean	Std. Dev.	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					Accidental tourists & Economy class passengers	36		
Pilgrims Passengers	31	3,26	1,154	,207	2,83	3,68	1	5
Total	58	3,16	1,348	,177	2,80	3,51	1	5
Total	125	3,20	1,205	,108	2,99	3,41	1	5

ANOVA

firsthouse_Satisfaction

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,239	2	,119	,081	,922
Within Groups	179,761	122	1,473		
Total	180,000	124			

Chi-square test considering to move current house by number of housing situations**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
CH_Consider_moving * Morethan1house	137	100,0%	0	0,0%	137	100,0%

CH_Consider_moving * Morethan1house Crosstabulation

Count

		Morethan1house		Total
		No	Yes	
CH_Consider_moving	Yes	31	39	70
	No	29	38	67
Total		60	77	137

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	,014 ^a	1	,906	1,000	,522
Continuity Correction ^b	,000	1	1,000		
Likelihood Ratio	,014	1	,906		
Fisher's Exact Test					
Linear-by-Linear Association	,014	1	,906		
N of Valid Cases	137				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 29,34.

b. Computed only for a 2x2 table

Independent samples T-test satisfaction first housing situation by reason to move: better possibilities available

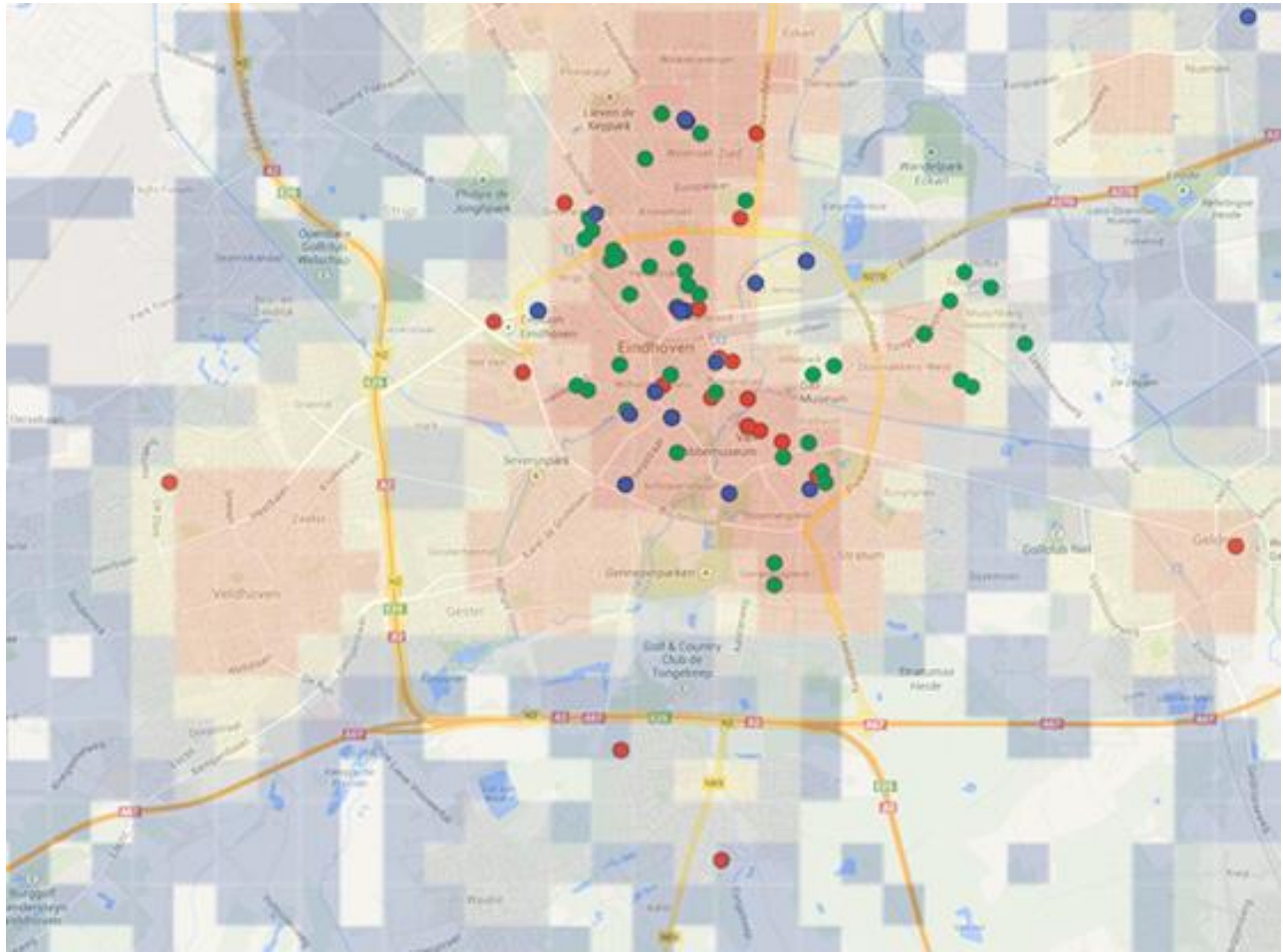
Group Statistics

	H1_RM_Better_possibilities	N	Mean	Std. Deviation	Std. Error Mean
H1_Satisfaction	False	47	3,43	1,137	,166
	True	32	2,16	1,322	,234

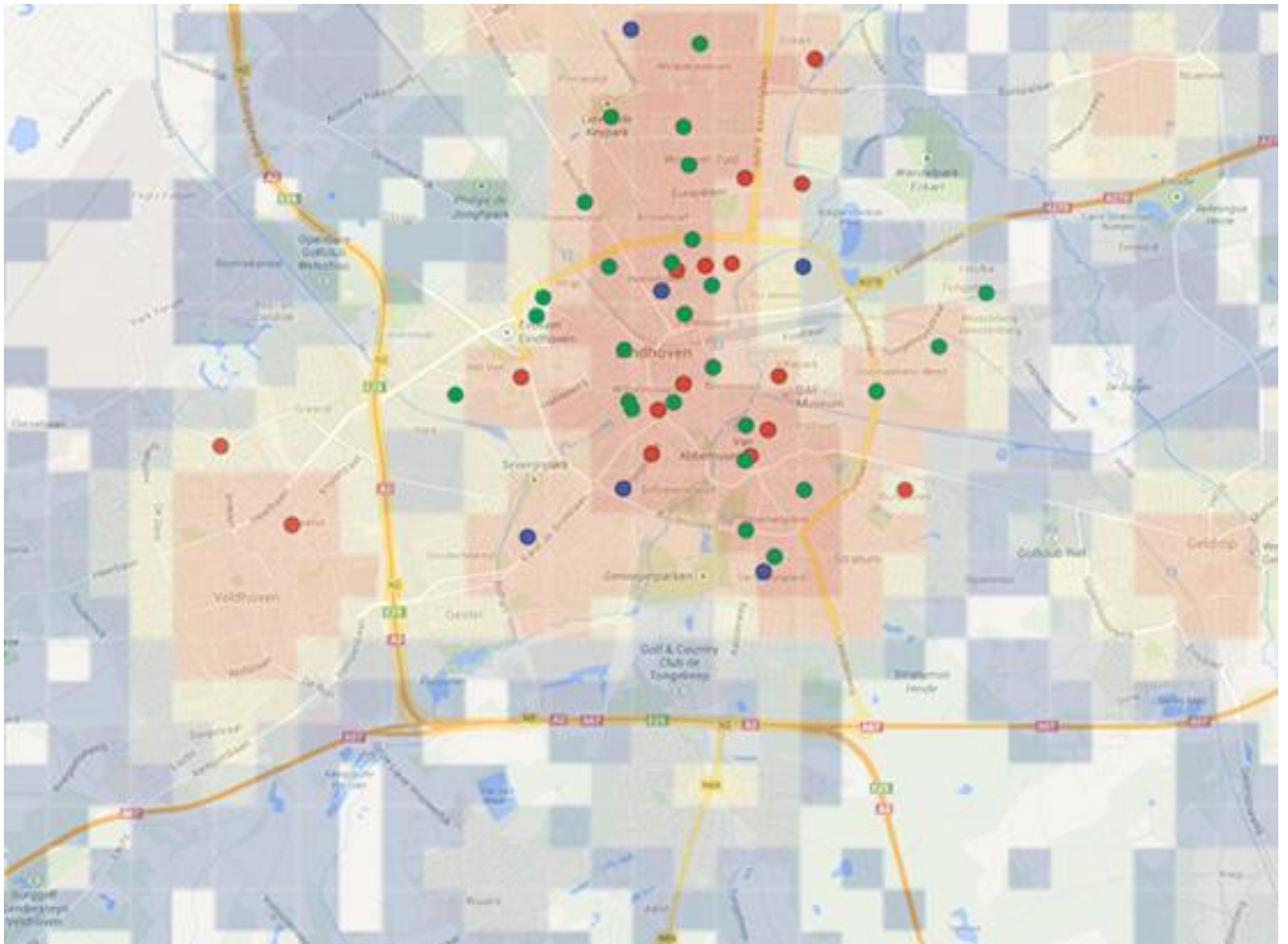
Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	,775	,381	4,557	77	,000	1,269	,279	,715	1,824
Equal variances not assumed			4,428	59,848	,000	1,269	,287	,696	1,843

