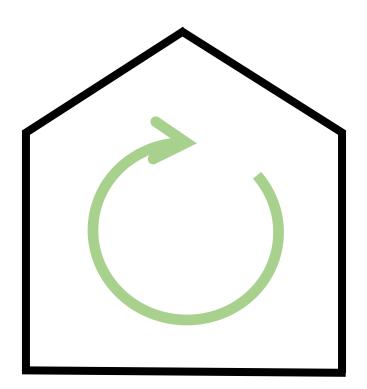
### Stimulating the desire to move

How instruments can improve the willingness to move of owneroccupiers aged 55-75: a case study of Rotterdam



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#### **Preface**

On the first of September, the process of graduation started with a brainstorming session about what I would research for the coming year. There were two main criteria that the study had to meet: It had to be relevant and I had to have a personal fascination with it. I soon came across the ageing population and the housing situation of the elderly. Both in my immediate surroundings and my work, I met elderly people who lived in houses that were not suitable for them. Additionally, the relocation of these people also has benefits for other target groups. My interest was piqued. The topic of my graduation project was found: how elderly residents can be persuaded to move to another dwelling. After conducting some additional research the focus shifted towards residents with a certain type of homeownership, a certain age and living in a certain municipality. Although the process of graduation sometimes has been rough, I still look back positively. With this research, I hope to have developed relevant knowledge to improve the housing situation of the intended target group and also the overall living situation of the inhabitants of the Netherlands.

My thanks go to several people without whom the research would not have been what it is now. First of all, I want to thank my mentors both from the TU Delft and the municipality of Rotterdam. Arend Jonkman and Harry Boumeester their constructive criticism and explanatory questions continually added a new layer to the research. I also want to thank Harry van der Heijden for his replacement of Harry Boumeester at the beginning of the process. Nienke Miedema and Samantha van Rooij who, in addition to the project, also had an eye for all the personal circumstances that accompany such a project. Secondly, I want to thank my family and girlfriend. Their unconditional support during the process has dragged me through various difficult moments. I would also thank my roommates and all other friends with whom I could spar about the research, but where I could also just hang out. Thirdly, I want to thank all the respondents for their input and cooperation. But above all, my thanks go to Him; Soli Deo Gloria.

I hope you will enjoy reading this thesis.

Jan van Vliet

Delft, June 2021

#### Summary

The Dutch population is ageing. The impact of the housing situation of the elderly on society is therefore increasing. The current housing situation of the elderly may be inappropriate regarding the use of space and the wellbeing of the residents. Especially the housing situation of owner-occupiers aged between 55 and 75 is not suitable. Relocation can improve the housing situation of these older adults. Additionally, relocation can also increase sustainability investments and relocation opportunities of other target groups. Residential mobility of owner-occupiers aged between 55 and 75 thus has multiple benefits. However, the actual residential mobility of these older adults is low. According to the push and pull framework developed by Wiseman (1980), residential mobility is inter alia dependent on the willingness to move. In the Netherlands, this willingness to move is low for older adults, which is one of the reasons for their low residential mobility. It is, however, unsure what will work in enhancing this willingness to move, as there are currently no well-developed instruments regarding this issue. There is also not much research on possible interventions regarding the willingness to move of owner-occupiers aged between 55 and 75. Therefore, this research aims to examine how instruments can increase the willingness to move of owner-occupiers aged between 55 and 75. The focus of this research will be on the municipal level, as most relocations take place within municipalities and most instruments concerning housing can be implemented on the municipal level. The main research question of this study is: How can the willingness to move of owner-occupiers aged between 55 and 75 be increased by instruments on a municipal level?

#### **Method**

To answer the research question qualitative research has been conducted. This qualitative research consists of two parts: literature research and case study research. The selected case is the municipality of Rotterdam, one of the four big cities in the Netherlands. The literature research is conducted to gain more insights into the basic elements of willingness to move and does also function as the basis for the case study. The case study contains three elements: a data analysis, interviews with experts, and interviews with elderly. The data analysis gives more insight into the context of the municipality of Rotterdam. The interviews with the experts are conducted to discover what instruments influence these mechanisms to increase the willingness to move of owner-occupiers aged between 55 and 75. The interviews with the target group are conducted to validate earlier findings.

#### Willingness to move

The willingness to move is researched with the literature review and the interviews with the target group. Willingness to move consist of two elements: a triggering mechanism and an evaluation mechanism. Due to push or pull factors the triggering mechanism makes people start thinking about a possible relocation. Ninety-two different push and pull factors are discovered. These factors are divided into nine groups, five of them are push related and four of them are pull related. The groups of push factors are dwelling, neighbourhood, health, finance and social relations. The groups of pull factors are dwelling, neighbourhood, lifestyle and social relations. Based on the literature and the interviews with the target group it has become clear that these factors have different levels of importance. Factors related to lifestyle and dwelling are more important than those related to finance or social relations.

After the triggering mechanism makes people think about a possible relocation, the evaluation mechanism determines if such a relocation is actually preferred. The evaluation mechanism consists of four parts: elements of the current situation (including possible push factor), elements of the new situation (including possible pull factor), the transaction costs

of relocation and personal characteristics. Personal characteristics determine the willingness to move of residents by giving weight to the evaluated elements. Twenty-two personal characteristics are discovered which are clustered into 7 groups: age, nationality, marital status, relation with the dwelling, income, educational level and social relations. Each of these groups has a different relationship with willingness to move. Residents with younger age, Dutch nationality, who are single, with a shorter time of residency, higher income and bad social relations are more willing to move than their opposites.

#### Municipal context

The context of the municipality regarding willingness to move is researched by data analysis. The context is influenceable on four different elements: the personal characteristics of the inhabitants of a municipality, the characteristics of the housing stock, neighbourhood characteristics and the policy context. Except for the policy context, these elements are analysed and compared to the national average and the other three big cities: Amsterdam, The Hague, Utrecht. The four big cities are significantly different from other municipalities in the Netherlands. For example, the number of owner-occupiers in these municipalities is significantly lower. Dwellings are also smaller and there are relatively more older buildings. Residents in these municipalities experience their neighbourhood as much more unsafe than the average Dutch citizen. The four big cities also differ from each other. For example inhabitants of the municipality of Rotterdam experience their neighbourhood significantly worse than residents of the other three big cities. Another example is the average value of a dwelling, which is significantly lower in the municipality of Rotterdam. The personal characteristics of inhabitants of the municipality of Rotterdam also differ from the ones living in Amsterdam, The Hague or Utrecht. The context of the municipality is therefore influential concerning both the triggering mechanism, due to different possible push and pull factors, as well as the evaluation mechanism, due to different personal characteristics. In addition to these characteristics, the willingness to move of residents is also shaped by the policies of the municipality and other stakeholders operating within the municipality. This influence can be direct or indirect. Direct interventions are instruments focused on the inhabitants, for example, the senior real estate agent. Indirect interventions are related to legislation and regulations which influences the stakeholders operating within the municipality.

#### <u>Instruments</u>

Instruments are developed based on the results of the literature review, the data analysis, the interviews with the experts and the interviews with the target group. For the municipality of Rotterdam, six suitable types of instruments are discovered. These instruments are suitable dwelling, financial arrangement, priority rules, process help, awareness of the current situation, awareness of the new situation. 'Suitable dwellings' is about the construction of dwellings that are interesting for the target group due to the physical characteristics of the dwelling, but also due to its location, possibilities with regards to care and social interaction. The instrument of financial arrangement creates opportunities and reduces barriers with regards to the finance of a dwelling, reducing the transaction costs of relocating. Priority rules are also intended to reduce the transaction costs of relocation. The priority rules increase the accessibility for the target group. While the instruments of financial arrangement and priority rules are focused on certain aspects of the process, e.g. finance and accessibility, the instrument of process help cover multiple elements of the relocation process. For example by creating a sympathetic ear, but also by giving legal support etc. The intention of the instrument of awareness of the current situation is to influence how the elderly evaluate their current situation. This will reduce satisfaction with the current dwelling,

increasing the willingness to move. The instrument of awareness of the new situation is intended to influence the evaluation of the new situation. By creating a feeling with a new situation, residents are more inclined to move.

#### **Conclusion**

The main question of this research was: How can the willingness to move of owner-occupiers aged between 55 and 75 be increased by instruments on a municipal level? Instruments can influence the willingness to move by making residents aware of push and/or pull factors, creating pull factors, influencing the evaluation of the current situation, reducing transaction costs of relocating and influencing the evaluation of the new situation. Instruments that influence the triggering mechanism, e.g. push factors and pull factors or awareness of these factors, have priority over instruments that influence the evaluation mechanism, e.g. evaluation of the current situation, transaction costs of relocating, and evaluation of a new situation.

The exact influence of the instruments differs between individuals, due to their characteristics and the context of the municipality. As has become clear personal characteristics influence all different elements with regards to the willingness to move, and therefore also concerning the instruments that influence this willingness to move. Instruments should be adjusted based on these characteristics. For example, a suitable dwelling is something different for those aged between 55 and 65 than for those aged between 65 and 75.

To influence the willingness to move of owner-occupiers aged between 55 and 75 it is thus important to know their characteristics. These characteristics include personal characteristics, e.g. age and educational level, but also contextual factors related to the dwelling and the neighbourhood. As these characteristics are known, it becomes clear which aspect of the willingness to move has the most potential to increase the willingness to move and which instruments can be applied.

#### Recommendations

Based on lacunae found during the research and the final results of this study multiple recommendations are made. Different cases can be studied to gain more insight into the influence of the context of place. Also, a quantitative study can be conducted to gain more insight into the influence of personal characteristics. Additionally, more research can be done at the neighbourhood level as there is a difference between the perspectives of the experts and the target group. It is currently unclear how the location influences the suitability of a dwelling. Another element that can be researched is what elements are influenced by changed expectations to increase satisfaction. A final aspect that can be researched is the time needed for the target group to get used to the idea of relocating and how this influences their willingness to move. Instruments that are focussed on problems mentioned by respondents were not recognized as solutions. It is expected that this has to do with the time needed to get used to an idea.

Recommendations are also made for practice. First of all, the municipality of Rotterdam should not focus on one solution for solving its problems. Developing general instruments will not do justice to the different characteristics of residents. Secondly, the municipality should use existing interventions for tenants to increase the willingness to move of owner-occupiers. Several instruments are already used for tenants, these instruments, as the senior real estate agent, can also be used for owner-occupiers. Thirdly, the municipality of Rotterdam should try to motive and inspire other stakeholders. Not all instruments can

directly be implemented by the municipality itself. Additionally, this also increases awareness of the target group. A final recommendation is to focus on younger residents, as they experience more trigger events that should be utilized.

#### Management samenvatting

De Nederlandse bevolking vergrijst. De impact van de woonsituatie van ouderen op de samenleving neemt dan ook toe. De huidige woonsituatie van ouderen kan ongeschikt zijn wat betreft het ruimtegebruik en het welzijn van de bewoners. Vooral de woonsituatie van eigenaar-bewoners tussen de 55 en 75 jaar is ongeschikt. Verhuizing kan de woonsituatie van deze ouderen verbeteren. Daarnaast kan verhuizing ook de duurzaamheidsinvesteringen en verhuiskansen van andere doelgroepen vergroten. Woonmobiliteit van eigenaarbewoners tussen de 55 en 75 jaar heeft dus meerdere voordelen. Deze doelgroep verhuisd echter relatief weinig. Volgens het door Wiseman (1980) ontwikkelde push en pull framework is woonmobiliteit onder andere afhankelijk van de bereidheid om te verhuizen. In Nederland is deze verhuisbereidheid laag voor oudere volwassenen, wat een van de redenen is voor hun lage woonmobiliteit. Momenteel zijn er echter geen goed ontwikkelde instrumenten om de verhuisbereidheid van eigenaar-bewoners in de leeftijd van 55 tot 75 jaar te verhogen. Er is ook niet veel onderzoek gedaan naar mogelijke interventies met betrekking tot de verhuisbereidheid van deze doelgroep. Deze studie onderzoekt hoe instrumenten de verhuisbereidheid van eigenaar-bewoners tussen 55 en 75 jaar kunnen verhogen. De focus van dit onderzoek zal liggen op het gemeentelijk niveau, aangezien de meeste verhuizingen binnen gemeenten plaatsvinden en de meeste instrumenten op het gebied van huisvesting op gemeentelijk niveau kunnen worden geïmplementeerd. De centrale onderzoeksvraag van dit onderzoek is: Hoe kan de verhuisbereidheid van eigenaar-bewoners tussen de 55 en 75 jaar worden vergroot door instrumenten op het gemeentelijk niveau?

#### Methode

Om de onderzoeksvraag te beantwoorden is een kwalitatief onderzoek uitgevoerd. Dit kwalitatieve onderzoek bestaat uit twee delen: een literatuuronderzoek en een case study. De geselecteerde casus is de gemeente Rotterdam, één van de vier grote steden in Nederland. Het literatuuronderzoek is uitgevoerd om meer inzicht te krijgen in de basiselementen van verhuisbereidheid en fungeert tevens als basis voor de casestudy. De casestudy bestaat uit drie onderdelen: een data-analyse, interviews met experts, en interviews met ouderen. De data-analyse geeft meer inzicht in de context van de gemeente Rotterdam. De interviews met de experts zijn uitgevoerd om te achterhalen welke instrumenten van invloed zijn op deze mechanismen van de verhuisbereidheid. De interviews met de doelgroep zijn gehouden om eerdere bevindingen te valideren.

#### Verhuisbereidheid

De verhuisbereidheid is onderzocht aan de hand van het literatuuronderzoek en de interviews met de doelgroep. De bereidheid om te verhuizen bestaat uit twee elementen: een triggering mechanisme en een evaluatie mechanisme. Door push- of pullfactoren zorgt het triggeringmechanisme ervoor dat mensen gaan nadenken over een mogelijke verhuizing. Er zijn tweeënnegentig verschillende push- en pullfactoren. Deze factoren zijn onderverdeeld in negen groepen, waarvan er vijf push-gerelateerd zijn en vier pull-gerelateerd. De groepen met push-factoren zijn woning, buurt, gezondheid, financiën en sociale relaties. De groepen met pull-factoren zijn woning, buurt, levensstijl en sociale relaties. Op basis van de literatuur en de interviews met de doelgroep is duidelijk geworden dat deze factoren in verschillende mate van belang zijn. Factoren die te maken hebben met de leefstijl en de woning zijn belangrijker dan factoren die te maken hebben met financiën of sociale relaties.

Nadat het triggermechanisme mensen aan het denken zet over een mogelijke verhuizing, bepaalt het evaluatiemechanisme of zo'n verhuizing ook daadwerkelijk de voorkeur heeft. Het evaluatiemechanisme bestaat uit vier onderdelen: elementen van de huidige situatie (inclusief mogelijke push-factor), elementen van de nieuwe situatie (inclusief mogelijke pull-factor), de transactiekosten van een verhuizing en persoonlijke kenmerken. Persoonlijke kenmerken bepalen de verhuisbereidheid van bewoners door gewicht toe te kennen aan de geëvalueerde elementen. Er zijn 22 persoonlijke kenmerken ontdekt die zijn geclusterd in 7 groepen: leeftijd, nationaliteit, burgerlijke staat, relatie met de woning, inkomen, opleidingsniveau en sociale relaties. Elk van deze groepen heeft een specifieke relatie met verhuisbereidheid. Bewoners met een jongere leeftijd, Nederlandse nationaliteit, alleenstaand, met een kortere woonduur, hoger inkomen en slechte sociale relaties zijn eerder bereid te verhuizen dan hun tegenpolen.

#### Gemeentelijke context

De context van de gemeente met betrekking tot de verhuisbereidheid is onderzocht door middel van een data-analyse. De context bestaat ui vier verschillende elementen: de persoonlijke kenmerken van de inwoners van een gemeente, de kenmerken van de woningvoorraad, buurtkenmerken en de beleidscontext. Met uitzondering van de beleidscontext zijn deze elementen geanalyseerd en vergeleken met het landelijk gemiddelde en de andere drie grote steden: Amsterdam, Den Haag, Utrecht. De vier grote steden verschillen aanzienlijk van de andere gemeenten in Nederland. Zo is het aantal eigenaarbewoners in deze gemeenten aanzienlijk lager. Ook zijn de woningen kleiner en staan er relatief meer oudere gebouwen. Bewoners in deze gemeenten ervaren hun buurt als veel onveiliger dan de gemiddelde Nederlander. De vier grote steden verschillen ook van elkaar. Zo ervaren inwoners van de gemeente Rotterdam hun buurt beduidend slechter dan inwoners van de andere drie grote steden. Een ander voorbeeld is de gemiddelde waarde van een woning, die in de gemeente Rotterdam beduidend lager ligt. Ook de persoonlijke kenmerken van inwoners van de gemeente Rotterdam verschillen van die van inwoners van Amsterdam, Den Haag of Utrecht. De context van de gemeente is dus van invloed op zowel het triggeringmechanisme, vanwege verschillende push- en pullfactoren, als op het evaluatiemechanisme, vanwege verschillende persoonskenmerken. Naast deze kenmerken wordt de verhuisbereidheid van bewoners ook bepaald door het beleid van de gemeente en andere belanghebbenden die binnen de gemeente actief zijn. Deze invloed kan direct of indirect zijn. Directe interventies zijn instrumenten die gericht zijn op de inwoners, bijvoorbeeld de seniorenmakelaar. Indirecte interventies hebben te maken met wet- en regelgeving die van invloed is op de binnen de gemeente opererende stakeholders.

#### <u>Instrumenten</u>

Instrumenten zijn ontwikkeld op basis van de resultaten van het literatuuronderzoek, de data-analyse, de interviews met de deskundigen en de interviews met de doelgroep. Voor de gemeente Rotterdam zijn zes geschikte type instrumenten ontdekt. Deze instrumenten zijn: geschikte woning, financiële regeling, voorrangsregels, proceshulp, bewustwording van huidige situatie, bewustwording van nieuwe situatie. Bij passende woningen gaat het om het bouwen van woningen die interessant zijn voor de doelgroep vanwege de fysieke kenmerken van de woning, maar ook vanwege de ligging, mogelijkheden op het gebied van zorg en sociale interactie. Het instrument van de financiële regeling schept mogelijkheden en vermindert drempels bij de financiering van een woning, waardoor de transactiekosten van een verhuizing worden verlaagd. Voorrangsregels zijn ook bedoeld om de transactiekosten van een verhuizing te verlagen. De voorrangsregels vergroten de toegankelijkheid voor de doelgroep. Terwijl de instrumenten financiële regeling en voorrangsregels gericht zijn op bepaalde aspecten van het proces, bijvoorbeeld financiering en toegankelijkheid, bestrijkt het instrument proceshulp meerdere elementen van het herhuisvestingsproces. Bijvoorbeeld

door het creëren van een luisterend oor, maar ook door het geven van juridische ondersteuning etc. De bedoeling van het instrument 'bewustwording van de huidige situatie' is om invloed uit te oefenen op hoe ouderen hun huidige situatie beoordelen. Hierdoor zal de tevredenheid met de huidige woning afnemen, waardoor de bereidheid om te verhuizen toeneemt. Het instrument 'bewustwording van de nieuwe situatie' is bedoeld om de evaluatie van de nieuwe situatie te beïnvloeden. Door een gevoel bij een nieuwe situatie te creëren, zijn bewoners eerder geneigd te verhuizen.

#### Conclusie

De hoofdvraag van dit onderzoek luidde: Hoe kan de verhuisbereidheid van eigenaarbewoners tussen de 55 en 75 jaar worden vergroot met instrumenten op het gemeentelijk niveau? Instrumenten kunnen de verhuisbereidheid beïnvloeden door bewoners bewust te maken van push- en/of pullfactoren, pullfactoren te creëren, de evaluatie van de huidige situatie te beïnvloeden, de transactiekosten van verhuizen te verlagen en door de evaluatie van de nieuwe situatie te beïnvloeden. Instrumenten die het triggeringsmechanisme beïnvloeden, bijvoorbeeld door het creëren van push- en pull-factoren of door het bewustzijn te beïnvloeden van deze factoren, hebben voorrang op instrumenten die het evaluatiemechanisme beïnvloeden, bijvoorbeeld evaluatie van de huidige situatie, transactiekosten van verhuizen, en evaluatie van een nieuwe situatie.