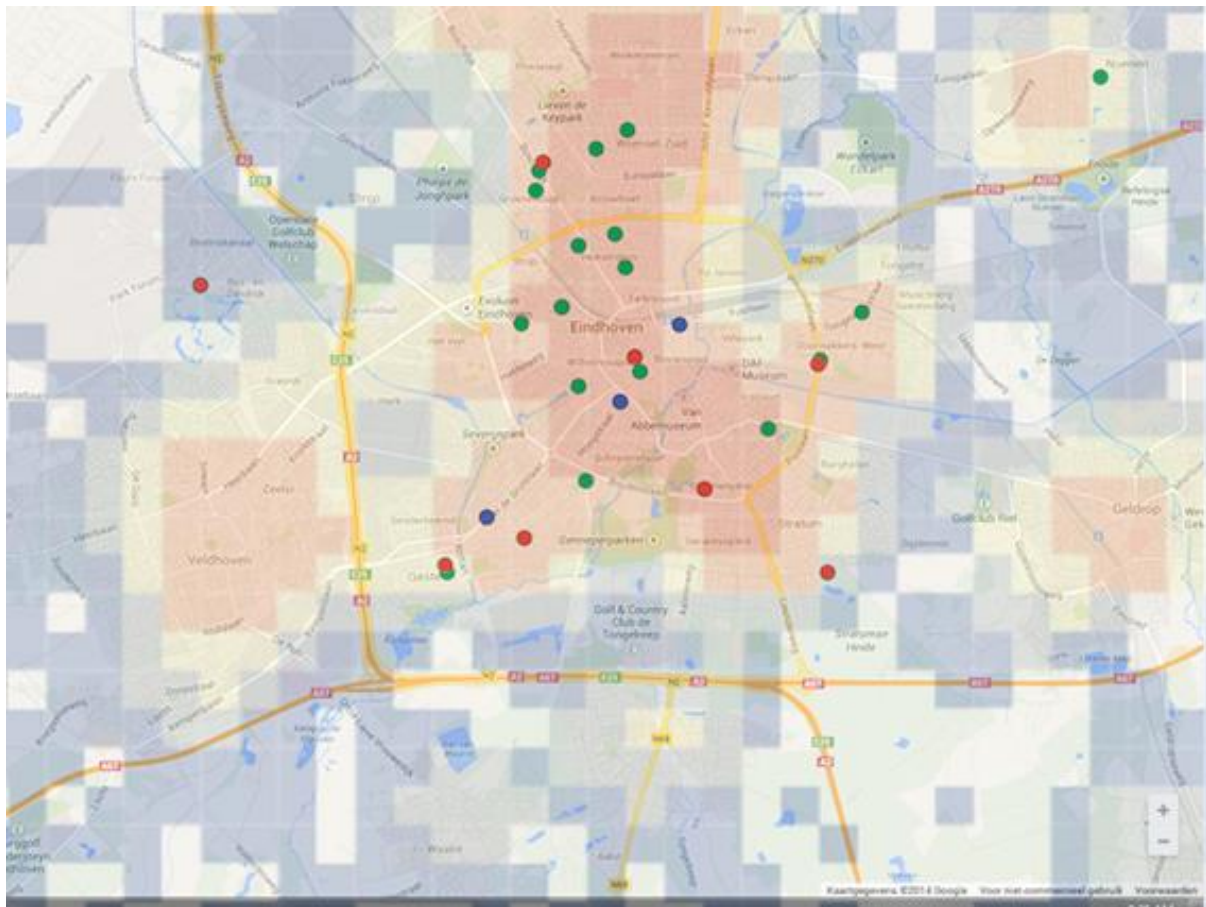
K. RELOCATION PATTERNS (LARGE SCALE)



First housing situation (N=114)



Second housing situation (N=59)



Third housing situation (N=44)