De precieze invloed van de instrumenten verschilt van individu tot individu, als gevolg van hun kenmerken en de context van de gemeente. Zoals duidelijk is geworden hebben persoonskenmerken invloed op alle verschillende elementen met betrekking tot de verhuisbereidheid, en dus ook met betrekking tot de effectiviteit van instrumenten die deze verhuisbereidheid beïnvloeden. Instrumenten moeten worden aangepast op basis van deze kenmerken.

Om de verhuisbereidheid van eigenaar-bewoners tussen 55 en 75 jaar te beïnvloeden is het dus van belang hun kenmerken te kennen. Deze kenmerken omvatten persoonlijke kenmerken, bijvoorbeeld leeftijd en opleidingsniveau, maar ook contextuele factoren zoals de woning en de buurt. Als deze kenmerken bekend zijn, wordt duidelijk welk aspect van de verhuisbereidheid het meeste potentieel heeft om de verhuisbereidheid te vergroten en kunnen instrumenten worden toegepast.

#### <u>Aanbevelingen</u>

Op basis van lacunes die tijdens het onderzoek zijn gevonden en de eindresultaten van deze studie worden meerdere aanbevelingen gedaan voor verder onderzoek. Verschillende cases kunnen worden bestudeerd om meer inzicht te krijgen in de invloed van de context van de plaats. Ook kan een kwantitatief onderzoek worden uitgevoerd om meer inzicht te krijgen in de invloed van persoonskenmerken. Daarnaast kan er meer onderzoek gedaan worden naar het buurtniveau, aangezien er een verschil is tussen de perspectieven van de experts en de doelgroep. Het is op dit moment onduidelijk hoe de locatie van invloed is op de geschiktheid van een woning. Een ander element wat onderzocht kan worden is welke elementen beïnvloed worden door veranderde verwachtingen om de tevredenheid te verhogen. Een laatste aspect dat kan worden onderzocht is de tijd die de doelgroep nodig heeft om te wennen aan het idee van verhuizen en hoe dit hun verhuisbereidheid beïnvloedt. Instrumenten die gericht zijn op problemen die door de respondenten worden genoemd, werden niet altijd herkend als oplossingen. Verwacht is dat dit te maken heeft met de tijd die nodig is om aan een idee te wennen.

Er zijn ook aanbevelingen gedaan voor de praktijk. Allereerst zou de gemeente Rotterdam zich niet moeten richten op één generieke oplossing voor het oplossen van haar problemen. Het ontwikkelen van algemene instrumenten zal geen recht doen aan de verschillende kenmerken van haar bewoners. Ten tweede zou de gemeente gebruik moeten maken van bestaande interventies voor huurders om de verhuisbereidheid van eigenaar-bewoners te vergroten. Voor huurders worden al verschillende instrumenten ingezet, deze instrumenten, zoals bijvoorbeeld de seniorenmakelaar, kunnen ook voor eigenaar-bewoners worden ingezet. Ten derde moet de gemeente Rotterdam proberen andere belanghebbenden te motiveren en te inspireren. Niet alle instrumenten kunnen direct door de gemeente zelf worden ingezet. Bovendien vergroot dit ook de urgentie van de doelgroep. Een laatste aanbeveling is om te focussen op jongere bewoners, omdat zij meer trigger events meemaken die benut kunnen worden.

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# CHAPTER 1 introduction

#### 1. Introduction

The global population is ageing, and so is the Dutch population. In the Netherlands, the number of adults aged above 65 increased from 2,15 million in 2000 to 3,39 in 2020. This number is expected to increase to 4,86 million in 2040. The 'grey pressure', which is the number of older adults relative to the working population age¹, increased from 21,9 in 2000 to 33,1 in 2020 and is also expected to continue to increase in the coming years to 48,1 in 2040 (CBS, 2019a; CBS Statline, 2020). The Dutch government implemented multiple policies to keep this grey pressure manageable. One of these policies is the raise of the retirement age (Rijksoverheid, 2012). Another policy is the 'ageing in place' program, which is intended to reduce the costs of institutionalised care settings while simultaneously increasing the quality of life of older adults (Sixsmith & Sixsmith, 2008). This policy is, however, being discussed as it gives the elderly the idea that they have to age in their current home, while their current living environment may not be the most suitable place to grow older (van Halder et al., 2020).

#### The housing situation of the elderly

There are multiple aspects of the current housing situation of the elderly which makes them less appropriate. One of these aspects concerns the well-being of the elderly. The tendency of older adults to stay put in their homes can harm their wellbeing (Hillcoat-Nallétamby & Ogg, 2014; Sixsmith & Sixsmith, 2008; Smetcoren, De Donder, Dury, & De Witte, 2017). Means (2007) argues that the vulnerability of many of the elderly is not related to their personal characteristics, but more to their inappropriate housing situations. According to Lord, Menz, and Sherrington (2006), it is a combination of both the dwelling and the personal characteristics of an older adult that creates vulnerability. The dwelling is a crucial area to show the increasing incompetence and vulnerability of the elderly when they cannot fulfil taken-for-granted tasks anymore, like climbing the stairs, opening a window or repainting a wall (Golant, 2011). The living arrangement of older adults does not only affect the physical health of the elderly, but it also affects their emotional well-being (Pope & Kang, 2010). The earlier mentioned loss of control can lead to stress and ill-health (Danermark & Ekstrom, 1990). Daalhuizen, van Dam, de Groot, Schilder, and van der Staak (2019) discus the inappropriateness of the house as most houses can be easily adapted. Daalhuizen et al. (2019) argue that its mostly the neighbourhood that will have an impact on the wellbeing of the elderly, as around 70% of the older adults live in an unsuitable neighbourhood: which means that primary functions as supermarkets,

general practitioners etcetera are at least 500m away. The inappropriateness of the neighbourhood is also mentioned by Sixsmith and Sixsmith (2008) who argue that due to the increase of cars, essential shops and services are located away from the neighbourhood. Due to the increase of cars, the average citizen became more mobile, which reduced the necessity to have multiple (smaller) shops. Therefore, shops moved to cheaper locations away from the neighbourhood. There is, however, a paradox as the unsuitable

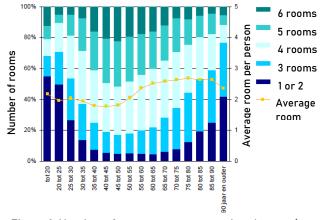


Figure 1. Number of rooms per person related to age(van lersel, Leidelmeijer, & Buys, 2009).

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<sup>&</sup>lt;sup>1</sup> Persons aged 20 to 65

neighbourhoods contain relatively more appropriate houses, while the more suitable neighbourhoods contain relatively more houses not suited for the elderly (Daalhuizen et al., 2019). Leidelmeijer, van Iersel, and Leerling (2017) also mention this paradox, stating that the big cities have inappropriate houses while the rural areas have inappropriate neighbourhoods.

Another aspect of the housing situation of the elderly which makes it less appropriate is the inefficient use of space. Research by van lersel et al. (2009) finds that the average number of rooms per person increases significantly from the age of 50, from 1.8 to around 2.6, as can be seen in Figure 1. From the age of 75, the average room per person slightly declines. This means that older adults aged between 50 and 75 occupy relatively more space per person, than other residents. Based on the median size of living area per household size, Grutzen and Hagen (2020) defined if someone lived too big, appropriate or too small. The results of their research can be found in Figure 2, as this figure shows especially residents aged between 55 and 80 are living very spaciously. Better use of the existing space can lead to a reduction in the average cost of living, more sustainable housing stock, more space for nature and recreation, and it will reduce the housing shortage (Springco, 2020).

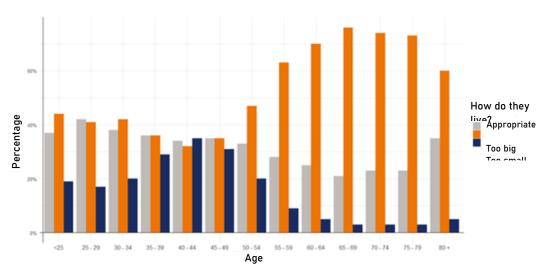


Figure 2. Space occupation for a person based on age (Grutzen & Hagen, 2020).

#### Opportunities of relocation

When the current housing situation of the elderly is inappropriate, relocation can become a suitable option. The effects of relocation differ greatly between individuals, which makes it difficult to draw general conclusions (Danermark & Ekstrom, 1990). Multiple researchers, however, mention possible positive effects of relocation for older adults. Hillcoat-Nallétamby and Sardani (2019) argue that the movement to a new dwelling can potentially improve the well-being of older adults. Research by Springco (2018) showed that when elderly relocate, they move to a dwelling which better suits their requirements.

Relocation has not only the potential to improve the well-being of older adults it can also reduce the inefficient use of space. Older adults acknowledge the problems of a house that is too big, therefore most of them prefer to relocate to a house that has fewer square meters than their current residence (van Iersel et al., 2009). They not only prefer a smaller house,

but most of them also actually move to a smaller dwelling (Gielen, Herbers, & Hitzert, 2018). Residential mobility of the elderly thus ensures more efficient use of space.

The benefits of the relocation do not only concern older adults themselves, but relocation can also benefit other target groups. The Dutch housing market is a dynamic housing system, which means that residents follow certain housing paths, thereby moving from one house to another (van der Heijden, Dol, & Oxley, 2011). Relocation of one household gives therefore possibilities for other households (Renes & Jokövi, 2008). General theories on such housing paths or housing careers are all focused on an upward movement in housing and neighbourhood quality at certain times in life. Clapham (2002) discusses those theories as they assume simple and universal household attitudes and motivations. However, he also argues that there are motorways, housing paths that are taken by many people. In the Netherlands, the general housing path can be roughly described as follows2: starters prefer a rental apartment when they get older and their household composition changes they move to single-family owner-occupied houses, after reaching the retirement age residents move to rental apartments. In the Netherlands, an increasing number of elderly, from 49% in 2012 to 55% in 2018, live in owner-occupied single-family houses (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2018a). Older adults thus stay in their owner-occupied singlefamily house, thereby reducing the opportunities of other target groups. Research by Springco (2018) argues that increased residential mobility of the elderly will increase the supply of the much-needed single-family houses, as most older adults move towards apartments.

Additionally, an increase in residential mobility of older adults will have a positive influence on sustainability investments. Especially relocation of elderly owner-occupiers can have a positive effect. First of all, because extensive investments regarding energy reduction, circularity, etc. are mostly done shortly after a house is sold (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2018b) Another reason is that if elderly stay longer in their current houses, have to invest more to keep their home in accordance with their needs, which will reduce other investments (Schilder, Daalhuizen, & de Groot, 2018).

In conclusion, relocation of older adults can have multiple benefits: increased wellbeing of older adults, reduced inefficient use of space, more opportunities for relocation of other target groups, and increased sustainability investments.

#### Residential mobility

Relocation of the elderly can thus have multiple benefits, however, residential mobility of Dutch elderly is low. The residential mobility of residents aged above 65 is approximately 11% of the total relocations in the Netherlands, while they amount to 26% of the total households in the Netherlands (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2018a). As can be seen in Figure 1, hardly 5% of the residents between the age of 50 and 80 moves to a new location.

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<sup>&</sup>lt;sup>2</sup> Based on the report 'Ruimte voor wonen. De resultaten van het WoonOnderzoek Nederland 2018' by (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2018a)

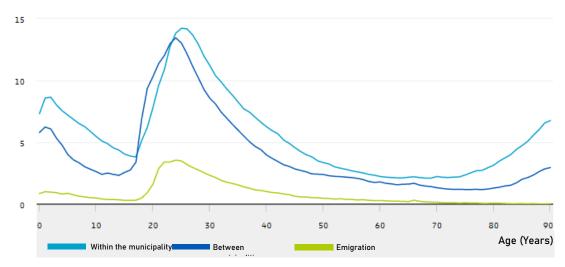


Figure 3. Residential mobility in the Netherlands as a percentage of the average population (Kooiman, 2020).

There are three main theoretical frameworks regarding the residential mobility of older adults; person-environment, push-pull, and developmental (Pope & Kang, 2010). The person-environment framework is developed by Lawton and Namehow (1973). In this framework characteristics of the personal environment determine actual residential mobility. Regarding the elderly, these characteristics are for example the stairs which they cannot climb anymore or the rooms which they are not able to clean.

The push and pull framework is based on the theoretical model of elderly migration process by Wiseman (1980), which can be seen in Figure 4. In this model, migration starts with a triggering mechanism which is comprised of several push and pull factors. These push and pull factors will be evaluated against the characteristics of the resident and their interpretation of exogeneous factors, like housing market conditions and regulations. Based on this evaluation residents determine if they want to move or stay put. If they are willing to move a migration process starts. The outcome of this process is again dependent on the characteristics of the household and the exogeneous factors. A former real estate agent has for example more knowledge about the housing market than a former factory employee. Additionally, problems in the housing market may reduce appropriate supply, which makes it difficult for households to realize their desire to move. In the push and pull framework residential mobility is thus dependent on some push and pull factors and several contextual factors, like the characteristics of the resident, housing market conditions, etc.

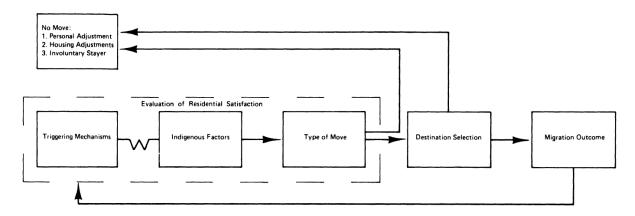


Figure 4. Theoretical Model of Elderly Migration Process (Wiseman, 1980).

The developmental framework regarding residential mobility is based on the assumption that residents move after facing certain events. Clark and Dieleman (1996) argue that these events are changes in the household structure and changes in the occupational career. The change in household structure is also mentioned by van Iersel et al. (2009), however, they replace job/occupational career with a change in financial situation.

Each of the three frameworks has its advantages and disadvantages. In this research the push and pull framework will be used as the theoretical framework regarding elderly residential mobility. The person-environment framework focuses only on the environment, while the developmental framework is dependent on certain events. The push and pull framework is more inclusive as it can take both the effects of the environment and that of a specific event into account.

#### Willingness to move

Willingness to move is in the push and pull framework one of the main determinants for actual residential mobility of the elderly. Wiseman (1980) formulates willingness to move as follows: "The decision to move, then, can be viewed as a process of continuous or periodic reevaluation of residential satisfaction where the various push-and-pull factors of the triggering mechanisms are weighted in the balance of needs and desires, countervailed by perceived outcomes and influenced by facilitating and inhibiting factors (Wiseman, 1980)."

Willingness to move is according to Wiseman (1980) thus related to residential satisfaction. The relation between satisfaction and willingness to move is also mentioned by Speare (1974) who argues that residents have to be dissatisfied with their current residence to consider moving. The importance of satisfaction on residential mobility is criticized by Hillcoat-Nallétamby and Ogg (2014), who suggest using 'dislike' instead of 'satisfaction' in assessing residential decisions. However, this approach does not change the essence of the discovered pattern: push and pull factors are the cause of residential considerations regarding relocation.

The resulting willingness to move has a stronger influence on actual residential mobility of the elderly than that it has on actual residential mobility of other target groups. The percentage of elderly with an explicit desire to move who actually relocate within two years is around 47%, for older adults with a less explicit reason to move this number is around 18%, almost 30 percentage points lower (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2018b). On average this difference is a little more than 20%. Around 54% of the residents with an explicit desire to move succeed in finding a new house within two years, for those with a less explicit reason to move this number is around 31%. A possible reason for this distinction is that most elderly do not see good alternatives (Rli, 2020).

Willingness to move is thus an important factor concerning the residential mobility of older adults. However, the willingness to move of the Dutch elderly is low. In the Netherlands willingness to move reduces when age increases (de Groot, Manting, & Boschman, 2008). Research by Statistics Netherlands (CBS) showed that the number of people aged above 65 with an explicit desire to move is around 3%, while the number of elderly that not want to move is around 80% (Gielen et al., 2018). In comparison, the percentage of younger adults with an explicit desire to move is around 7%, while the number of younger adults that do not want to move is around 60%. The main reason for this is related to the earlier mentioned aspect of satisfaction. The elderly are on average more satisfied with their dwelling than younger adults (Dekker, de Vos, Musterd, & van Kempen, 2011). In the Netherlands more than 90% of the elderly are satisfied with their current house, therefore having no pressing reasons to move

(van lersel et al., 2009). Older adults are not only satisfied with their house, but they are also more satisfied with their neighbourhood than younger residents (Bolt & van Ham, 2009; Parkes, Kearns, & Atkinson, 2002). An important remark by all of this is that older adults are more inclined to change their goals and expectations to bring satisfaction back to its original level (Golant, 2011). This change of expectations brings satisfaction back to the original level, but at a lower level of utility. The elderly are therefore less inclined to move, resulting in low residential mobility of older adults.

#### Interventions regarding willingness to move

When the low willingness to move of older adults is causing multiple different problems, interventions are needed. Due to the aging of the Dutch population, the housing situation of the elderly is getting more and more attention. On the national level, the earlier mentioned aging in place program is implemented. Also on more local levels, special programs are developed concerning the housing situation of older adults. The municipality of Amsterdam has for example its 'Programmaplan Ouderenhuisvesting 2019-2022', while the municipality of Rotterdam has its 'Langer Thuis Akkoord'. However, in all these programs the willingness to move of older adults is hardly mentioned. When there are interventions mentioned concerning the willingness to move of older adults, they mostly relate to tenants instead of owner-occupiers. Private initiatives concerning the willingness to move are also mostly focused on tenants, not on owner-occupiers. Housing associations use, for example, priority rules and senior estate agents to enhance the willingness to move of older adults (Zeelenberg & van Kessel, 2014). There are almost no well-developed interventions regarding the willingness to move of owner-occupiers aged between 55 and 75.

#### 1.1 Research problem

As literature showed, the housing situation of older adults may not be appropriate, due to inefficient use of space and negative influences on wellbeing. Relocation of this target group can increase their wellbeing and the efficiency of space, but it can also increase sustainability investments and relocation opportunities of other target groups. However, actual residential mobility of older adults is low. Relocation of older adults depends inter alia on their willingness to move, but Dutch elderly are generally not willing to move. There are currently, however, almost no well-developed interventions concerning the willingness to move of older owner-occupiers. There is also no clear literature on how the willingness to move can be influenced.

#### Research aim

This study aims to examine how the willingness to move of older adults can be increased. This research is focused on owner-occupiers aged between 55 and 75. As has become clear from the literature relocation of owner-occupiers provides most benefits, while especially residents aged between 55 and 75 do not move. To fully capture the opportunities of relocation of this target group the focus will be on instruments that can be used or implemented in a certain context. As has become clear from the literature, willingness to move is not only dependent on personal characteristics but also on the local context. Instruments are also implemented in a specific context and on a specific level. The research will therefore be aimed towards the municipal level. The municipal level is chosen as most of the moves take place at this level. The distance people move decreases when people are getting older (Feijten & Visser, 2015; Oswald & Rowless, 2006). Between the age of 55 to 75 around 80% of the elderly relocate within a radius of 25 km, 70% of them do not even move further than 5 km away from their previous home (van lersel et al., 2009). A second reason for choosing the municipal level

concerns the implementation of instruments. Most public instruments and policies concerning elderly housing are implemented on a national or municipal level (van Bladel & Oudijk, 1990). However, due to the decentralisation policy of the Dutch government more and more instruments concerning housing are implemented on the municipal level (VNG, 2013).

#### Conceptual framework

The conceptual framework of this study can be seen in Figure 5. This research is set on the municipal level and is about households distinguished by age and housing status, i.e. owner-occupier or tenant. Residential mobility of these households influences sustainability investments, efficient use of space, the well-being of older adults, and the housing flow. Residential mobility is influenced by the households' willingness to move. 'Willingness to move' is a key concept of this study. Willingness to move is influenced by push and pull factors which are evaluated based on certain contextual factors. The first contextual element is the characteristics of the household itself. Other exogenous factors are related to the context of place. These are factors like the situation of the housing market and local regulations. The context of place does not only influence the evaluation mechanisms of the households but also the possible instruments. These instruments are another important concept of this thesis. The thesis is about the interaction between those two main concepts of 'willingness to move' and 'instruments'. The hypothesis is that the instruments affect the willingness to move through influencing the push and pull factors and/or the evaluation mechanisms of households.

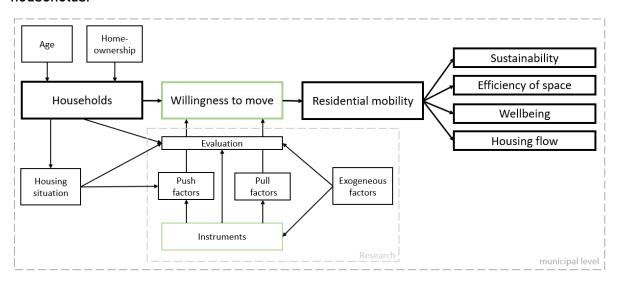


Figure 5. Conceptual model

#### Societal relevance

Willingness to move and thereby residential mobility of older adults do influence multiple currently relevant issues. Firstly, sustainability. The negative effects of recent climate changes caused by human behaviour, create the need for more sustainable developments (IPCC, 2014). This thesis can contribute to an increasingly sustainable world, as the investments in sustainability are expected to increase and space is used more efficiently when actual residential mobility of the elderly is increasing. Secondly, the pressure on the housing market. Especially in the more urbanized areas, the housing market is under high pressure (BPD, 2020). Increased residential mobility enhances the housing flow and gives opportunities for other target groups. Relocation of older adults can thus reduce the pressure. Thirdly, the wellbeing of the aging population. Increased residential mobility affects the wellbeing of the elderly, which is not only beneficial for the older adults themselves, but

also regarding government spending. By giving opportunities to increase the willingness to move this research can thus contribute to the solution of multiple societal problems.

#### Scientific relevance

This thesis aims to add knowledge to the already extensive literature on residential mobility and the willingness to move of older adults. There are multiple different theoretical frameworks regarding residential mobility, like the earlier mentioned frameworks of Clark and Dieleman (1996), Lawton and Namehow (1973), and Wiseman (1980). These frameworks are extensively used and developed in other studies. For example, the concept of willingness to move, which is based on the push and pull framework found by Wiseman (1980), is further developed by Smetcoren et al. (2017) in their study 'Refining the push and pull framework: identifying inequalities in residential relocation among older adults'. The impact of different push and pull factors is researched in various contexts by among others Sommers and Rowell (1992) Stimson and McCrea (2004) and Weeks, Keefe, and Macdonald (2012). Roy, Dubé, Després, Freitas, and Légaré (2018) analyzed 86 different studies to research the impact of all different factors on the housing decisions of frail older adults. Although a lot of research is already conducted on the concept of willingness to move, not much research has been done regarding how this willingness to move can be changed and what their relation is with possible (policy) instruments. This is also recognized by Hillcoat-Nallétamby and Sardani (2019) who mention that much less is known about potential interventions of older adults who voluntarily move to a new home. In their study Hillcoat-Nallétamby and Sardani (2019) research how instruments can help these older adults in moving to their new dwelling. This study goes a level deeper by researching how interventions, like the moving-on services proposed by Hillcoat-Nallétamby and Sardani (2019), can create the will to move. Additionally, this research aims to create more insights into the relation between the elements of willingness to move, i.e. push and pull factors and the evaluation mechanism, and different kind of instruments. In conclusion, this study contributes to the body of knowledge about willingness to move of older adults by providing more insight into potential interventions regarding the willingness to move of the elderly.

#### 1.2 Research questions

Based on the problem statement the main research question of this research is: How can the willingness to move of owner-occupiers aged between 55 and 75 be increased by instruments on a municipal level?

This main research question revolves around the three main concepts: 'Willingness to move', 'municipal level' and 'instruments'. These three main concepts are embedded in the context of the municipality. Therefore, the following sub-questions have been drawn up:

- 1. What influences the willingness to move of owner-occupiers aged 55-75?
  - a. What push and pull factors can be distinguished?
  - b. What affects the evaluation mechanism of older adults?
    - What characteristics of older adults influence their evaluation?
    - What exogenous factors influence the evaluation mechanisms of the elderly?
  - c. How do the push and pull factors interact with the evaluation mechanism?
- 2. What is the municipal context regarding willingness to move?
  - a. What elements of the municipal context determine the willingness to move of residents?
    - What are the specific characteristics of the inhabitants of the municipality?

- What are the specific characteristics of the housing stock of the municipality?
- What are the specific characteristics of the neighbourhoods of the municipality?
- How do the policies of different stakeholders influence the municipal context?
- b. What is the influence of the municipal context on the different push and pull factors?
- c. What is the influence of the municipal context on the evaluation mechanism of the target group?
- 3. What instruments can influence the willingness to move of elderly owner-occupiers aged 55-75?
  - a. What instruments can influence the push factors?
  - b. What instruments can influence the pull factors?
  - c. What instruments can influence the evaluation mechanism?
  - d. How does the context of the municipality influence the use and implementation of these instruments?

# CHAPTER 2 method

#### 2. Research method

To answer the research questions a qualitative study is conducted. The goal of this study is to find new linkages between the concepts of 'willingness to move' and 'instruments'. A qualitative approach is most suited to discover these new linkages. Additionally, the concepts of 'willingness to move' and 'instruments' are strongly influenced by contextual factors, like the personal characteristics of residents. To fully capture these characteristics, this thesis examines how individuals experience their environment. Due to these aspects, a qualitative approach is most suitable as they match the three features for qualitative research mentioned by Bryman (2016): theory is generated out of research, the social world is understood through an examination of the interpretation of that world by its participants, and social properties are outcomes of the interactions between individuals.

#### Methodological framework

The study consists of two parts: a literature review and a case study. The case study has three elements: data analysis, in-depth interviews with experts in the field of housing and, in-depth interviews with the target group of owner-occupiers aged between 55 and 75. The literature research together with the interviews with the target group answers the first sub-question. The literature review is also used as input for the data analysis, the interviews with the experts, and the interviews with the target group. The second research question is answered by analysis' of documents and data of the municipality of Rotterdam. These analyses are

conducted in response to the literature research. interviews with the experts and the interviews with the target group answer the third subguestion. The relation between the different elements and the research questions can be found in Figure 6. The literature research is the basis for the case study. This case study starts with a data established analysis, which familiarity with the context of the municipality. After the context of the municipality is discovered, the interviews with the experts are conducted. The interviews with the target group are based on the interviews with the experts, the data analysis, and the literature research.

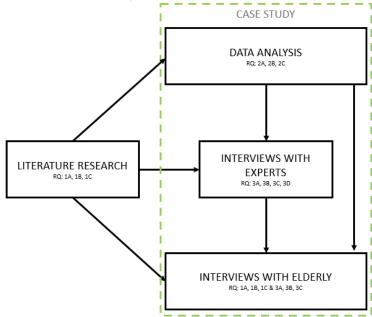


Figure 6. Methodological framework

#### Case study

Due to the importance of the context of place, part of the qualitative research is designed as a case study. In a case study research, a bounded case is intensively studied to understand a more general issue (Creswell, Hanson, Clark Plano, & Morales, 2007). Studying a case gives the possibility to cover contextual conditions (Yin, R. K., 2003, as cited in Creswell et al., 2007). This context is important in this study as both the evaluation mechanism of households and the instruments are dependent on the context of place. The context of place in this study is the

municipality, as most relocations take place at this level and most instruments concerning housing are implemented on the municipal level.

The municipality which is selected as a case is the municipality of Rotterdam. Rotterdam is one of the four big municipalities in the Netherlands. The city of Rotterdam is selected due to the cooperation between public and private parties regarding the housing situation of the elderly. On February 17, 2020, the 'Langer Thuis Akkoord' was signed, which is an agreement between 40 public and private parties to create enough suitable houses for the elderly of Rotterdam (Huisman, 2020). Several other municipalities also have such agreements, but these are mostly initiated and developed by the public parties only. Amsterdam has for example its 'Programmaplan Ouderenhuisvesting 2019–2022' which is developed by the city council (Amsterdam, 2019). In the other big Dutch cities, Utrecht and The Hague, there are no special agreements regarding the housing situation of the elderly.

The city of Rotterdam is thus one of the four big Dutch cities but distinguished from the other big cities due to the cooperation between public and private parties regarding the housing situation of the elderly. The municipality of Rotterdam is therefore an extreme case, as it is distinguished from other municipalities by both its size and the attention of both the public and private parties regarding the housing situation of the elderly. An extreme case is a case that is especially problematic or especially good in certain aspects (Flyvbjerg, 2006). Such cases can give more insights into the deeper causes behind a problem and its consequences. However, being an extreme case also causes that the results of the study cannot directly be implemented in other cases. Other municipalities have a different context that influences both the willingness to move and the instruments as we can see in Figure 5.

#### 2.1 Data collection

The literature research is the foundation of the case study. The literature review aims to provide insight into the push and pull factors and the evaluation mechanisms. The literature review answers the questions: 'What push and pull factors can be distinguished?', 'What affects the evaluation mechanism of older adults?' and 'How do the push and pull factors interact with the evaluation mechanism?'. Due to the social character of this thesis, the literature study is focused on scientific papers as well as government documents and reports. Examples of keywords that are used are 'elderly housing preferences', 'elderly residential movers', 'relocation', 'elderly', 'push factors', 'pull factors'. Besides scientific papers about these topics, government studies and surveys regarding the elderly are an important source as well. Especially reports and programs like the 'WoON' are valuable. The WoON is a national survey about all different elements of the housing situation of the Dutch citizens, including willingness to move. The results of this literature review are a basis for the data analysis, the interviews with the older adults, and the interviews with the experts.

#### Data analysis

The first part of the case study is data analysis. This gives more insight into the context of the municipality. Research questions that are answered by this form of data collection are: 'What elements of the municipal context determine the willingness to move of residents?', 'What is the influence of the municipal context on the different push and pull factors?', and 'What is

the influence of the municipal context on the evaluation mechanism of the target group?'. The data analysis is conducted in response to the literature study. Based on the concepts as established in the conceptual framework, data is collected with regards to the characteristics of the inhabitants, the housing market, and local policies. Data concerning these topics is collected from local data sources, like the OBI which is the Research and Business Intelligence department of the municipality of Rotterdam, and WoON2018, which is a national survey related to housing. The data collected by OBI is specifically focused on the municipality of Rotterdam, however, local data sources can be incomplete. Data of the WoON2018 is used in addition to the local data sources. This data might be less specific as it is uses housing regions instead of municipalities, as can be seen in Figure 7. The insights gained by the analysis of documents are used as input for both the interview sets.



Figure 7. Housing regions by ABF as used in the WoON2018 (Groenemijer & Gopal, 2019).

#### **Interviews experts**

The interviews with the experts are conducted to examine what instruments can influence the push and pull factors and/or the evaluation mechanism to increase the willingness to move of older adults. These interviews will answer the questions: 'What instruments can influence the push factors?', 'What instruments can influence the pull factors?', 'What instruments can influence the evaluation mechanism of older adults?', and 'How does the context of the municipality influence the use and implementation of these instruments?'. Six different experts are interviewed. Each of these experts has a distinct role regarding housing

provision and/or elderly, which can be seen in Table 1. Five of these experts are directly or indirectly part of the 'living longer at home' agreement, as in this agreement almost all relevant stakeholders regarding the housing situation of the elderly are united. The interviews with the experts are semi-structured and will be conducted based on a pre-established interview protocol, which can be found in Appendix C. All the interviews are audio-recorded and transcribed. The transcriptions of these interviews can be found in Appendix F.

Profession	
Municipal policymaker*	
Developer*	
Real estate agent	
Welfare worker*	
Care worker*	
Elderly organization*	

Table 1. Professions interviewed

#### Interviews target group

The interviews with the elderly are conducted to gain more insight into the relations between the different elements of willingness to move and the developed interventions. The interviews

answer the questions 'What influences the willingness to move of elderly owner-occupiers aged 55-75?' and 'What instruments can influence the willingness to move of elderly owneroccupiers aged 55-75?'. The number of elderly who are interviewed is 11. All of the interviewees are between 55 and 75 years old and living in Rotterdam. Four of them have an owner-occupied house and did not move recently. Seven of them are residents who recently moved from their owner-occupied house to a new dwelling. The distinction between the two groups is made to distinguish if there are significant differences in the mechanism behind the willingness to move of older adults who actually move and older adults who currently stay put. The interviews are done with two pre-established interview protocols, one for each group. The protocol for those who did move recently can be found in Appendix D, the protocol for those who did not move recently can be found in Appendix E. The main difference between the two protocols is that those who did not relocate recently are asked about their current willingness to move while those who moved are asked about their past willingness to move. The elderly are contacted using the professional network of the Langer Thuis Akkoord, the social network of the author, and the social networks of the respondents. Each of the interviews with the elderly takes around an hour and is audio recorded. The transcriptions of these interviews can be found in Appendix G.

#### 2.2 Data analysis

The transcriptions of both the interviews are analyzed and coded in Atlas.ti. The data of the interviews are analyzed using both an inductive and deductive approach. The process of this analysis is shown in Figure 8. First, the audio recordings are transcribed using the digital tool Trint. These transcriptions are read and edited to increase the accuracy of the transcriptions and to get familiar with the data. Additionally, the transcriptions are made anonymous, to ensure the privacy of the participants. After transcribing the data is coded. Coding is the process of clustering chunks of data into relevant themes (Creswell, 2014). As the interviews with the experts and the interviews with the elderly are semi-structured, some themes are known in advance. In addition to these predetermined codes, new codes came forth out of the analysis of the data. After the data is coded, relations are made between the different themes. Additionally, the results of the interviews are compared to each other based on the codes. The last step of the analysis is the interpretation of these themes and their relations.

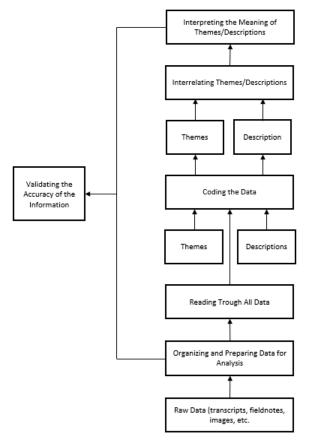


Figure 8. Analysis of qualitative research. Deductive and inductive approach (based on the analysis of qualitative research by Creswell (2014)

#### 2.3 Ethical considerations

In this research data is collected in various ways. Each of these forms of data collection has their ethical issues. To ensure ethical correctness, this study is conducted according to the

'Dutch code of conduct of scientific integrity' developed by (KNAW et al., 2018), and 'the FAIR guiding principles for scientific data management and stewardship' by (Wilkinson et al., 2016).

As a researcher, I have conducted this study in an honest, careful, transparent, independent, and responsible way. First of all, the study will be done in an honest matter. This means that no unfounded claims are made, no data is invented or falsified, and alternative opinions are taken seriously (KNAW et al., 2018). Secondly, I carefully used scientific methods in conducting this study. Thirdly, the research is transparent. Transparency means that it is clear to others what data have been relied on, how they have been obtained, what results they have achieved and by what route, and what the role of external stakeholders has been (KNAW et al., 2018). To ensure privacy, the participants of the interviews are anonymized, only generic characteristics like age or profession are published. Fourthly, the study is conducted independently: only scientific considerations are used in making choices and assessing data. This thesis is combined with an internship at the Municipality of Rotterdam. This gives an added depth to the thesis, but it can also cause unwanted interference. To ensure independence, choices are based on scientific literature and are done in consultation with and verified by mentors of the TU Delft, mentors of the Municipality of Rotterdam and people outside the project, like other students. Finally, I take full responsibility for all the consequences of this study.

The data which is collected in this research is Findable, Accessible, Interoperable, and Reusable. First of all, the data is described with rich metadata and registered in a searchable resource to make the data accessible. Secondly, the data is accessible. This means that data are retrievable using a standardized communications protocol that is open, free, and universally implementable (Wilkinson et al., 2016). To ensure the findability and accessibility of the data, the final document will be uploaded to the repository of the TU Delft. As mentioned before this can create problems related to privacy. Therefore, participants are anonymized in this study. Thirdly, the data is readable and, in accordance with the principles of honesty and transparency, should include references to other data. Finally, the data is reusable, which is done by an accurate description of the data itself and the method of how the data is obtained.

#### 2.4 Research structure

The research is structured in accordance with the methodological framework. Chapter 3 contains the literature review. In chapter 4 the context of the municipality is discovered. The results of the interviews with the experts are discussed in Chapter 5. Chapter 6 deals with the results of the interviews with the elderly. The conclusion can be found in chapter 7. Chapter 8 will contain the discussion.

# CHAPTER 3 Basic elements of willingness to move

#### 3. Basic elements of willingness to move

As has become clear from the push and pull framework, the willingness to move of residents is depending on two elements: the triggering mechanism and the evaluation mechanism. In this chapter, the triggering mechanism, the evaluation mechanism, and the relation between these two are analysed. An important remark which has to be made is that the generalizability of the used studies is sometimes limited due to contextual factors. Such factors are for example the location in which a study is conducted, type of persons studied, and the age of the study. In Table 2 the limitations of multiple different studies are categorized. Although generalizability is sometimes limited, the studies do give insight into possible push and pull factors, and possible elements of the evaluation mechanism.

Contextual factors	Studies					
Location	(Carlson, Junk, Fox, Rudzitis, & Cann, 1998; Crisp, Windsor, Anstey, &					
	Butterworth, 2013; Hansen & Gottschalk, 2006; Stimson & McCr					
	2004; Weeks et al., 2012)					
Type of person	(Pope & Kang, 2010; Smetcoren et al., 2017; Stimson & McCrea, 2004)					
Time of study	(Carlson et al., 1998; Sommers & Rowell, 1992)					

Table 2. Limitations of studies with regard to generalizability

#### 3.1 Triggering mechanism

The willingness to move of residents is triggered by push and pull factors. Push factors are disconnections between the needs of a person and its current residence, while pull factors are elements of a new situation which are preferred above the elements of the current situation. The distinction between these factors is not strict. According to multiple researchers there can be a symbiotic relationship between the different push and pull factors (Oswald, Schilling, Wahl, & Gäng, 2002; Smetcoren et al., 2017; Stimson & McCrea, 2004). For example a person can be pushed out of its current inappropriate residence due to health problems while at the same time he or she is being pulled towards a location with better services. There are multiple different interpretations of push and pull factors. According to Stimson and McCrea (2004) push factors trigger the willingness to move while pull factors influence the final destination of the resident. Pope and Kang (2010) made a difference between proactive and reactive factors. However, as mentioned before the separation between push and pull factors is not strict, there can be a symbiotic relationship between the factors. Another important remark is that willingness to move of residents is not influenced by only one single factor but by a mix of multiple different factors (Feijten & Visser, 2015; Stimson & McCrea, 2004).

There are lots of different push and pull factors. Roy et al. (2018) analyzed 86 different studies, including the ones of Crisp et al. (2013), Hansen and Gottschalk (2006), and Sommers and Rowell (1992), to examine which factors influence housing decisions of older adults. Their research found 71 significant different factors. However, not all of these factors can be assigned as a push or pull factor, as some of these factors are part of the evaluation mechanism. With the research of Roy et al. (2018) as basis, 92 different push and pull factors are identified. A list of all these different push and pull factors can be found in Appendix A. These factors have different levels of importance. Pull factors are more important than push factors (Carlson et al., 1998). Research by Smetcoren et al. (2017) showed that the pull factor of a more attractive environment is most influential with regards to relocation. The most important push factors are housing problems and health problems. Stimson and McCrea (2004) also mention 'health reasons or requirement of more assistance' as the most

important push factor, followed by 'the death of a spouse' and 'the garden at the previous house'. In their research among Danes aged between 52-77 Hansen and Gottschalk (2006) found that the most frequently mentioned push factor was the size of the dwelling, which is often experienced as too big. Other factors which were frequently mentioned are the presence of a garden or the presence of stairs and the costs of the current dwelling. The percentages about how much a factor is mentioned in different studies can be found in Appendix A. As most of the studies are conducted in other countries, with a specific target group or a long time ago, these different levels of importance cannot directly be generalized. These percentages can give an indication about the importance of the different factors.