L. REMARKS AT END OF QUESTIONNAIRE

- My salary is my business. To have an effective questionnaire, you should respect peoples privacy and allow an option which says "I prefer not to answer". The first optional text field does not work - the text is limited to a few words. I wanted to say that most people in my situation come here first to a hotel for a couple of days. Then they are put into temp furnished housing because it takes approx 3 months for their goods to arrive and clear customs. During that time, they look for a more permanent solution.
- we like to look for the house we can purchase in 2014. If there are really useful information for it, we would like to use it.
- Feel free to contact my email below for any other similar surveys. Also, I just moved to Eindhoven, and still trying to meet people and make friends, so I don't mind getting invited to social events with a group of meeting, if appropriate :) Good luck with your survey! Amir
- I would be keen to get information on various suburbs of Eindhoven and type of housing available
- Questionnaire should have included the case of someone moving within Netherlands. For ex. What if someone moves from Delft to Eindhoven as in my case!
- I am satisfied with my current housing. I also want to point out that having opportunity to choose my housing from several options helped me a lot.
- I think the situation might differ a lot whether people are expats for a certain amount of time (for example) PhD students or whether one has a job with potential fixed-term appointment who think about staying in the Netherlands "forever" (like tenure-track in our case) - maybe this should be taken into account in the questionnaire/evaluation
- It is very different to find a suitable department for a couple.
- I am searching for a house in the area of Eindhoven since some months now. Actually my driving distance is more than 100 km. My employer only compensates me for a maximum of 90 km and driving every day is very stressful. Unfortunately most of the house offers on the internet are old offers, which the housing agents only use to attract potential customers. When you ask them the house is always "just rented to someone else", but the house offer is still on the home page. So it seems that I will have to pay about 300 EUR more for a comparable house here in Eindhoven area.
- Note: the detached house we live in is actually a small house(possibly an ex tool storage)inside someone else's back yard.
- I hope there will be many sites for giving many free information for room or house for rent in Eindhoven.
- As a student, moving to Eindhoven is not so nice to find a housing matter. All the student priced housing comes from Vestide or Trudo and on these you have a 2-5 years waiting list. By that time, all my business and studies in Eindhoven will be done! Not so motivating.

- Force rental agency to give out contracts in ENGLISH. They should inform BEFORE about particular concerns (saying that this flat was dirty is being gentle). Noone cleaned the flat. Noone took care of the fixes. We waited for months before getting the first fixes and the agency forces us on agreements we couldn't deny since we had already signed an agreement document. Worst experience ever with renting a house, and this is not the first time I rent a house. That's maybe just my case but... Totally disappointed.
- Thank you for the survey, it was nice to express how I feel about this housing situation in Eindhoven, hope that with your study you can make a difference even if it's just a small change, or even just to advice other people about what to do or what to avoid while searching for a house. Good luck and have a nice day!
- My biggest problem with the housing market in the Netherlands is the huge disparity between social housing and the private market. Administration and participation fees for housing agencies are very high, there's no quality control on the properties advertised, prices seem to be set in an arbitrary fashion, and the agencies offer absolutely no help nor share the liability with the landlord if anything goes wrong after signing the contracts and running off with the agency fee. The law doesn't even seem to protect tenants in the private sector in the same way it does in the social housing market. Renting directly from the homeowners has been, in my case, a much better experience, but it's a pity there is no real marketplace to find a home in this way.
- There are not many options and the options that international students have are more expensive than the ones that dutch students have.
- The questionnaire was bit difficult to complete for me, as some of the question were in form 'when you first arrived to the Netherlands' and some in 'when you first arrived to Eindhoven area'. At least in my case these are two difficult situations since I first lived in Den Haag for a year.
- The international housing situation here is a joke. Luckily i got a contract with vestide so i got good accomodation. Unfortunately for alot of others who get assigned to a contract with Student Eindhoven or now known as Friendly housing i can not say the same. A friend of mine had a room in a student flat with student Eindhoven. For 350 euros his room was like a small box, 8m² or something, with 1 kitchen, 3 toilets and 2 showers to share with 16 other people. Yet the university still sends more and more students each year
- ahoy

M. FACEBOOK DISCUSSIONS

On 7 november 2013 a discussion was started on the Eindhoven housing facebook page. Since housing in the Netherlands was rated very negatively, a discussion was started to better interpret these results.

- **Janneke Koeleman**
“**First survey results about the housing careers of expats indicate that almost half of you say that housing conditions in the Netherlands are worse than in your home country. What is it about housing in the Netherlands that bothers you the most? (Eg. price, availability, real estate agents fees et cetera) Please comment below.**

If you haven't filled in the survey yet, it is open till Sunday!

- If an erasmus student or newcomer wants to rent a room in Eindhoven, he or she need to do it via an agency, and have to pay 1 month rent + 1 month of fee + 1 month of deposit. What do agency offer for 1 month of fee? They offer a lot of things. What parts do they deliver? Almost none, unless they are threatened with lawyers or negative advertisement or complains to the headquarters.