To be able to work with the high numbers of different push and pull factors, most studies group the different factors. Stimson and McCrea (2004) created four groups that are in order of importance: change in lifestyle, maintenance, social isolation, and health and mobility. They also distinguished three different types of pull factors: 'built environment and affordability', 'location', and 'maintenance of existing lifestyle and familiarity'. Hagen and Neijmeijer (2020) created living profiles based on multiple different pull factors as availability of care, need for social contact, size of the dwelling, facilities, sustainability, etc. The living

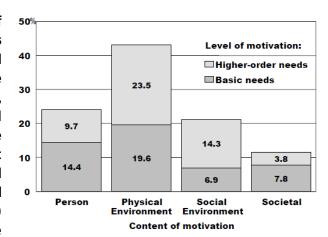


Figure 9. Relative frequency of relocation motives (Oswald & Rowless, 2006).

profiles are own place, private domain, basic, residential property, family house, city-apartment, community block, park-apartment, residential court, senior-apartment. In the province of Zuid-Holland the demand is the highest for the profiles 'basic' and 'family house'. Oswald and Rowless (2006) created four groups of motives for relocation: person, physical environment, social environment, and societal. They found that the physical environment is the most important motive for relocation, as can be seen in Figure 9. Most motives related to this group are also assigned as high-order needs, which means that they are experienced as more important compared to basic needs. Pope and Kang (2010) divided multiple different push and pull factors into the groups: social support, health, finance, and housing

environment. The factors related to health are reactive. factors related to the housing environment are proactive, and factors related to social support and finance can be proactive or reactive. They that health-related found factors are most frequently mentioned, followed by social support and house environment. Factors related finance are barely mentioned. These results are also confirmed for the Dutch

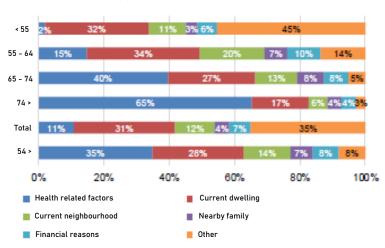


Figure 10. Factors determining possible relocations (ABF, 2021)

elderly. Research by ABF (2021) showed that only 8% of the Dutch residents aged above 55 relocate due to financial reasons, while 35% moves due to health-related factors, as can be seen in Figure 10. Earlier research by Feijten and Visser (2015) also confirmed that the importance of health-related factors increases by age. They also found that above the age of 45, factors related to the current dwelling are equally important as factors related to health.

All 92 discovered push and pull factors are clustered into nine different groups, five related to push factors and four related to pull factors. The groups of push factors are health, dwelling, neighbourhood, social relations and finance. The groups of pull factors are dwelling, neighbourhood, social relations and lifestyle. The different groups of push and pull factors are ranked in importance, as can be seen in Figure 11. As has become clear from the literature pull factors are on average more important than push factors (Carlson et al., 1998). Additionally, multiple studies mention the physical environment as one of the more important aspects with regards to the willingness to move (Hansen & Gottschalk, 2006; Oswald & Rowless, 2006; Smetcoren et al., 2017). Factors related to health are also mentioned as important (ABF, 2021; Crisp et al., 2013; Stimson & McCrea, 2004). Factors related to social relations and finance are mentioned as less important (ABF, 2021; Smetcoren et al., 2017; van lersel et al., 2009). The importance of the groups of different push and pull factors are also visible in the scores of the individual factors, which can be seen in Appendix A. For example, none of the factors related to social relations or finance is mentioned by more than 25% of the respondents in all of the different studies. While in several studies, factors related to lifestyle, health or dwelling are mentioned by more than 30% of the respondents as a reason to relocate.

Most important	Pull – lifestyle	Pull - dwelling	Push - dwelling	Push - Health	Pull - neighbourhood	Push – neighbourhood	Pull – social relations	Push - social relations	Push – Finance	Least important
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Figure 11. Importance of the different groups of push and pull factors

#### 3.2 Evaluation mechanism

Whether the earlier discovered push and pull factors create a willingness to move is dependent on the evaluation mechanism of the resident. The evaluation mechanism of a resident consists of four parts: the current situation, the expected new situation, the transaction costs of relation and personal characteristics.

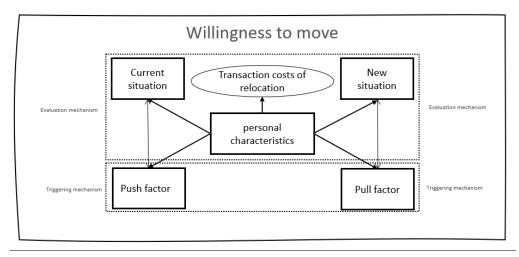


Figure 12. Willingness to move consist of an evaluation mechanism and a triggering mechanism

#### <u>Current situation and new situation</u>

In every evaluation, an existing situation is weighted against a new situation. Due to a push factor, the old situation may become unattractive, or due to a pull factor, a new situation becomes more attractive than the current situation. However, both the old and the new situation consist of more than one single push or pull factor. Crisp et al. (2013) mention for example the possible loss of independence, getting another doctor in a new situation and moving away from family and friends as discouraging factors with regards to relocation. The loss of proximity of friends and family is also mentioned by van Iersel et al. (2009) who, however, argue that feelings of attachment are far more impactful. Oswald and Rowless (2006) mention cost of living and climate as a possible element that can be part of the evaluation. Size and accessibility are other elements that can be compared between the old and the new situation (Hansen & Gottschalk, 2006). According to Merkens (2015), the potential increase of housing costs in the new situation can ensure that residents are reluctant to move. The type of dwelling can also become an important factor in the comparison between the old and new situation (Akkermans, Kloosterman, & Reep, 2020; Stimson & McCrea, 2004; Weeks et al., 2012). Oswald and Rowless (2006) mention the process of placemaking as an important aspect in the evaluation of the new situation. This process of placemaking "involves reconciling elements of previously established patterns of habitation of familiar spaces with the constraints and opportunities provided by the size, architecture, spatial configuration and social context of each new residence (Oswald & Rowless, 2006)". Developing a sense of belonging to a new place thus not only consists of elements of the current and new dwelling but also experiences of earlier residences.

#### Transaction costs

Not only the benefits and drawbacks of the current and the new situation are evaluated, but also the transaction costs of the process of relocation. Residents can see themselves as too old for relocation, or they find the process of relocating too expensive (van Iersel et al., 2009). Yawny and Slover (1973) mention entry procedures, business and legal affairs as influential components of the relocation process. These affairs can create a sense of helplessness and powerlessness for residents. According to research by Merkens (2015) around 64% of the people who relocated have been (a little) reluctant with regards to the relocation process. The most mentioned reason for this reluctance is packing the goods. People want to view the relocation process as something in which they can choose and have control (Oswald & Rowless, 2006). If they do not have such a view, the process of relocation can become an obstacle, reducing the willingness to move.

#### Personal characteristics

The personal characteristics of a resident influence the willingness to move of residents in three ways. First of all, they determine which push or pull factors can acts as a triggering mechanism, for example, a person without family cannot be pushed or pulled by the proximity of family. Secondly, the personal characteristics are giving weight to the current situation, with possible push factor, and to the expected new situation, with possible pull factor, and to the transaction costs of the relocation process. Thirdly, personal characteristics determine coping strategies, for example adaptation of the dwelling or change of goals and expectations.

Multiple personal characteristics shape the evaluation mechanism of older adults. Age is one of the most researched elements. Multiple different studies find a relation between age and the willingness to move (Akkermans et al., 2020; Feijten & Visser, 2015; Smetcoren et al., 2017). Another frequently researched element is self-reported health. The influence of self-reported health on the evaluation mechanism is however discussed. According to Akkermans

et al. (2020), Hansen and Gottschalk (2006) and Pope and Kang (2010) it does have an influence. However, Weeks et al. (2012) and Sommers and Rowell (1992) found no significant difference between good or bad self-reported health and the willingness to move. The influence of the income of a resident is another element that is discussed by researchers. Akkermans et al. (2020), Hagen and Neijmeijer (2020), Hansen and Gottschalk (2006) and Weeks et al. (2012) find that the willingness to move is influenced by the income of a resident. Pope and Kang (2010) and Sommers and Rowell (1992) did not find significant evidence for such a relation. Gender, relations with family and relations with friends are characteristics that in almost all studies are mentioned as significant with regards to the willingness to move. Besides all the non-physiological characteristics, Muzus (2017) mentioned the degree of proactivity as an additional physiological personal characteristic. Hagen and Neijmeijer (2020) used physiological and sociological characteristics as developed in the DISC model. They translated these elements into different personalities or certain lifestyles: direct, red; inspiring, yellow; stable, green; correct, blue. They also added four additional characteristics: creative, orange; friendly, lime; respectful, aqua; enterprising, purple. For example, a person with the blue lifestyle can be described as follows: "They are analytical, business-like, ambitious and focused on a social career. They have a higher than average attachment to norms and values and value it highly when people around them have a sense of style and good manners. They have a clear brand orientation, which they use to underline their social position" (Hagen & Neijmeijer, 2020). Another Dutch study by SmartAgent (2013), also used life styles to cluster residents. The problem with life styles, however, is that they overlap with traditional characteristics as education, income etc. Therefore, it is discussed if they have additional variant statement.

Similar to the push and pull factors, personal characteristics are divided into groups. Hansen and Gottschalk (2006) made a division between individual characteristics and household variables. Sommers and Rowell (1992) divided the group of individual characteristics into independent variables, health status, socioeconomic status, and use of support services. Hagen and Neijmeijer (2020) created household profiles based on income, education, lifestyle, and relationship status.

This research uses the household profiles of Hagen and Neijmeijer (2020) as the basis for the groups of personal characteristics, as these household profiles are related to actual households in the province of Zuid-Holland, the province in which the municipality of Rotterdam is located. As it is unsure if the group of different lifestyles has an additional variant statement it is removed. In addition to the four groups of Hagen and Neijmeijer (2020), four other groups of personal characteristics are added: age, health, relation with dwellings, other personal characteristics. The specific distribution of the personal characteristics in the different groups can be found in Appendix B.

#### 3.3 Evaluation of the factors

Studies about the relationship between the triggering mechanism and the evaluation mechanism can be divided into two different groups: studies in which the elements of the evaluation mechanism are related to specific push and pull factors, and studies in which the elements of the evaluation mechanism are related to the generic concept of triggering mechanisms, which consists of different push and pull factors. In this study, only one element of the evaluation mechanism is related to the general concept of willingness to move and the different push and pull factors. This element is 'personal characteristics' as these personal characteristics have an influence on the push and pull factors but also on the other elements which are part of the evaluation mechanism.

#### Relation with the generic concept of triggering mechanism

Sommers and Rowell (1992) found that homeowners and resident who lived for a longer period in one house either experience less push and/or pull factors or these factors have less of an influence on these residents. They also showed that health status does not influence the willingness to move. This is also confirmed by Weeks et al. (2012), who found that especially women, younger elderly, and households with a higher income are likely to move. Men are more likely to be married, thereby getting more support, which makes relocation more suitable. Households with a lower income are less likely to relocate as they have less affordable opportunities. Research among the Dutch elderly also showed that having a relatively high income increases the willingness to move (Akkermans et al., 2020). Residents who receive informal care do have a lower willingness to move than residents who do not get informal care. The willingness to move is also low for residents who have a relatively high amount of social contact with their neighbours. Besides these studies about the relation between individual elements and the generic concept of triggering mechanisms, some studies relate certain profiles to this concept. Hagen and Neijmeijer (2020) related their household profiles to the generic concept of triggering mechanism. They found that couples, with a high income, and a medium to high education level combined with the lifestyles blue/purple/aqua or yellow/lime/orange are on average less willing to move. Household profiles with lower income, and singles are on average more willing to move. Muzus (2017) clustered the elderly of the municipality of Rotterdam into six different persona's each with different characteristics and a different willingness to move. Persona's which are related to the yellow (good social relations and extravert) and green (good social relations and introvert) are more willing to move. A list of the relation between the different elements of the evaluation mechanism with the general concept of triggering mechanisms can be found in Table 2. In conclusion, residents with a younger age are more willing to move than older residents, just as people with a higher income those who are single, those with poor health, tenants, those who live for a shorter period in their dwelling, women, and residents with bad social relationships.

Ī	Element	Age	Incom	Education	Relation	health	Relation dwelling	Other	Social
			е		status			personal	relations
	Higher willingness	Younger	Higher	-	Single	Poor	Tenant, shorter period	Women	Bad

Table 3. Personal characteristics and how they relate to willingness to move

#### Relations with specific push and pull factors

In their study among Australians who relocated to a retirement village Stimson and McCrea (2004) related the personal characteristics to several groups of push and pull factors. They found that push factors related to change in lifestyle and related to health have more influence on men than on women. Push factors related to social isolation have more influence on women. In comparison to couples, singles are more influenced by push factors related to maintenance and social isolation. Pull factors related to maintenance and affordability have more of an influence on couples and males, while pull factors related to the maintenance of existing lifestyle have more of an influence on singles. Research by Smetcoren et al. (2017) about the relation between push and pull factors and personal characteristics showed similar results. Push factors related to social isolation have more influence on singles, women, residents with medium to low income and residents with poor health. With the replacement of men for women, these residents are also more influenced by push factors related to housing problems. Tenants, with poor health and a low to medium income, are also more

influenced by push factors related to financial problems, health and mobility, and unsafe feelings. Pull factors related to the availability of services are more impactful for residents with older age, women and residents with poor health. Pull factors related to an attractive environment are more influential for men, residents with a higher income, homeowners and couples. Couples are also more influenced by pull factors related to being not dependent on children. This is also applicable to women, residents with a lower income, higher age and those who are social tenants. Based on their research Smetcoren et al. (2017) argued that residents with a low income and tenants move due to problems, they are therefore more influenced by push factors than pull factors. Residents with a higher income and homeowners move due to opportunities and are therefore more influenced by pull factors. This is also mentioned by Pope and Kang (2010) who argue that women, residents with older age, lower educational level, and poor health move due to reactive reasons or push factors as health problems. Men, residents with higher age, higher educational level and better health move due to proactive reasons or pull factors as an attractive environment. Crisp et al. (2013) found that residents with a younger age are pulled by feelings of independence, while older elderly are pulled by safety. Research among Dutch residents showed that younger people are pushed by factors related to relationship status and work, older people are pushed by factors related to health, house, and neighbourhood (Feijten & Visser, 2015). The study also related nationality and geographical location to several push and pull factors. In contradiction to residents with a middle-east background, residents with a European background are more likely to move as a result of health and work-related factors. Residents living in the province of Zuid-Holland are relatively more influenced by factors related to their house and their neighbourhood, while residents living in Groningen are relatively more influenced by factors related to their health and their relationship status. Carlson et al. (1998) also related different personal characteristics, including the location of earlier residences, to several push and push factors. They found that age and education are more influential with regards to the different factors than gender or income level. Besides these individual elements, there are also studies which relate certain profiles to the different push and pull factors. Hagen and Neijmeijer (2020) related their household profiles to their living profiles. They found that the households groups with the lowest willingness to move are attracted to the living profiles: own place, city-apartment, community block, and park-apartment. These profiles have in common that provision of living with care and the size of the dwelling are not important.

The relation between personal characteristics and different groups of push and pull factors can be found in Figure 13. Personal characteristics for which no relation between specific push and pull factors were found, for example, social relations, have been left out of the figure. The rows of this table consist of different push and pull factors while the columns of the table consist of personal characteristics. These personal characteristics are divided into three columns: a division within the personal characteristic and a column if no relation is

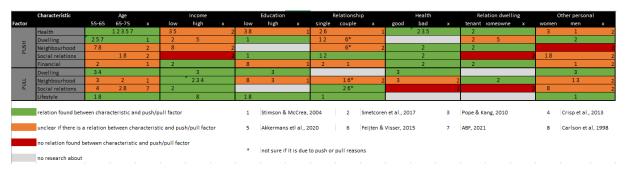


Figure 13. Relation between personal characteristics and different groups of push and pull factors.

found between the factor and the characteristic. The cells contain numbers relating to the sources confirming or denying the relationship. For example, in the column of age, it can be seen that a relation was found between age and the push factor health, the push factor dwelling, the pull factor dwelling and the pull factor lifestyle. Five different studies showed that older people (65-75) are more inclined to move due to push factors related to health than younger residents (55-65). It is unclear if there is a relation between age and the push factor neighbourhood, the push factor social relations, the push factor financial, the pull factor neighbourhood and the pull factor social relations. Therefore, the importance of these factors does not change with the increase of age.

### 3.4 First development of instruments

Based on the literature review first suggestions for instruments can be made. With the exception of personal characteristics, instruments can target each of the different elements of the willingness to move, as can be seen in Figure 14.

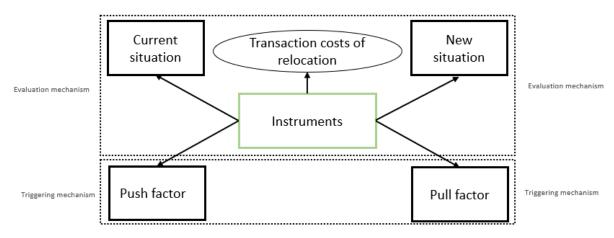


Figure 14. Influence of instruments on different elements of the willingness to move.

First, instruments can be related to push factors. As has become clear push factors work as a triggering mechanism with regards to the willingness to move. However, it differs for each person which push factors they experience. Instruments can try to add or enhance push factors, to create a triggering mechanism for residents. Instruments can be developed for each of the earlier discovered groups of push factors. With regards to push factors related to health, a care organisation can for example deny care for residents older than 55 and living in an owner-occupied house that is bigger than a certain threshold. An example related to the dwelling can be a ban on stairlifts for certain residents. Another example can be the reduction of facilities in a certain neighbourhood, forcing the residents to move. The social relations of a person can indirectly be influenced, as neighbours, residents with a similar lifestyle, or friends move due to other instruments. An example of an instrument related to the group of financial push factors can be the addition of a tax for owner-occupiers aged between 55 and 75 who live in a dwelling that is bigger than a certain threshold. Instruments related to the addition or enhancement of push factors are ethically debatable, as they add a negative element to the existing housing situation of the target group.

Secondly, instruments can be related to pull factors. Similar to instruments related push factors, instruments related to pull factors are intended to create a triggering mechanism. Instruments can be developed for each of the earlier discovered groups of pull factors. With

regards to the dwelling, the development of sustainable and maintenance-free dwellings can be a possible instrument to increase the willingness to move. An example related to the neighbourhood can be the (enhancement of) accessibility with public transport. Similar to instruments related to the push factor of social relations, instruments related to the pull factor of social relations are expected to work indirectly, by the relocation of friends or family or by creating an optimal environment for good social relations.

Thirdly, instruments can be related to the transaction costs of relocation. Instruments related to transaction costs can be divided into four different groups. First, instruments can eliminate financial barriers for example by reducing the costs of a real estate agent or that of a moving service. Secondly, instruments can eliminate legal barriers as the notary's paperwork. Thirdly, instruments can reduce stress by eliminating physical aspects of the relocation process, like sorting out and moving furniture. Fourthly, instruments can reduce stress by creating social support.

Fourthly, instruments can be related to the evaluation of the current situation. The evaluation of a person is based on personal experience. Instruments related to the evaluation can change personal experiences by for example making them aware of existing push factors or by eliminating (unrealistic) optimistic views. An example of changing the evaluation by raising awareness of push factors is making them aware of the possible dangers of stairs. An example of changing the evaluation by eliminating (unrealistic) optimistic views is indicating possible deteriorations in the neighbourhood, for example, a reduction of facilities. Instruments related to the evaluation of the current housing situation are also ethically debatable, as they negatively influence the perception of a housing situation, reducing satisfaction. However, in combination with the following instrument, a solution is presented to bring satisfaction back to an even higher level; relocation.

Fifthly, instruments can be related to the evaluation of the new situation. Similar to the evaluation of the existing housing situation, instruments related to the evaluation of the new situation can influence the willingness to move in two ways: by creating awareness of existing pull factors and by reducing (unrealistic) negative views. An example of raising awareness is providing good information, by for example websites or flyers, about the low maintenance costs of a new dwelling. An example of the elimination of unrealistic negative views is related to the concept of placemaking as mentioned by Oswald and Rowless (2006). A person cannot be able to imagine their current furniture in their new, smaller dwelling. This will reduce their willingness to move as the new situation cannot be as familiar as the current dwelling because the current furniture does not fit. For example, a real estate agent can create alternative floor plans to convince the resident that their current furniture will fit in the new, smaller dwelling. This will eliminate a possible (unrealistic) negative view of the new situation.

### 3.5 Conclusion

In this chapter the different push and pull factors, the characteristics that influence the evaluation mechanism, and the relation between these two have been analysed. Ninety-two different push and pull factors are discovered, which are divided into nine different groups. These factors have different levels of importance for residents. The importance of these factors is dependent on the evaluation mechanism of residents, which also determines if these factors can act as a triggering mechanism for the willingness to move. The evaluation mechanism consists of four parts: elements of the current situation (including possible push factor), elements of the new situation (including possible pull factor), the transaction costs

of relocation and personal characteristics. These characteristics give weight to all the different elements. These personal characteristics are related to the general concept of willingness to move and to the different groups of push and pull factors. The characteristics are, however, not related to experiences of the current housing situation, expectations of the new situation, and the transaction costs of relocation. It is assumed that the relation between the personal characteristics and the different push and pull factors can also be applied to these elements. For example, residents who are pushed out of their building due to financial issues, are also expected to be influenced by financial transaction costs. When conducting the interviews this hypothesis will be tested.

Based on the literature review first suggestions for instruments have been made. Five main areas are discovered in which the willingness to move can be influenced: related to push factors, related to pull factors, related to the transaction costs of the relocation process, related to the evaluation of the current housing situation and related to the evaluation of the new housing situation.

# CHAPTER 4 Context of the municipality

### 4. Context of the municipality

In the previous chapter, the concept basic elements of willingness to move are analysed. In this chapter, these elements are placed in the context of the municipality of Rotterdam. This will give more insight into which aspects are important and should be taken into account when developing instruments for enhancing the willingness to move of Rotterdam's older owner-occupiers. The context of the municipality is researched based on four elements: characteristics of the residents, dwelling characteristics, neighbourhood characteristics and the policy context. Bringing together characteristics and residential mobility of inhabitants, a first insight can be created about the municipal context regarding willingness to move. The data of the municipality of Rotterdam is compared to the national average and the three other big cities of the Netherlands, which are: Amsterdam, The Hague, and Utrecht. This comparison will give insight into the distinctive characteristics of the municipality of Rotterdam. In addition to the positioning of the municipality of Rotterdam, the target group of owneroccupiers aged between 55 and 75 is analysed within the context of the municipality of Rotterdam. The different factors as found in chapter three are related to the target group. Based on these analyses the earlier suggested instruments are related to the owneroccupiers aged between 55 and 75 in the context of the municipality of Rotterdam.

### 4.1 The municipality

In this subsection, four different elements of the municipality of Rotterdam are analysed and compared to the national average and the other three large cities. First, the personal characteristics of the inhabitants are analysed. This is one of the main elements that influence the willingness to move, as has become clear in chapter 3. Secondly, the characteristics of the housing stock are analysed. The housing stock provides possible push and pull factors and possibly has an impact on the evaluation of both the current housing situation as well as the new situation. Thirdly, the characteristics of the neighbourhood are analysed, for similar reasons as the analysis of the housing stock. Fourthly, the policy context of the municipality of Rotterdam with regards to the residential mobility of the elderly is analysed. This will give insight into already existing initiatives and the possibilities of new instruments. Additionally, the different elements are related to residential mobility.

### **Inhabitants**

The municipality of Rotterdam is the second-largest city in the Netherlands. The total population of the Netherlands as of 2020 was 17.407.585, of which 872.757 lived in the municipality of Amsterdam, 651.157 lived in the municipality of Rotterdam, 545.838 lived in the

municipality of The Hague and 357.597 lived in the municipality of Utrecht (CBS, 2020b). The municipality of Rotterdam has the highest relative number of residents aged above 55, and also the highest relative number of residents aged between 55 and 75, as compared to the other three big cities. Around 29% of the inhabitants of Rotterdam is aged above 55, and 22% is aged between 55 and 75. For the municipality of Amsterdam these numbers are 25% and 20%, The Hague 28% and 21%, and Utrecht 21% and 16%. Although the municipality of Rotterdam has in comparison

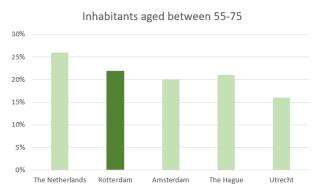


Figure 15. Percentage of inhabitants aged between 55-75. (based on research by CBS (2020b)).

with the other four big cities a high number of elderly, it is below the Dutch average. In the Netherlands, 35% of the population is aged above 55 and 26% is aged between 55 and 75.

The four big cities are with regards to nationality far more diverse than the rest of the

Netherlands. On average 7% of the people living in the Netherlands have a nationality that is not Dutch (CBS, 2020c). In the municipality of Rotterdam, around 12% of the residents have a nationality other than Dutch, in Amsterdam, this number is 18%, in The Hague, it is 19%, and in Utrecht, it is 10% of the population. The numbers for Amsterdam and The Hague are especially high due to immigrants from the European Union. The number of inhabitants with a non-Western nationality is almost equal for the four cities, around 5%.

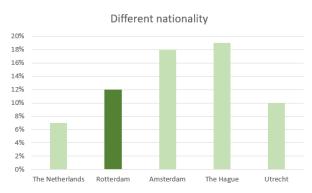


Figure 16. Percentage of inhabitants with a nationality other than Dutch. (based on research by CBS (2020c))

Similar to the other big municipalities, the municipality of Rotterdam has a low share of

couples. In the municipality of Rotterdam, only 29% of the residents are married (CBS, 2020b). Around 71% of the inhabitants of Rotterdam is single: 57% never married, 4% is widowed, and 10% divorced. Of the three big cities, only The Hague has a higher relative number of couples, 30%. The population of Utrecht consists of 27% couples and 73% singles. The municipality of Amsterdam has the lowest number of couples, 24%. On a national level, the number of couples is significantly higher, around 39%.

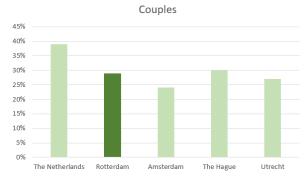


Figure 17. Percentage of couples. (based on research by CBS (2020b))

The number of homeowners in the municipality of Rotterdam is relatively low. In the municipality of Rotterdam, around 35% of the households are homeowner, the other 65% are tenants (CBS, 2020j). In comparison with the other three big cities only Amsterdam has fewer homeowners (29%), the municipalities of Utrecht Hague and have homeowners, respectively 42% and 45%. The relative number of homeowners in the four bigger municipalities is less than the Dutch average. In the Netherlands, 57% of the households is a homeowner and 43% is a tenant.

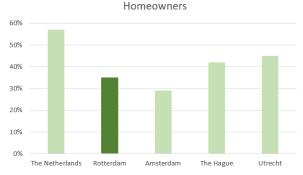


Figure 18. Percentage of homeowners. (based on research by CBS (2020j))

The average income of an inhabitant of the municipality of Rotterdam is low as compared to the national average and the other three big cities. The average income of an inhabitant of the municipality of Rotterdam is €23.700,- (CBS, 2020d). This is lower than the national average

of €25.700,- and that of other large cities as Amsterdam €28.900,-, The Hague €25.800,and Utrecht €27.200,-. The relatively high number poorer inhabitants of of the municipality of Rotterdam is also visible in the percentages of residents belonging to the poorest 40% or the richest 20% in the Netherlands. Around 54% of the inhabitants of Rotterdam belong to the poorest 40% of the Netherlands. Only 13,3% of Rotterdam's inhabitants belong to the richest 20% of the Netherlands.

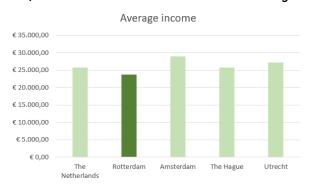


Figure 19. Average income (based on research by CBS (2020d))

In comparison to the other three big cities, the educational level of inhabitants of the municipality of Rotterdam is low. In their study about educational level in the Netherlands, CBS (2020g) used three different educational levels: low (primary education, preparatory secondary vocational education) medium (pre-university education, intermediate vocational

education) and high (high vocational education, university). They found that in the Netherlands 29,5% of the residents aged between 15 and 74 have a low educational level, 45,7% have a medium educational level, and 24,9% have a high educational level. The municipality of Rotterdam has relatively more inhabitants with a lower educational level (32,9%), but also relatively more inhabitants with a higher educational level (28%). The other bigger municipalities have relatively more inhabitants with a higher educational level, as can be seen in Figure 20.

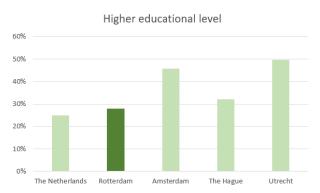


Figure 20. Percentage with a higher educational level (based on research by CBS (2020g))

The health of the inhabitants of Rotterdam is significantly poorer than the average Dutch citizen, and also as compared to the inhabitants of the other three big cities. RIVM (2016) researched multiple different elements with regards to health. Six have been analysed: self-reported health, physical limitations, mental health, loneliness, receiving informal care and feeling of control. Except for receiving informal care, the municipality of Rotterdam has a lower score on all these elements compared to the national average and the other three big cities. Inhabitants of the municipality thus have on average lower self-reported health, more physical limitations, poorer mental health etc.

The personal characteristics of inhabitants of the municipality of Rotterdam differ from the national average, as can be seen in Table 4. The personal characteristic of the residents also differs as compared to the other three bigger municipalities. The municipality of Rotterdam has relatively more elderly, more tenants and more couples. The average income and level of education of the inhabitants of the municipality of Rotterdam are relatively low.

Relative to	Age	Relation dwelling	Other personal	Education	Income	Marital status	Health	Social relations
Dutch average	Less elderly	More tenants	More with different nationality	Lower & higher	Lower	More singles	Poorer	-
Other big municipalities	More elderly	More tenants	Less - with western nationality	Lower	Lower	More couples	Poorer	-

Table 4. Personal characteristics of the inhabitants of the municipality of Rotterdam compared to the national average and the other three big municipalities

### **Housing stock**

In this subsection first the general aspects of the housing stock are analysed. Secondly, there will be a focus on the characteristics of the housing stock which are based on the push and pull factors as discovered in chapter 3. The analysed elements are type, size, value, maintenance condition, sustainability, presence of a garden, and presence of stairs. The elements of type, presence of a garden and presence of stairs are clustered in the group 'type of dwelling'. The elements maintenance condition and sustainability are clustered in the group 'age of dwelling'. These groups are made as there is almost no data about the specific elements. In this research, two different types of dwelling are distinguished: single-family houses and apartments. The presence of a garden can be related to the type of dwelling as in the Netherlands almost only single-family houses have a garden. The presence of stairs is more difficult as both single-family houses and apartments can contain stairs. Around 15% of the single-family houses in the Netherlands and 4% of the apartments in the Netherlands does not have any stairs inside or outside the dwelling (BZK & CBS, 2019). However, most of the stairs of single-family houses are intern while stairs of the apartments are extern. These extern staircases are most of the time also equipped with a lift. Therefore, it is assumed that residents who live in apartments less often experience push factors related to the presence of stairs. Maintenance condition and sustainability can be related to the age of dwelling as newer dwellings are on average in a better state and research by W/E adviseurs (2010) showed that sustainability requirements increased significantly in recent years.

In the Netherlands, there are 7.891.786 dwellings (CBS, 2021). The municipality of Amsterdam has the most dwellings (447.351), followed by Rotterdam (315.565), followed by The Hague (262.492), followed by Utrecht (156.678). The four big municipalities especially differ from the Dutch average with regards to the number of dwellings per square kilometre. The Dutch average is 234 dwellings per square kilometre while the municipality of the Hague has more than 3.000 dwellings in a similar area. There is also a big difference between the municipalities. For example, the municipality of Rotterdam has only 1450 dwellings per square kilometre and the municipality of Utrecht has 1650 dwellings per square kilometre.

With regard to the type of houses, the four big cities are an exception in the Netherlands. The larger municipalities have high numbers of apartments. The housing stock in the municipality of Rotterdam consists of only 25% out of single-family houses (CBS, 2020j). The municipalities

of Amsterdam and The Hague have even higher lower numbers of single-family houses, respectively 12% and 21%. The housing stock in the municipality of Utrecht is more equally divided: 43% of the housing stock is single-family houses, 57% is apartments. In the Netherlands, only 36% of the total housing stock is apartments while 64% is single-family houses. There are thus relatively few single-family houses in the municipality of Rotterdam. However, there is a shortage of these dwellings as there is more demand than supply.

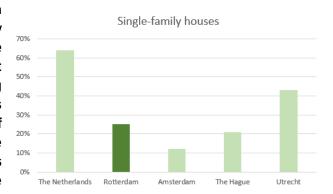


Figure 21. Percentage of apartments (based on research by CBS (2020j))

The municipality of Rotterdam has, similar to the other three big cities, on average smaller dwellings. The average size of dwellings in the municipality of Rotterdam is  $90m^2$  (CBS, 2020j). The national average is  $119m^2$ , the average for the municipality of Amsterdam is  $76m^2$ , the average for the municipality of The Hague  $94m^2$ , and for the municipality of Utrecht the average size is  $97m^2$ . The main reason for the on average lower size of dwellings in the four

big cities is the higher numbers apartments in these cities. Netherlands, apartments are significantly single-family smaller than houses. Apartments are on average 81m<sup>2</sup> while single-family houses are on average 140m<sup>2</sup>. However, single-family houses apartments in the four big cities are also smaller than comparable dwellinas elsewhere in the Netherlands. In the municipality of Rotterdam, apartments are on average 79m<sup>2</sup> and single-family houses are on average 123m<sup>2</sup>.

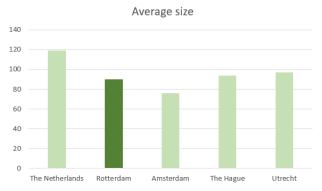


Figure 22. Average dwelling size (based on research by CBS (2020j))

The value of a dwelling in the Netherlands is measured with the WOZ-value. In 2019 the

average WOZ-value of a dwelling in the Netherlands was around €270.000,- euros (CBS, 2020k). Except for the municipality of Rotterdam, the average WOZ-value of dwellings is higher in the four big cities. Especially the municipality of Amsterdam has a high average WOZ-value for its housing stock, around €418.000,-. Dwellings in the municipality of Rotterdam are on average 18% cheaper than the average Dutch dwelling. In addition, to the WOZ-value, which is for all dwellings, there is also the sale value. The sale-value is more



Figure 23. Average WOZ-value. (based on research by (CBS, 2020k))

relevant to compare as this number says something about the housing value of the dwellings of owner-occupiers only. In 2019 the average sale price for a dwelling in the Netherlands was around  $\[mathbb{c}\]$ 308.000,- (CBS, 2020a). In the municipality of Rotterdam houses are sold for around  $\[mathbb{c}\]$ 283.000,-, in the municipality of Amsterdam for  $\[mathbb{c}\]$ 485.000,-, in the municipality of The Hague for  $\[mathbb{c}\]$ 325.000,-, and in the municipality of Utrecht for  $\[mathbb{c}\]$ 380.000,-. The difference between the WOZ-value of the dwellings and the sale value of dwellings is the highest in the municipality of Rotterdam, around 47%. This means that dwellings in the municipality are sold way above their actual value, that prices increased significantly in a short time, or that there is a great difference between the value of dwellings of owner-occupiers and those of tenants.

The housing stock of the municipality of Rotterdam has relatively the least new and modern houses as compared to the national average and the housing stock of the other three big municipalities Based on research by CBS (2020j) five different groups are distinguished regarding the age of a dwelling: 0-15 years old, 15-35 years old, 35-55 years old, 55-75 years old, and older than 75 years. The housing stock of the municipality of Rotterdam consists mainly, for around 44%, of houses which are built between 1985 and 2005. As mentioned before the municipality of Rotterdam has relatively few modern houses. In the Netherlands around 12% of the dwellings are built after 2005, in the municipality of Rotterdam this is

around 9%, in the municipality of Amsterdam it is 15%, in the municipality of The Hague it is 11%, in the municipality of Utrecht it is 20%. Additionally, the municipality of Rotterdam has, just like the other three big cities, a high number of houses that are older than 75 years. In the Netherlands around 19% of the housing stock is older than 75 years, for the municipality of Rotterdam, this is 30% of the housing stock, while in the municipalities of Amsterdam and The Hague more than 40% of the dwellings are built before 1945.

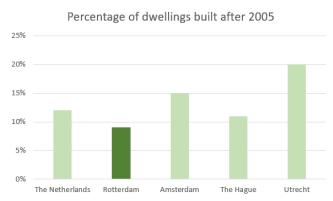


Figure 24. Percentage of dwellings built after 2005. (based on research by (CBS, 2020j))

In conclusion, the municipality of Rotterdam is not much different from the other three big municipalities with regards to dwelling type, and therefore also not with regards to the dwelling size. However, with regards to the age and especially the value of a dwelling, the municipality of Rotterdam differs significantly from the other big municipalities and the national average.

Relative to	Туре	Size	Value	Age of dwelling
Dutch	More apartments	Smaller	Lower	Older
average	More apartification	Siliallei	Lowel	
Other big	Cincilan	Cincilor	Lawan	Less young & less extreme
municipalities	Similar	Similar	Lower	old

Table 5. Characteristics of the housing stock of the municipality of Rotterdam compared to the national average and the other three big cities.

### **Neighbourhood**

In their research about the situation of neighbourhoods, the municipality of Rotterdam (2020a) makes a distinction between three elements of the neighbourhood: the physical

situation, safety and the social situation. This distinction is used as the basis for the analysis of the neighbourhood.

The four big municipalities score well on the physical aspects of the neighbourhood. The physical situation of a neighbourhood consists inter alia of the proximity of facilities and services. For example, supermarkets and general practices are on average within a reach of 0,5 km for the four big municipalities while the national average for these services is within a reach of around 1km (CBS, 2020f). The municipalities score also well on the proximity of green (0,5 km), restaurants (0,4 km), and recreative facilities (around 2km) compared to the national average. However, the residents of the municipality of Rotterdam have to walk a little further than residents in the other big cities with regards to recreative facilities. The

of subjective perception the neighbourhood is with regards relocation, of more importance than the objective reality. The subjective perception is the result of the evaluation, while the objective reality is the input of the evaluation. In the Netherlands, the physical facilities of the neighbourhood are rated with a 6,4, on a scale from 0 to 10 (CBS, 2020e). With the exception of the municipality of Rotterdam (6,2), the big municipalities score higher than the national average (6,6-6,7).

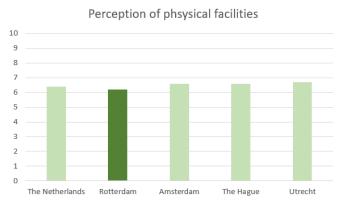


Figure 25. Perception of physical facilities in a neighbourhood. (based on research by CBS (2020e))

Neighbourhoods in the municipality of Rotterdam are experienced as relatively unsafe. CBS (2019b) did research in municipalities with more than 70.000 inhabitants to find how residents perceive their safety. They found that 18,5% of the residents of these municipalities have feelings of insecurity in their neighbourhood. The municipality of Rotterdam has most

inhabitants have feelings who insecurity, around 25,9% of the inhabitants of Rotterdam feel insecure in their neighbourhood. The perceptions of the municipality Rotterdam do not, however, correspond to reality. In 2015 there was one criminal for 13 habitants activity municipality of Rotterdam (CBS, 2016). For the municipality of Amsterdam this ratio is 1:10, for the municipality of The Hauge it is 1:14, and for the municipality of Utrecht it is 1:12.