Too many agencies taking advantage of international students. Renting out rooms that they can never rent out to someone who lives in NL (expat, student, foreigner or not) for ridiculous prices. And they do not care about tenants needs or concerns. They are able to do this because new comers have no idea about where to find other options..

Contracts are in most cases in Dutch. International students are signing contracts that they can not understand BEFORE signing. I signed my first contract when i wasn't even in Eindhoven yet.

I changed 10 places in 3 years. 7 of them were rentals with contracts, 3 of them were temporary / short term.

And now i found peace in a house that i rented directly from the landlord.

I think Eindhoven needs a proper portal which brings landlords and renters together. Eliminating those 'smart' agencies who charge ridiculous amounts of fees both from the renters and landlords.

- i fully agree. I was in a really bad sitaution last year and my last landlord even took out 1800€ for a damage out of our deposits (with me and my former room mates). The damage he declared however was not our mistake more like a water damage. But the landlord was too "busy" being on vacation in Thailand to got to the insurance company to get it fixed on time.
So what happened he waited to long. Only option was to take the money out from the erasmus students who went home 2 weeks later anyway... (In total this was 180€ each one)
I wrote a long complaint letter to the international office to never take anyone to those landlords again because they are immoral. The result, I already met 3 new guys living there and studying with me.

Problem: Too many students -> too little housing possibilities

- **Janneke Koeleman**
Thanks for your comments! If I may ask you, what do you believe is the reason that it is harder for international students than for Dutch students? For example, can't you use sites like kamernet because they are in Dutch or do you believe most student houses prefer Dutch students, for example because they don't feel like talking English all the time? Thanks a lot!

- Kamernet is like a joke for me. I have never used it and i will never use it. This is my personal point of view, no one has to agree or disagree.
If you ask why, i would say i don't believe it is ethical to put those people in a room and let them try to be better than each other. I don't believe it is possible to get to know any of those candidates in a environment like that neither.

I lived with many different people. I interviewed with them to chose who to live with, i know how hard it is because when you drink a coffee with someone, you get to know them and there is generally no valid reason for not to like them. In this point of view, it is really hard to chose who to live with, at least for me. But it is a choice that we need to make.

And on the other hand, kamernet requires meeting. If you are coming from abroad, you can not attend to a meeting. In this case, you need direct contact with a landlord. What my point is Kamernet is only an option for the people who are already living in NL. And even for them, i believe it is not good enough.

I don't think it is harder for international students. "As long as they are already here", it is as easy as Dutch students because they have the chance to go, meet, chat etc.
New comers don't. They generally have to sign a contract before they meet their room mates and even before they see their house / room. And their only option is provided by their company or from their university.

Spoiler: This is why i have a project on my mind. To making it easier, cheaper and pain-free to find housing in Eindhoven. Both for renters and landlords. I hope no one acts before me. ^^

- agency fee is too expensive and also, most of the landlords will refuse to offer you an accommodation if you are expecting or having a baby
- think there is no problem for signing a contract with a landlord as a foreign student you don't have any other chances most of the time. Coming here just for an apartment does not seem realistic and most of the time they will only stay for one or maximum two semester therefore room mates might not even matter so much. I think the problem is more the landlords being jerks and taking advantage of those Erasmus guys. Like in the example I gave you. I think it is very very unethical to behave like that and that is what worries me the most.

Don't take this offensively but in my experience this is part of the Dutch culture (very money orientated folks) and this is maybe just one part you have to experience while being in the Netherlands!

- I agree with you except the room mates. I came here as an Erasmus student and my university arranged my housing via Vestide. The room was around 8 square meters, like a little box you can not move inside. Apartment was full with spiders, kitchen was sticking and stinking because of the excessive vaporized oil etc etc.

But what was my biggest problem? One of my house mates was a real schizophrene case. An extreme obese(huge..), 19 years old, Cameroonian kid. He was threatening me to kill me time to time. Screaming like crazy all night long, punching walls, talking to himself all day long, threatening me with knife and bunch of other freaking sh.t. I reported several times to police, Vestide and Fontys. Nobody cared.

I told them i may have to defend myself someday, and i won't be responsible about the outcomes. They did not care. Eventually that happened and he tried to kill me and he ended up unconscious.

Taken to hospital first and then arrested. If it was someone else in my position, who does not know how to defend himself/herself, s/he would be dead.

Why did I have to experience this shit? Because Vestide was so lame to relocate me to one of their tens of empty rooms. Police was so lame to do anything else than warning him. And my university was so lame to take action and make an arrangement with Vestide.

This is maybe an extreme case but shit happens. If i had the chance to meet my housemates before, I would leave that apartment as soon as i saw that freak.