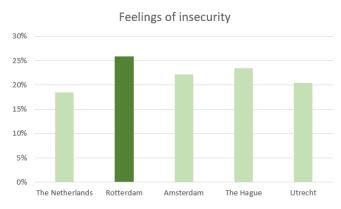


Figure 26. Feelings of insecurity in a neighbourhood. (based on research by CBS (2019b))

The social situation of neighbourhoods in the municipality of Rotterdam is relatively poor. Based on how well people know each other, how people interact, solidarity, feeling at home,

amount of interaction and satisfaction with the composition of the population CBS (2020e) constructed a score for social cohesion in a neighbourhood. The average score for the Netherlands is 6,3. The municipalities of Amsterdam, Rotterdam, The Hague and Utrecht have significantly lower scores for social cohesion in a neighbourhood, ranging from a 5,5 for the municipality of Rotterdam to a 5,9 for the municipality of Utrecht.

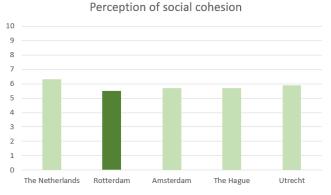


Figure 27. Perception of social cohesion in a neighbourhood. (based on research by CBS (2020e))

Inhabitants of the municipality of Rotterdam experiences all three aspects of the neighbourhood more negative than the average Dutch citizen. However, as can be seen in Table 6, their experience does not correspond to reality. The physical situation of the neighbourhood is better than the national average, while with regards to safety, neighbourhoods are experienced worse than they are.

Relative to	Physical	situation	Sa	fety	Social situation			
iverative to	Objective	Subjective	Objective	Subjective	Objective	Subjective		
Dutch average	Better	Better Worse		Worse	-	Worse		
Other big municipalities	Worse	Worse	Better	Worse	-	Worse		

Table 6. Characteristics of the neighbourhoods in the municipality of Rotterdam compared to the national average and the other three big municipalities

### Residential mobility

Inhabitants of the municipality of Rotterdam move more frequently than the average Dutch citizen. In 2019 around 11,7% of the residents living in Rotterdam moved to a new location. Of the total Dutch population 10,31% moved to a new location (CBS, 2020i). However, compared to the other three large cities, residential mobility in Rotterdam is low. In 2019 around 11,88% of the inhabitants of The Hague relocated, for Utrecht this number was 14,58%, and for the municipality of Amsterdam this number was 15,24%.

As concluded before, residents aged between 55 and 75 relocate significantly less than other target groups. CBS (2020i) distinguishes between residents aged between 50 and 65 and those aged between 65 and 85. They found that in 2019 around 5,03% of the residents aged between 50 and 65 moved to a new location and only 4,14% of the residents aged between 65 and 85 relocated. In the four big cities, the elderly relocate more often, except for residents aged between 65 and 85 living in Amsterdam or Utrecht. In the municipality of Rotterdam 6.368 (5,48%) of the residents with an age between 50 and 65 relocated and 3.651 (4,27%) of the residents aged between 65 and 85 moved to a new location in 2019. For Amsterdam these numbers are respectively 5,12% and 3,76%, for The Hague 6,21% and 4,46%, and for Utrecht 5,34% and 4,09%. Although these numbers are higher than the national average, the difference between relocation of elderly and other target groups is higher in the bigger cities than in the other parts of the Netherlands.

Relating residential mobility to municipal characteristics is difficult, as multiple different factors are influencing each other. However, based on the analysis of the three different elements, some remarks can be made. Elements that can be related to the higher residential mobility in the municipality of Rotterdam are the relatively low numbers of elderly, homeowners, and couples in combination with the on average poorer health, the older age of the dwellings and the experience of the neighbourhood. Elements that do not correspond with the higher residential mobility in the municipality of Rotterdam are the relatively lower income of the inhabitants and the size of dwellings.

Elements ensuring higher residential mobility	Elements ensuring lower residential mobility			
Age <sup>1</sup>				
Homeownership <sup>1</sup>	Income <sup>1</sup>			
Relationship status <sup>1</sup>				
Health status¹				
Age of dwelling <sup>2</sup>	Size of dwelling?			
Experience of the neighbourhood <sup>2</sup>	Size of dwelling <sup>2</sup>			

Table 7. Contextual elements of the municipality of Rotterdam related to residential mobility. Cells with 1 are related to personal characteristics and cells with 2 are related to (lack of) possible push and pull factors.

### Policy context

In addition to personal characteristics and the physical characteristics of the housing situation, the (future) willingness to move of a resident is also shaped by policies of the different stakeholders in the municipality of Rotterdam. Additionally, as showed in the conceptual framework, the instruments themselves are also shaped by external factors. This policy analysis gives more insight into the possibilities of instruments with regards to the willingness to move of owner-occupiers aged between 55 and 75.

One of the most important policies with regards to the housing situation and willingness to move of the target group in the municipality of Rotterdam is the 'Langer Thuis Akkoord'. Forty different stakeholders in the municipality of Rotterdam signed the 'Langer Thuis Akkoord' which is an agreement focused on the housing situation of the elderly (Huisman, 2020). The agreement has three traces of action: (1) increase in life-cycle proof houses, (2) living longer independent in the neighbourhood, (3) increase of innovative residential care concepts (Langer Thuis Akkoord Rotterdam, 2020b). The first focus point is about the supply of enough suitable houses for the elderly. Additionally, it is also about labelling these new dwellings for the elderly. However, these interventions are mainly focused on housing associations and tenants. The second focus point is about the suitability of the neighbourhood. In the initial document, this is mainly given form with the development of elderly hubs. The third focus point is about the development of different forms of housing, e.g. group living for the elderly, courtyard living and multi-generational housing and cooperative housing (care) concepts for the elderly. Initially, actual residential mobility was not included in the agreement, however, in their more recent action agenda, it has become part of the third trace of action (Langer Thuis Akkoord Rotterdam, 2020a). As actual residential mobility of the elderly is a newly added point of action, much is unknown. Therefore the main aim is to gain new insights by exchange of experiences between housing associations, but also with pilots as a senior real estate agent. Compared to the initial agreement the action agenda is more specific and has an additional trace of action: knowledge sharing.

Besides the 'Langer Thuis Akkoord' the municipality of Rotterdam has several other policy documents concerning housing. The 'Woonvisie 2030' is the main housing policy document of the municipality of Rotterdam. In the housing vision two different programs are mentioned concerning the housing situation of the elderly: 'earlier at home' and 'longer at home' (Gemeente Rotterdam, 2016). The first program is developed to keep the elderly out of care institutions. The focus of the second program is on increasing the accessibility of housing in the existing stock and the addition of a new suitable supply, with the important remark that each area needs its own solutions based on characteristics like the number of elderly, type of elderly etc.

To deal with its ageing population the municipality of Rotterdam also designed the master plan 'Rotterdam, Ouder en Wijzer'. The main problem according to the municipality is the lack of appropriate houses and housing situations (Gemeente Rotterdam, 2019). In theory, there are enough appropriate houses, however, they are not available, not affordable, or in an inappropriate neighbourhood. To solve this the municipality developed five lines of action: (1) Housing development is in line with population development and the demand for suitable housing in the areas, (2) realization of new residential care concepts, (3) stimulate awareness, pre-sorting on future housing needs and lowering thresholds concerning relocation, (4) vital living communities with attention to safety, fire safety and quality of life in senior citizens' complexes, (5) and accessible outdoor space (Gemeente Rotterdam, 2019). In this master plan the municipality of Rotterdam acknowledges the impact of the elderly on the housing market, however, actual residential mobility or willingness to move are hardly mentioned.

Besides the municipality of Rotterdam, it is mainly the housing associations that have developed some policies with regards to the housing situation of the elderly. For example, the earlier mentioned senior real estate agent is an initiative of five housing associations and the municipality of Rotterdam (Vestia, n.d.). Other private parties have also developed some initiatives, but these initiatives are not implemented in the municipality of Rotterdam yet. For example, Blauwhoed, one of the developers who is also part of the Langer Thuis Akkoord, developed Parkentree in Schiedam which is a project based on a Senior Smart living concept (Blauwhoed, n.d.). Another developer which is part of the Langer Thuis Akkoord, HDGroep, developed several care concepts. These care concepts are for the older part of the target group but do not contain owner-occupied dwellings.

In conclusion, interventions with regards to actual residential mobility and the willingness to move for the target group of owner-occupiers aged between 55 and 75 are still in their infancy. The various stakeholders are willing to improve the situation, but there are currently few real concrete results. Therefore, it is expected that currently the willingness to move of owner-occupiers living in the municipality of Rotterdam and aged between 55 and 75 is not directly shaped by policies or external interventions. However, an important remark is that the willingness to move of the target group is always indirectly shaped by the policies of the different stakeholders. For example, by the type of dwellings, a developer develops.

### **Existing interventions**

- Senior real estate agent\*
- Intermediate facilities
- Development of 10.000 dwellings suitable for the elderly
- Priority rules\*
- 65+ magazine

Figure 28. Existing interventions in the municipality of Rotterdam with regard to the willingness to move of the elderly. Interventions with a \* are intended only for tenants

### 4.2 The target group

In this paragraph, the target groups of owner-occupiers aged 55 to 65 and those aged 65 to 75 living in the municipality of Rotterdam are analysed. The target groups are analysed on the same three elements as the municipality of Rotterdam; personal characteristics, dwelling characteristics and neighbourhood characteristics.

### Personal characteristics

The group of owner-occupiers aged between 55 and 75 amounts to 30.963 or 10% of the total number of households in the municipality of Rotterdam (Rotterdam, 2020b). Around 7% of the total number of households is owner-occupier with an age between 55 and 65 and around 4% is owner-occupier with an age between 65 and 75. The lower number of owner-occupiers with an age between 65 and 75 is not only because there are fewer residents within this age group, but in the municipality of Rotterdam the relative number of owner-occupiers reduces from the age of 65 (OBI, 2020).

As can be seen in Figure 28, the neighbourhoods Prins-Alexander, IJsselmonde and Hillegersberg-Schiebroek have the largest number of owner-occupiers aged 55-75. Especially, the neighbourhood Prins-Alexander has a large number of owner-occupiers aged 55-75, more than 6.500. However, as can be seen in Figure 28, the relative number of this target group within this neighbourhood is not extremely high, as it is one of the bigger neighbourhoods of the municipality of Rotterdam. The neighbourhoods with the highest relative numbers of owner-occupiers aged 55-75 are Pernis (23,4%), Hillegersberg-Schiebroek (18,1%), Hoek van Holland (18,8%), and Rozenburg (20,1%). Except for Hillegersberg-Schiebroek these are all smaller neighbourhoods, they all fall in the lowest category concerning the absolute numbers of owner-occupiers aged 55-75.

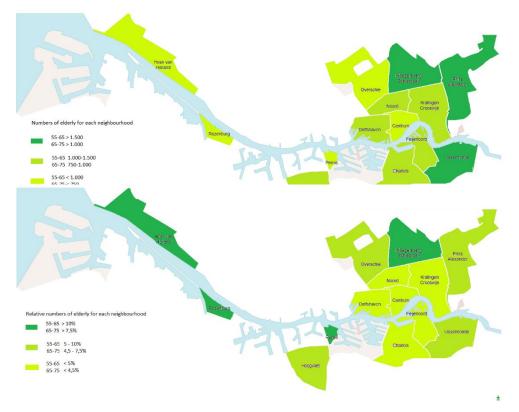


Figure 29. Relative numbers of owner-occupiers aged 55-65 and 65-75 within each neighbourhood (based on research by Rotterdam (2020b)).

The length of residency of the target group is significantly different as compared to other target groups in the municipality of Rotterdam. More than 75% of the owner-occupiers aged 65 to 75 have been living for more than 10 years in their current dwelling, and 50% of this target group lived even longer than 20 years in their current dwelling (Rotterdam, 2020b). For owner-occupiers aged between 55 to 65 these numbers are slightly lower 70,4% of this group lived longer than 10 years in their current dwelling and 34,7% longer than 20 years. The difference is especially high in comparison to younger owner-occupiers. Around 37% of the other owner-occupiers live longer than 10 years in their dwelling and only 9% live longer than 20 years in their current dwelling.

The following analyses of the personal characteristics of the target group are based on the WoON2018 study. As mentioned in the method section the WoON research does not make differences between municipalities, but between residential regions which can be seen in Figure 4.

The majority of the target group, living in the residential region Rotterdam has the Dutch nationality. However, the relative number of residents with another nationality is higher than the national or municipal average. Around 15% of the owner-occupiers aged between 55 and 65 and 12% of the owner-occupiers aged between 65 and 75 have a different nationality (BZK & CBS, 2019). Around 12% of the owner-occupiers aged between 55 and 65 have a non-western nationality, and around 2% have a western nationality which is not Dutch. For the owner-occupiers aged between 65 and 75 these numbers are respectively, 8% and 5%.

There are significant differences in the level of education between owner-occupiers aged between 55 and 65 and those aged between 65 and 75. Around 29% of the younger target group have a lower educational level, 32% have a medium educational level, and 38% have a higher educational level (BZK & CBS, 2019). The relative number of people with a lower educational level is much higher for the older target group. Around 43% of the owner-occupiers aged between 65 and 75 have a lower educational level, 23% have a medium educational level and 30% have a higher educational level.

The average income of owner-occupiers aged between 55 and 75 and living in the residential region Rotterdam is higher than the municipal or national average. The average income of owner-occupiers aged between 55 and 65 is &56.000,- (BZK & CBS, 2019). Owner-occupiers aged between 65 and 75 earns on average around &43.000,- each year. Around 20% of the owner-occupiers aged 55 and 65 and around 40% of those aged between 65 and 75 earn less than &35.000,- each year. This is lower than the modal income in the Netherlands.

The majority of owner-occupiers aged between 55 and 75 is part of a couple. Similarly, as with the level of education, there are differences between those aged 55-65 and those aged 65-75. Around 80% of those aged between 55 and 65 is part of a couple, for the target group of owner-occupiers aged between 65 and 75, this is around 67% (BZK & CBS, 2019).

Although the target group of owner-occupiers aged between 55 and 75 is becoming older, most of them still report their health as good or very good. There are, however, differences between the younger and the older target group. Around 83% of those aged 55-65 experience their health as good or very good versus 72% of those aged 65-75 (BZK & CBS, 2019). Only 1% of the target group experience their health as bad. This might be because people with poorer health are less inclined to fill in the survey.

Social relations of residents is not researched in relation to geographical location. Therefore, the specific context of the municipality of Rotterdam concerning this element cannot directly

be analysed. However, CBS (2020h), Coumans and Schmeets (2020), and Kloosterman and van der Houwen (2014) related several personal characteristics to the concept of social relations. With regards to the frequency of social contact, all studies found that younger residents have a lower income, lower education level, non-western nationality, and women have more social contact with friends and family. The study of CBS (2020h) found that with regards to social contact with neighbours especially the elderly, residents with a western nationality and people living in non-urban neighbourhoods together with women, lower educated residents and singles have more such social contact. Coumans and Schmeets (2020) found that the quality of social contact did not differ much between target groups, although residents with a higher income, women, Dutch residents and those younger than 35 and older than 65 are on average a little more satisfied with their social relations. Kloosterman and van der Houwen (2014) concluded that residents who are male, older, lower educated and have a lower income and a non-western nationality, have on average less close relationships.

In comparison to the average citizen of the municipality of Rotterdam, owner-occupiers aged 55-75 live longer in their dwelling, have a higher income, are relatively more often part of a couple and have poorer social relations. There are also differences within this target group. Those aged 55-65 are relatively higher educated, have a higher income, are more often part of a couple and have better health than those aged 65-75.

Target	Relation dwelling	Other	Education	Income	Marital	Health	Social
group		personal			status		relations
55-65	Longer length of residency 35% >20 years	Dutch 85%	High 38%	High €56.000,-	Couples 80%	Good 83%	Good
65-75	Longer length of residency 50% >20 years	Dutch 88%	Low 43%	High €43.000,-	Couples 67%	Good 72%	Good

Table 8. Characteristics of owner-occupiers living in the municipality of Rotterdam and aged 55-65 and 65-75

### **Housing stock**

The housing stock of the target group is analysed on type of dwelling, size of the dwelling, value of the dwelling and the age of the dwelling. Additionally, the subjective perception of the dwellings of the target group is analysed.

More than half of the owner-occupiers in the age category 55 to 75 lives in a single-family house (Rotterdam, 2020b). For those aged between 55 and 65, it is 57% and for the age group of 65 to 75, it is 52%. These numbers are much higher than the numbers of tenants (20%) and other owner-occupiers (45%) who live in a single-family house. Around 10% of the owner-occupiers aged between 55 and 75 is still living in an apartment without a lift. Although this is less than the percentage of tenants in the same age category (26%), it is still a significant number.

The dwellings of owner-occupiers aged between 55 and 75 are significantly larger than that of other residents in the municipality of Rotterdam. Around 87% of the owner-occupiers aged between 55 and 65 are living in a residence which is bigger than  $75m^2$ , for owner-occupiers aged between 65 and 75 this number is around 89%, whereas for tenants in the same age category this number is around 60% (Rotterdam, 2020b). But also owner-occupiers with a different age live smaller than those aged between 55 and 75. Around 78% of the other owner-occupiers live in a dwelling bigger than  $75m^2$ . The difference between the target group and other residents is even bigger with the relative numbers of residents who live in a dwelling that is bigger than  $125m^2$ . Around 35% of the owner-occupiers aged between 55 and 75 live in

dwellings bigger than 125m<sup>2</sup>. For tenants within the same age range, this is around 6%, and for owner-occupiers with a different age, this is 27%. In conclusion, owner-occupiers aged between 55 and 75 live bigger than other target groups. However, an important remark is that a higher proportion of owner-occupiers aged between 55 and 75 live in single-family houses, which are on average bigger than other dwelling types.

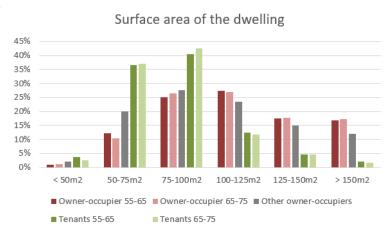


Figure 30. Surface area of the dwelling for different target groups in the municipality of Rotterdam.

Owner-occupiers aged between 55 and 75 live on average in more expensive dwellings. Around 52% of those aged between 55 and 65 and around 55% of those aged between 65 and 75 live in dwellings which have a WOZ-value higher than €250.000,- (Rotterdam, 2020b). For tenants in the same age range, this is 12% and for other owner-occupiers, this is around 47%. A significant proportion of owner-occupiers aged between 55 and 75 live in dwellings that have a WOZ-value higher than €500.000,-. Around 12% of the target group live in such dwellings, whereas for tenants this number is barely 1%, and for other owner-occupiers, it is around 9%. There is also a part of the target group who have a dwelling with a WOZ-value lower than €200.000,-. Around 24% of those aged between 55 and 65 and 22% of those aged between 65 and 75 have such a dwelling.

Owner-occupiers aged between 55 and 75 live in younger dwellings than the average citizen of the municipality of Rotterdam. Around 40% of the target group live in houses which are built after 1995. For other target groups in the municipality, this percentage is between 30% to 35% (Rotterdam, 2020b). Around 25% of those aged between 55 and 65 and 24% of those aged between 65 and 75 live in dwellings that are older than 75 years.

As mentioned before, subjective perception is, with regards to relocation, of more importance than the objective reality. The subjective perception is the result of the evaluation, while the objective reality is the input of the evaluation. Owner-occupiers aged between 55 and 75 and living in the residential region of Rotterdam are on average very satisfied with their current dwelling. Around 92% of those aged between 55 and 65 is (very) satisfied with their current dwelling, of those aged between 65 and 75 around 95% is (very) satisfied (BZK & CBS, 2019). This is much higher than the national and municipal average. In the Netherlands, around 83% of the citizens are (very) satisfied with their dwelling. In the municipality of Rotterdam, only 47% of the inhabitants are (very) satisfied with their dwelling.

The dwelling characteristics of the target group within the context of the municipality of Rotterdam can be seen in Table 9. Except for percentages, the numbers in the figure are based on the middle 50% of the target group. So, around 25% of the target group live in a dwelling smaller than 75m², 50% live in a dwelling with a size between 75 to 150m² and 25% live in a dwelling bigger than 150m².

Target group	Type	Size	Value	Age of dwelling	Satisfaction
55-65	55-65 Single-family (57%)		High (€200.000-€350.000)	Average (15-55 years)	(very) satisfied (92%)
65-75	Single-family (52%)	Big (75-150 m²)	High (€200.000-€400.000)	Average (15-55 years)	(very) satisfied

Table 9. Characteristics of the dwellings of owner-occupiers living in the municipality of Rotterdam and aged 55-65 and 65-75

### Neighbourhood

As mentioned before the municipality of Rotterdam (2020a) researched the situation of the different neighbourhoods on three elements. For each of these elements a total index, an objective index and a subjective index are developed. The objective index for the physical situation in a neighbourhood is based on the value of the dwellings, the number of unoccupied dwellings, duration before a house is sold, the proximity of essential shops, the proximity of recreative facilities, public transport etc. The subjective index is based on satisfaction of the residents with their living environment, willingness to move, satisfaction with the dwelling, experience of the quality of public space, number of facilities, nuisance etc. The municipal average for the total index of the physical situation in 2020 is 106, the objective index is 113 and the subjective index is 99. As mentioned before a relatively high proportion of the target group live in the neighbourhoods Prins-Alexander, Hillegersberg-Schiebroek and IJsselmonde. Prins-Alexander and Hillegersberg-Schiebroek have a higher total index than the municipal average, respectively 119 and 122. The objective index (119 & 123) and the subjective index (119 & 120) of the physical situation are also higher for both neighbourhoods. IJsselmonde, however, has lower indexes for the physical situation of the neighbourhood. The total index for IJsselmonde is 100, the objective index is 95 and the subjective index is 105.

The objective index for safety developed by the municipality of Rotterdam (2020a) is based on the number of crimes, like theft, assault, destruction etc. The subjective index for safety is based on how residents experience disturbance, but also the numbers of assault and theft. The safety index for the municipality of Rotterdam in 2020 is 110, the objective safety index is 116 and the subjective index is 104. The neighbourhoods Prins-Alexander and Hillegersberg-Schiebroek have higher indexes than the municipal average, while IJsselmonde again has lower indexes.

The objective social index is based on income, debt, the relative number of working residents, the percentage of residents who do volunteer work, but also on the quantity of contact with neighbours, friends and family (Rotterdam, 2020a). The subjective social index is based on how satisfied residents are with the quality of their life, if they have the feeling of control over their life, the experience of their health, knowledge of the Dutch language, how they experience their relationship with neighbours etc. The average social index for the municipality of Rotterdam is 105, the objective social index is 107 and the subjective social index is 104. Similar to the indexes related to the physical situation and safety, Prins-Alexander and Hillegersberg-Schiebroek have higher indexes, while IJsselmonde has lower indexes compared to the municipal average.

As can be seen in Table 10, the target group has on average relative higher indexes as compared to the municipal average. The indexes in the table are based on the sum of the number of residents belonging to the target group in a neighbourhood, times the index of that neighbourhood for all neighbourhoods divided by the total number of residents belonging to the target group in the municipality of Rotterdam, as can be seen in Figure 30. Based on this data it can be concluded that, on average, owner-occupiers aged between 65 and 75 live in neighbourhoods that have better ratings than the average neighbourhood of owner-occupiers aged between 55 and 65.

Number of target group 1 \* index 1 + number of target group 2 \* index 2 + number of target group 3 \* index 3 + ..... + ...

Total number of target group

Figure 31. Formula to calculate average neighbourhood index for the target group in the municipality of Rotterdam

Target	Physical	situation	Sa	ıfety	Social situation			
group	Objective	Subjective	Objective	Subjective	Objective	Subjective		
55-65	111	104	121	121 112		107		
65-75	111	106	122	115	110	109		
Municipal average	113	99	116	104	107	104		

Table 10. Characteristics of the average neighbourhood of owner-occupiers living in the municipality of Rotterdam and aged 55-65 and 65-75

### Residential mobility

Around 5% of the owner-occupiers aged between 55 and 65 relocated between 2016 and 2018, and 4% of the owner-occupiers aged between 65 and 75 relocated in this period (BZK & CBS, 2019). In comparison in the same period, 9% of the inhabitants of the residential region Rotterdam and 16% of the Dutch citizens moved to a new location. Six different elements can be related to the lower residential mobility of the target group. With regards to personal characteristics, these are health status, relation with the dwelling, relationship status, and social relations. Health status and relationship status are more influential for the younger part of the target group (55-65), while the relation with the dwelling is more influential for the older part of the target group (65-75). With regards to the housing situation of the target group, the (younger) age of the dwellings and the (good) experience of the characteristics of the neighbourhood can be related to the lower residential mobility of the target group. Three elements are in contrast with the lower residential mobility. These are the relatively higher income of the target group and the type and size of their dwellings.

Elements ensuring higher residential mobility	Elements ensuring lower residential mobility					
Income <sup>1</sup>	Health status¹					
income <sup>.</sup>	Relation with dwelling <sup>1</sup>					
Turn of devalling?	Relationship status <sup>1</sup>					
Type of dwelling <sup>2</sup>	Social relations <sup>1</sup>					
Cina of duralling?	Age of dwelling <sup>2</sup>					
Size of dwelling <sup>2</sup>	Experience of the neighbourhood <sup>2</sup>					

Table 11. Contextual elements of target group within the municipality of Rotterdam related to residential mobility. Cells with 1 are related to personal characteristics and cells with 2 are related to (lack of) possible push and pull factors.

### 4.3 Relation characteristics target group and instruments

In this paragraph, the five different types of instruments as discovered in chapter 3 are further developed based on the context of the municipality of Rotterdam. Based on the knowledge acquired from the data analysis the instruments can be focused based on the characteristics of the inhabitants, the characteristics of the housing stock and the neighbourhood characteristics.

### <u>Instruments related to push factors</u>

Instruments related to push factors can be developed based on two aspects: push factors currently lacking and push factors to which the target group is sensitive due to personal characteristics.

Instruments related to push factors should change existing elements of the housing situation of the target group to create a higher willingness to move. This intervention would be most effective if it changes elements that currently reduces the willingness to move of the target group. The housing situation of the target group has two such characteristics: the age of the dwelling and the experience of the neighbourhood. As has become clear from the data the average dwelling of the target group is in a good condition. Additionally, the target group live on average in neighbourhoods that have a higher score for safety as well as for the social situation and the physical situation. A negative change, for example, raised pavements, in the neighbourhoods which contain a lot of elderly owner-occupiers can increase the willingness to move of the target group.

There are five personal characteristics of the target group which can be related to instruments based on push factors: Health status, relation with dwelling, relationship status, social relations and income. As can be seen in Figure 31, almost all personal characteristics of the owner-occupiers aged between 55 and 65 living in Rotterdam do not have a relation with the different groups of push factors. The target group of owner-occupiers aged between 55 and 65 living in the municipality of Rotterdam is thus less influenced by push factors. Only push factors related to the dwelling are significant compared to other target groups. As can be seen in Figure 31, there is a (possible) relation between this group of push factors and four personal characteristics of the target group: younger age, higher income, part of a couple and homeowner. It is expected that instruments related to push factors are less influential for the owner-occupiers aged between 55 and 65 and living in Rotterdam. This is different for the older part of the target group, those aged between 65 and 75. As has become clear from the data, the educational level of the older part of the target group is low. Additionally, they are less often part of a couple and they have on average poorer health compared to the ones aged between 55 and 65. These characteristics ensure that push factors related to social relations and health are becoming more influential.

### Instruments related to pull factors

Similar to the instruments related to push factors, instruments related to pull factors can be developed based on lacking elements and personal characteristics.

With regards to the characteristics of the housing situation, instruments can be developed which are the opposite of currently existing push factors of the housing situation of the target group. Currently, existing push factors present in the dwellings of the target group are the size of the dwelling and the type of the dwelling. Dwellings are relatively big and they are single-family houses, which ensures problems with regards to maintenance of the garden and accessibility. An example of an instrument related to pull factors can be the development of suitable dwellings.

					PL	JLL			P	US	Н		Factor			PL	ILL			F	บร	Н		Factor	
no research about	no relation found between characteristic and push/pull factor	unclear if there is a relation between characteristic and push/pull factor	relation found between characteristic and push/pull factor	Lifestyle	Social relations	Neighbourhood	Dwelling	Financial	Social relations	Neighbourhood	Dwelling	Health		Characteristic	Lifestyle	Social relations	Neighbourhood	Dwelling	Financial	Social relations	Neighbourhood	Dwelling	Health		Characteristic
	oetween ch	a relation l	ween chara	18	4	3	34	2		78	257		55-65		18	4	ω	34	2		78	257		55-65	
	aracteristi	between ch	cteristic a		28	2			18			12357	65-75	Age		28	2			18			12357	65-75	Age
	c and pus	aracterist	nd push/p		7	1		1	2	2	1		×			7	1		1	2	2	1		æ	
	h/pull fact	ic and pus	ull factor		2			2		00	2	3.5	low			2			2		80	2	3.5	low	
	Ÿ.	h/pull fact		co		234	3				5		high	Income	00		234	3				5		high	Income
		tor							2	2		2	×							2	2		2	œ	
		5	<b>L</b>	18		00		8	1		1	38	low		18		00		8	1		1	38	low	
Cnara	}	Akkerman	Stimson &			3	3						high	Education			ω	w						high	Education
cnaracteristics related to specific target group		Akkermans etl al., 2020	Stimson & McCrea, 2004			1		1				1	×				1		1				1	œ	
related to		020	2004	1				2	12		12	26	single	T.	1				2	12		12	26	single	D.
specific ta		6	2		26*	16*		1		6*	6*		couple	Relationship		26*	16*		1		6*	6*		couple	Relationship
rget group		Feijten &	Smetcore			2				2		1	×	þ			2				2		1	×	v
		Feijten & Visser, 2015	Smetcoren et al., 2017			3	3						good				ω	ω						good	
		15	17					2	2	2		235	bad	Health					2	2	2		235	bad	Health
•	*	7	ω		2	2							×			2	2							æ	
not sure		ABF, 2021	Pope & Kang, 2010					2		2	2	2	tenant	Rela					2		2	2	2	tenant iomeowne	Rela
r It is que t			ang, 2010			2					5		tenant 10meowne	Relation dwelling			2					5		отеомпе	Relation dwelling
o pusn or					2				2				×	ling		2				2				œ	ng
not sure IT It is que to push or pull reasons		00	4		8				18			3	women	0		00				18			ω	women	Q
S	3	Carlson et al, 1998	Crisp et al., 2013	1		13	3	1			2	1	men	Other personal	1		13	S	1			2	1	men	Other personal
		al, 1998	2013		2	2		2	2	N		2	×	al		2	2		2	2	2		2	œ	₽

Figure 31. The personal characteristics of the target group related to different groups of push and pull factors.

The personal characteristics of the target group which can be related to instruments based on pull factors are Health status, relation with the dwelling, relationship status, social relations and income. The characteristics of those aged between 55 and 65 make them more susceptible to almost all different groups of pull factors. Only the influence of pull factors related to social relations is unclear. It is unclear if they have additional influence on this target group as compared to other target groups. Owner-occupiers aged between 65 and 75 are less influenced by pull factors as compared to the younger part of the target group. Besides pull factors related to social relations, it is also unclear if pull factors related to the dwelling have a higher influence on the older part of the target group.

### Instruments related to transaction costs

In chapter 3, transactions costs are not related to personal characteristics, dwelling characteristics, or neighbourhood characteristics. Each resident, however, has to face transaction costs when relocating to a new dwelling. As mentioned before instruments related to transaction costs can be divided into 4 different groups: financial, legal, physical and social. Instruments that are related to the financial and social aspect of the transaction process, are expected to be less effective for the target group as they have on average a higher income and good social relations. However, for those of the target group who earn less than €35.000,- financial help is expected to be more effective. Instruments that can reduce legal and/or physical barriers, such as extensive legal support or relocation service, can enhance the willingness to move of the target group, especially the willingness to move of the older part of the target group. As has become clear, more than 40% of the owneroccupiers aged between 65 and 75 has a lower educational level. This can ensure that they have difficulties with the legal aspects of a relocation. Additionally, the health status of a significant part of the older part of the target group is not good, which can ensure physical barriers with regards to the relocation process. In conclusion, instruments related to the transaction costs of relocating are expected to be most effective for the older part of the target group, those aged between 65 and 75.

### <u>Instruments related to the evaluation of the current housing situation</u>

Instruments related to the evaluation of the current housing situation changes personal experiences by for example making them aware of existing push factors or by eliminating unrealistic optimistic views. There is a difference in the impact of the different push factors for the target group. However, instruments related to the evaluation of the current housing situation should raise awareness of all different push factors, as the willingness to move of residents is always a combination of multiple different factors. From the data, it has become clear that owner-occupiers aged between 55 and 75 and living in Rotterdam give high scores to their neighbourhood. Their subjective perception of the neighbourhood is in line or might be even lower than the objective reality. Therefore, it is difficult for instruments related to the evaluation of the neighbourhood to eliminate unrealistic optimistic views about the overall perceived safety, social situation or physical situation of a neighbourhood. The perception of their dwellings is, however, exceptionally high. More than 90% of the target group is satisfied with their dwelling, for all the inhabitants of the municipality of Rotterdam, this number is not even 50%. Resetting the expectations is therefore a good opportunity to increase the willingness to move.

### <u>Instruments related to the evaluation of a new housing situation</u>

The evaluation of the new housing situation can be influenced in two ways. First, residents can be made aware of the existing pull factors of the new situation. Similar to the instruments related to the evaluation of the existing situation, instruments related to the evaluation of the new situation should raise awareness of all the different factors. Secondly, instruments related to the evaluation of the new housing situation can reduce possible barriers or negative views. No data is analysed about perceptions of the new housing situation. Therefore, this type of instrument cannot be directly related to the characteristics of the target group.

### 4.4 Conclusion

In this chapter, the context of the municipality of Rotterdam is analysed. Personal characteristics and characteristics of the housing situation which are influential with regards to the willingness to move are researched and compared to the national average and the other three big cities. What has become clear is that the four big cities are significantly different from other parts of the Netherlands. For example, the number of tenants in these municipalities is significantly higher. Dwellings are also smaller and there are relatively more older buildings. Residents in these municipalities experience their neighbourhood as much more unsafe than the average Dutch citizen. The four big cities also differ from each other. Inhabitants of the municipality of Rotterdam experience their neighbourhood significantly worse than the residents of the other three big cities. Another example is the average value of a dwelling, which is a lot lower for the municipality of Rotterdam. The personal characteristics of inhabitants of the municipality of Rotterdam also differ from the ones living in Amsterdam, The Hague or Utrecht. The context of the municipality is therefore influential concerning both the triggering mechanism, due to different possible push and pull factors, as well as the evaluation mechanism, due to different personal characteristics. Additionally, the willingness to move is also influenced by the policies of different stakeholders acting within the municipality. These actors shape the willingness to move by what they do or do not do. For example by deploying a senior real estate agent or by restricting developers to build new housing concepts. The consequence is that the results of this study cannot directly be related to other municipalities.

In addition to the general context of the municipality of Rotterdam, the situation of the target group of owner-occupiers aged between 55 and 75 within the municipality of Rotterdam is analysed. It has become clear that the target group is significantly different as compared to the average citizen of the municipality of Rotterdam, with regards to both their personal characteristics as their housing situation. Owner-occupiers aged between 55 and 75 are on average Dutch, have a higher income, are part of a couple, have good social relations, relatively good health, and have a longer length of residency. With regards to their housing situation, the target group live on average in single-family houses which are relatively big and expensive. They also live on average in the better neighbourhoods of the municipality of Rotterdam. There are, however, also differences within the target group. The younger part of the target group, those aged between 55 and 65, are on average higher educated, more often part of a couple and have better health than those aged between 65 and 75.

The personal characteristics and the characteristics of the housing situation of the target group are related to the instruments as discovered in chapter 3. Instruments related to push factors are expected to be more influential with regards to the older part of the target group, while instruments related to pull factors are expected to be more influential with regards to the younger part of the target group. Therefore, different instruments might be developed for

the different age groups. Additionally, instruments related to the evaluation of the existing housing situation are expected to be influential with regards to the dwelling, but less influential with regards to the neighbourhood. Instruments related to the evaluation of the new situation and the transaction costs of relocation are not directly related to the characteristics of the housing situation or personal characteristics of the target group.

Elements of willingness to move	Personal characteristics 55-65	Personal characteristics 65-75	Dwelling characteristi cs	Neighbourhood characteristics
Push factors	+	++	++	++
Pull factors	++	+	+	-
Evaluation current	?	?	++	
Transaction costs	+	++	?	?
Evaluation new	?	?	?	?

Table 12. Relation between characteristics of the target group and the different types of instruments as discovered in chapter 3.

## CHAPTER 5 Experts' view on instruments

### 5. Experts' view on instruments

The previous chapters have laid the groundwork for this chapter, in which possible instruments are developed. In chapter 3 the basic elements of the willingness to move are analysed. In chapter 4 the context of the municipality of Rotterdam concerning these elements is analysed. In this chapter, instruments are developed to intervene in the context of the municipality of Rotterdam to enhance the willingness to move and thereby the residential mobility of owner-occupiers aged between 55 and 75.

To develop these instruments, interviews are conducted with 6 professionals in the field of the housing situation of the elderly. As mentioned before, multiple different professions are interviewed as each of these professions have their own perspective on the issue of willingness to move and how this can be influenced. The different types of experts who are interviewed are a developer, a municipal policymaker, a care worker, someone working in a social welfare organisation, a member of a seniors organisation and a real estate agent. The interview with the developer is conducted as this profession can influence the housing situation of the target group, both the dwelling as well as the neighbourhood. The municipal policymaker is interviewed to gain more insight into the public perspective regarding instruments to enhance the willingness to move of owner-occupiers aged 55 to 75. The interview with the person working in a healthcare organisation is conducted due to his personal contact with the target group and his relation with their dwellings, with regards to health issues. The person working in a social welfare organisation is interviewed due to similar reasons as the employee of a care organisation; they are both closely related to the target group. The focus of the care worker is on the characteristics of the dwelling while the social welfare worker is more focused on the characteristics of the neighbourhood. The interview with the member of a seniors organisation is conducted, as such person represents the interests of the complete target group. The real estate agent is interviewed as he is strongly involved in the process of relocation in the Netherlands. Five of the six experts which have been interviewed are direct or indirect related to the Langer Thuis Akkoord. The interviews are done based on a Dutch interview protocol. This interview protocol is based on the results of the literature study and the data analysis. The interviewees have been asked about the willingness to move of the target group, how this can be changed and how the instruments as developed in chapter 3 can influence the willingness to move. A translation of the interview protocol can be found in Appendix C.

The codes which are used in the analysis of the interviews can be seen in Table 13. The predetermined codes are based on the questions of the interview protocol. These predetermined codes can be divided into four different groups. The first group is about the personal characteristics of the target group and the different age groups. These codes correspond to the second question of the interview protocol. The second group is about the willingness to move and the difference between pull or push factors. These codes correspond to the third, fourth and fifth question of the interview protocol. The third group is about the instruments. These codes correspond to the fifth to tenth questions of the interview protocol. The fourth group contains clarification features and does therefore not correspond to specific questions. The new codes are based on new information coming up from the interviews. These codes can be clustered into three different groups. First of all, a group related to the evaluation of the instruments. This group contain the elements on which the instruments are assessed: effectiveness, efficiency, and ethics. Secondly, a group about the experts' perspective. During the analysis of the interviews, it became clear that the perspective of the

experts has a significant influence on how they approach questions and how they view possible instruments. The experts went beyond the three earlier mentioned E's. They also mentioned other aspects of the instruments, like the implementation level, who is responsible and if instruments should be used together. Thirdly, a group with general assessment elements. These codes were added to make it possible to do some quick analysis.

0	odes
Predetermined	New
Personal characteristics	Effectiveness
55-65	Efficiency
65-75	Ethical
Willingness to move	Experts' perspective
Push factor	Diversity
Pull factor	Implementation level
Instrument	Integral approach
Instrument related to push	Responsibility
Instrument related to pull	Negative
Transaction costs of relocation	Positive
Evaluation current situation	Proactive
Evaluation new situation	Reactive
Dwelling	
Neighbourhood	
Physical	
Social relations	
Financial	7

Table 13. Codes used for the analysis of the interviews with the experts

In this chapter, first the perspective of the experts on the target group and their willingness to move is analysed. Thereafter, the various instruments as developed in chapter 3 will be analysed based on the interviews with the experts after which more specific instruments will be developed. This chapter ends with a conclusion about which instruments can be effective, efficient and ethically correct in enhancing the willingness to move of owner-occupiers aged between 55 and 75.

### 5.1 Experts' perspective

Each of the different experts has their own perspective on the target group and on possible instruments which can influence the willingness to move of the target group. This is partly due to their professional background, but it is also influenced by their personal characteristics. For example, the municipal policymaker works primarily with multiple different experts while the person working at the welfare organisation works mainly with elderly who experience problems. The person working at a welfare organisation mentioned the following: "Ninety per cent of my people are people with something wrong with them .... They are rarely people who come in fresh and fruity<sup>3</sup>" and the real estate agent mentioned with regards to the financial situation of the target group: "But that is also because, of course, we see the people who can afford it.<sup>4</sup>" An example of personal characteristics which influence the perspective of a person is prior experience. One of the interviewees lived in Sudan for his work, which made him positively appreciate different cultures in a neighbourhood. Another

<sup>&</sup>lt;sup>3</sup> "Negentig procent van mijn mensen zijn mensen die iets mankeren. .... dat zijn zelden mensen die helemaal fris en fruitig komen"

<sup>4 &</sup>quot;Maar dat komt ook omdat wij natuurlijk, wij zien natuurlijk de mensen die het kunnen betalen."

interviewee had a nationality other than Dutch. Several of those interviewed are also in the same age range as the target group. Another example is how people look at the influence of the state and civil liberties. One of the experts mentioned the following about citizen's rights: "Owner-occupiers buy and live in their own homes. Their dwellings are their own property and in principle, if someone wants to live there until they die, that is it. The choice is of course up to that person themselves that is not up to the government....<sup>57</sup> The care worker also mentioned "In the Netherlands, possession is sacred, property is sacred. You are not allowed to touch it. <sup>67</sup> The political climate is an influential element anyway, as will become clear in the following subsections.

## Experts' perspective on the characteristics of owner-occupiers aged between 55 and 75

The different backgrounds of the experts ensured different views on the characteristics of the target group. Most of the experts mention the diversity of the target group. According to the member of the seniors organisation: "The most important characteristic is the diversity. The target group is equal, but certainly not the same. That does not make it any easier to take measures for them?". The real estate agent formulated it as follows: "But I think 100 people. Then you get 100 stories about why they want to stay in that neighbourhood or not and why they go back to the city and what attracts them. But I think it's much more diverse than what you and I come up with.8" Examples of such differences are the health status, but also the preference for social interaction. There is also a difference in the degree of proactivity of the target group. Part of the target group is proactive: "There are people who, so to speak, as soon as they reach retirement age, are still thinking about how they are going to organise and spend the third stage of their lives, and these are generally the people who move in time.9" There is, however, also a part of the target group who is reactive: "Generally speaking, they do not look enough at what they can still do. And how that might develop and what is appropriate for that. And yes, that's where they stay. The process of getting older is often accompanied by the gradual loss of skills and capabilities, and this is then not properly recognised.<sup>10</sup>" The developer referred to the fact that the target group is at the top of Maslow's pyramid. Therefore, they do not move due to basic necessities of life, but it is about selfdevelopment, about showing who you are. The care worker called it the hardest target group there is: "The target group is intelligent, well-off and doesn't want to dance to the tune of the government or cooperatives or whatever. 11"

There are, however, also some important differences in the perspectives of the experts. One of the elements that is seen differently, is the financial situation of the elderly. According to the member of the seniors organisation, the financial situation of the target is not good as it seems. Although they may have an excess value of their property, their income is under

<sup>&</sup>lt;sup>5</sup> "Mensen die kopen een woningen dus het is een eigen woning. Het is eigen bezit en in principe als iemand daar wil blijven wonen tot tot aan zijn dood is. Dat is dat de keuze natuurlijk aan die persoon zelf is dat niet aan de overheid ....."

<sup>&</sup>lt;sup>6</sup> "In Nederland is bezit heilig, eigendom is heilig. Maar dat is. Dat daar mag je niet aankomen."

<sup>&</sup>lt;sup>7</sup> "De doelgroep is gelijkwaardig, maar zeker niet gelijk. Dat maakt het ook niet makkelijker om daar dus maatregelen voor te nemen."

<sup>&</sup>lt;sup>8</sup> "Maar ik denk 100 mensen. Dan krijg je 100 verhalen over waarom ze in die wijk willen blijven wonen of juist niet en waarom ze teruggaan naar de stad en wat ze dan zo aantrekt. Maar ik denk dat het veel diverser is dan wat jij en ik bedenken."

<sup>&</sup>lt;sup>9</sup> "Daar zijn de mensen die bij wijze van spreken zodra ze tegen het pensioen lopen, die zijn er nog bezig met van hoe gaan we eigenlijk die derde levensfase inrichten en doorbrengen, en dat zijn ook over het algemeen de mensen die op tijd verhuizen."

<sup>&</sup>lt;sup>10</sup> "Dat is over het algemeen dat ze te weinig kijken naar wat ze nog kunnen. En hoe dat zou kunnen ontwikkelen en wat daar passend bij is. En ja, daar blijven ze gewoon zitten. Het proces van het ouder worden gaan vaak gepaard met het geleidelijk aan verliezen van van vaardigheden en en mogelijkheden, en dat dan niet goed onder ogen. En dan hebben ze niet op tijd maatregelen."

<sup>&</sup>lt;sup>11</sup> "De doelgroep is intelligent, beschikt over veel vermogen en Uhm wenst niet naar de pijpen van de overheid te dansen of cooperaties of wat dan ook"

pressure in the long term. The municipal policymaker, the real estate agent and the care worker assume that the target group have a little more to spend. Although the care worker mentioned that the target group is well-of, he also mentioned: "Yes, they have money to arrange it properly. It is just that they don't want to spend too much money on it.<sup>12</sup>" and "They are asset rich but very poor. Yes, asset rich, because that is where the wealth is.13" Another debatable element is the digital competence of the target group. The municipal policymaker and the person working at a welfare organisation are doubting their competence while the developer is convinced of the competence of the target group. The experts themselves are also aware of the different perspectives. When talking about the implementation of a senior real estate agent for owner-occupiers the municipal policymaker mentioned the following: "We are thinking about it, and some of the parties of the Langer Thuis Akkoord are also in favour of it and are enthusiastic about it. But some of them also say that older owneroccupiers, you know, they can just manage on their own. Or else they have help from their network. So they don't really need it. But I think it would be interesting to investigate this further. 14" The difference in perspective about the degree of dependency of the target group also emerges from the different interviews. Some experts (municipal and developer) mention that the target group is used to make choices, while other experts (welfare organisation) emphasize the dependency of the target group. However, the welfare organisation worker also mentioned that the target group may be dependent but it wants to be independent.

### Experts' perspective on the difference between 55-65 and 65-75

According to the experts, there are differences between the younger part of the target group and the older part of the target group. However, none of the experts pointed towards significant differences between these age groups. The younger part of the target group is characterised as vivid. According to the real estate agent, the children of this target group recently left the house, but they feel too vital to go to an apartment. The vitality of the younger part is also mentioned by the care worker. The municipal policymaker mentioned the different phase the younger part is going into. Around the age of 65, people stop working and retire. Therefore, the municipality makes a difference between residents aged below or above 65. However, the developer pointed towards the fact that part of those aged between 65 and 75 are still working.

The experts also mention some small differences in the housing situation of the younger and the older part of the target group. On average the younger target group lives in single-family houses in (sub)urban areas. They also have quite a big house and a garden. This part of the target group moves to all different types of projects. The real estate developer mentioned that this is not the case for the older part of the target group. These residents tend to move to newly built flats. The real estate developer gave the example of 'Prinsenpark' as a project to which many owner-occupiers aged between 65 and 75 are moving.

### Experts' perspective on the willingness to move of the target group

About the willingness to move of the target group the experts mention several factors that increase the willingness to move. The municipal policymaker mentioned push factors of the dwelling, especially size, and pull factors of a new location as the most important reasons for the younger part of the target group to move. With regards to the older part of the target

<sup>12 &</sup>quot;Ja, ze hebben geld om het goed te regelen. Het is alleen maar ze willen er niet teveel geld aan uitgeven."

<sup>&</sup>lt;sup>13</sup> "Die zijn steenrijk, maar straatarm. Ja ja, steenrijk, want daar zit het vermogen in."

<sup>&</sup>lt;sup>14</sup> "We zitten er wel over na te denken en een deel van de partijen uit de langer thuis akkoord die ziet het ook zitten en is daar ook enthousiast over. Maar een deel daarvan zegt ook van oudere kopers of kopers weet je wel, die redden zichzelf gewoon wel. Of anders hebben ze hulp vanuit hun netwerk. Dus die hebben daar niet zo'n behoefte aan. Maar ik denk zelf dat het nog wel interessant is om het echt verder te onderzoeken."

group, she mentions push factors related to health as the most important reason. The person working at a welfare organisation and the real estate agent also mentioned health-related factors as the most important reason to move. In addition to health factors, the welfare worker also mentioned the type of dwelling, social relations, the proximity of facilities and services. The care worker also mentioned health-related factors as a reason to move, but also mentioned pull factors as familiar environment, like-minded people, facilities and services.

Factors reducing the willingness to move of the target group are Satisfaction with the dwelling, satisfaction with the neighbourhood, existing social relations. More specific reasons are getting rid of things and not having a garden anymore. The developer formulated it as follows: "Those senior citizens already have a roof over their heads. So that is not the primary necessity of life. They also often live in an environment they know. It's the safety that's often organised to some extent. They have a few buddies in the neighbourhood they can turn to. So why would they move?\(^{15}\)" The person of the welfare organisation points in particular to the process of relocation. The financial part and the process of packing the goods can be too complicated for the target group. Multiple experts also mention external factors as reasons why the elderly are not moving to a new location. There might be a willingness to move, but there are no suitable alternatives. The real estate agent mentioned the following about this: "Well, look, the problem is often that if they don't want to buy something back, then they have to be able to buy just in that project at the location they want and that is often quite difficult. Those people may be latently looking. But either the offer is not there, or they don't get in at that moment. Or they have to overbid there too.\(^{16}\)"

The member of the seniors organisation, the developer and the person working at a welfare organisation all mention the importance of the awareness phase with regards to the willingness to move. The developer formulated it as follows: "We notice that this is a target group that, when they choose a new plan, invests a lot of time and energy in it. So they make a very conscious choice. Senior citizens often take about twenty months from an idea to its implementation.<sup>17</sup>" The welfare worker mentioned the following: "...saying goodbye to the place where someone has lived with another man, where all the memories are still there, is really quite a process just to get used to the thought of moving.<sup>18</sup>"

### Experts' perspective on the implementation of instruments

The perspective of the experts also influences how the instruments should be implemented and who should be responsible for the implementation of these instruments.

The member of the seniors organisation and municipal policymaker doubt the effectiveness of general instruments. Almost all of them mention that, at least in some cases, customisation is needed. The developer gave as an example the concept of co-creation. However, the

<sup>&</sup>lt;sup>15</sup> "Die senioren, die hebben namelijk al een dak boven hun hoofd. Dus dat is niet de primaire levensbehoefte. Ze kennen wonen ook vaak in een omgeving die ze kennen. Het is die veiligheid, dat is vaak wel enigszins georganiseerd. Ze hebben wel een paar maatjes in de buurt waar ze terechtkunnen. Dus waarom zouden die verhuizen?"

<sup>&</sup>lt;sup>16</sup> "Nou ja, kijk, het probleem is vaak dat ze niet als ze iets aan iets terug willen kopen, dan moet ze net in dat project moeten ze maar kunnen kopen op de locatie waar ze willen dat dat vaak vrij lastig is. Die mensen zijn misschien wel latent op zoek. Maar of het aanbod is niet, of ze komen er niet tussen op dat moment. Of ze moeten daar ook overbieden."

<sup>&</sup>lt;sup>17</sup> "Wij merken dat dit een doelgroep is die, als ze de keuze maken voor een nieuw plan, daar ook best veel tijd en energie in steken. Dus zij maken heel bewust een keuze, had jou volgens mij al eens vertelt, senioren nemen vaak ongeveer twintig maanden de tijd om van een idee tot een plan te komen."

<sup>18 &</sup>quot;Afscheid nemen van de plaats waar iemand met een ander heeft gewoond, waar alle herinneringen nog liggen, is echt een heel proces, alleen al om te wennen aan de gedachte aan verhuizen."

member of the seniors organisation also mentioned the costs of all different tasks and instruments.

Most of the experts also stress the importance of an integral approach. Stakeholders related to housing, care and welfare should work together with regards to the relocation of owner-occupiers aged between 55 and 75. Multiple experts mention the Langer Thuis Akkoord as an excellent example of how this cooperation can be shaped.

Especially the member of the seniors organisation mentioned the importance of the level of the neighbourhood when developing instruments to enhance the willingness to move of the target group. At this level, the citizens feel responsible. The member of the seniors organisation formulated it as follows: "I think strongly in the district and neighbourhood level because that is where the involvement of people with their environment lies.<sup>19</sup>" The welfare worker, care worker and real estate agent also mention the importance of the neighbourhood with regards to the willingness to move of the target group. The real estate agent mentioned: "People are creatures of habit. They want to go to the same supermarket. They want to go to the same General Practitioner. If you ask people of that age about General Practitioners, for example, if they have to make that switch from one neighbourhood to another, they often think it's one of the worst things. <sup>20</sup>"

Based on the experts perspective on the specificity of the instruments and the level of implementation, different actors have different responsibilities. When the experts plead for a holistic approach, multiple different stakeholders are responsible. For example, the municipal policymaker mentioned the responsibility of the municipality to make other parties aware of the ageing of the population. The municipality does not only increases awareness by other parties, but it also actively steers other stakeholders. The care worker mentioned the following about responsibility "Who is going to arrange the financing? The market will do that.<sup>21</sup>" In keeping with the current liberal climate, he leaves the responsibility to the market.

### 5.2 Instruments related to push factors

Instruments related to push factors are a dilemma for the experts. The experts differ on whether such instruments will work and whether it is ethically correct. The municipal policymaker formulated it as follows: "I don't think you can and will easily apply this in practice........ I just think that, if you look at it kind of ethically, it is rather strange.<sup>22</sup>" The care worker formulated as follows: "Why should you penalise people who have spent a lifetime saving for their house and know that in retirement I have very low living costs? Why punish them?<sup>23</sup>" He thinks that such instruments can work but should be used only if there are suitable alternative dwellings. The member of the seniors organisation and the real estate agent think in certain cases instruments related to push factors can work.

Especially with regards to financial inducements, there is a disagreement between the experts. The member of the seniors organisation mentioned the following: "Look, because many parents look at their financial picture and if there are changes to be made and we can

<sup>19 &</sup>quot;Nou, ik denk ik denk sterk in de wijk en buurtniveau, omdat daar toch de betrokkenheid van de mensen bij hun omgeving ligt" 20 "Mensen zijn gewoonte dieren. Ze willen naar dezelfde supermarkt. Ze willen naar dezelfde huisarts. Als je mensen van die leeftijd vraagt over bijvoorbeeld huisartsen, als ze die overstap moeten maken van de ene wijk naar de andere, vinden ze vaak één van de ergste dingen."

<sup>21 &</sup>quot;Hoe gaat de financiering, regelen dat wie mensen opbelt? Maar dat doet de markt."

<sup>22 &</sup>quot;Nou, wat mij betreft niet nee. Dat vind ik gewoon. Als jullie, we een soort van ethisch kijkt, best wel gek."

<sup>&</sup>lt;sup>23</sup> "Waarom zou je mensen die een leven lang gespaart hebben, van het huis bewust gekozen hebben toen de tijd om zijn huis te sparen daar krom voor gelegen hebben en weten dat als ik met pensioen ben dat ik heel lage woonlasten heb. Waarom zou je die straffen?"

find a solution, so to speak, by moving. Then they will certainly do so.<sup>24</sup>" However, he also mentioned: "....I think people have a natural tendency when under pressure, to dig in their heels.<sup>25</sup>" The real estate agent mentioned the following about financial inducements: "It is slippery ice. The quality of life relative to your budget. Then the richer people can hold out longer than the poorer people, so you create even more inequality. And maybe even discriminate. Is that. Yeah, I don't know if we should want that, but it could work.<sup>26</sup>" He, however, does wonder if it is possible at all. The care worker thinks that a financial push factor can work. He also gave the example of the window tax at the beginning of the 20th century, which caused many windows to be bricked up. He is, however, not sure about the ethical correctness of the instrument: "But are you talking about the elderly, single people who have very low living costs or no living costs at all, who have their own home? Why should they move to an expensive house? He only does it when there is a capital tax on the old house and said: Yes, that money just melts away. Yes, I have to pay more and more for the value of that house. This is very political breaking because it says why are you punishing these people?27" Especially with the current liberal political climate, this is very difficult. However, such instruments should be used in combination with instruments related to pull factors. The care worker formulated it as follows: "What always works is the carrot and the stick.<sup>28</sup>" In addition to the stick of financial inducement, the care worker also mentioned the reduction or the removal of care at home as a possible instrument to increase the willingness to move of the target group. However, he doubts the efficiency of such an instrument as it will significantly increase the costs for the government.

In some cases, the benefits of relocation may be so high as to outweigh the ethical concerns about instruments based on push factors. An example is the refusal of a WMO<sup>29</sup> application because the costs of the adaptation are (relatively) too high. However, the municipal policymaker doubted the effectiveness of such efforts as she stated: "Owner-occupiers often have some money to spend and think, well, if the municipality doesn't want to pay, I'll just pay it myself. And then they arrange the home adaptations themselves.<sup>30</sup>"

In conclusion, there is little support among the experts for this type of instrument. The main objections are of an ethical nature. In most situations, the advantages of such instruments, higher residential mobility of the target group, do not outweigh the disadvantages, intrusion into a person's life. Additionally, the experts doubt the effectiveness of such instruments. Depending on the personal characteristics of a resident, and in combination with pull related instruments, it could work. A remark is that, with the exception of the care worker, the experts only mentioned financial push factors as a possible instrument to increase the willingness to move of the target group.

<sup>&</sup>lt;sup>24</sup> "Kijk, want veel ouders die kijken naar hun hun financiële plaatje en als daar veranderingen in in in aangebracht worden en wij kunnen dus bij wijze van spreken door verhuizen daar een oplossing voor vinden. Dan zullen ze dat zeker doen."

<sup>&</sup>lt;sup>25</sup> "....ik denk dat mensen van nature de neiging hebben als bij wijze van spreken in onder druk gezet worden met de hakken in het zand te zetten."

<sup>&</sup>lt;sup>26</sup> "Het is glad ijs. Mijn kwaliteit van leven ten opzichte van je budget is, dan kunnen de rijkere mensen kunnen het langer volhouden dan de armere mensen, waardoor je nog meer ongelijkheid gaat creëren. En misschien wel gaat discrimineren zelfs. Is dat. Ja, ik weet niet of we dat moeten moeten willen, maar het zou wel...."

<sup>27 &</sup>quot;Maar heb je het over de ouderen, alleenstaanden die heel lage woonlasten heeft of geen woonlasten van een eigen woning? Waarom zou die naar een dure woning moeten verhuizen? Dat doet ie alleen op moment dat er dus vermogen belasting wordt gelegd op de oude woning en gezegd: ja, dat geld smelt gewoon weg. Ja, ik moet steeds meer gaan betalen voor de waarde van die woning. Daar wordt, en dat is heel politiek, heel brisant, want daar wordt gezegd tsjonge jonge waarom straf je die mensen."
28 "Wat altijd werkt, is de wortel en de stok."

<sup>&</sup>lt;sup>29</sup> WMO = Wet maatschappelijke ondersteuning. This is a Dutch municipal act to give support at home

<sup>&</sup>lt;sup>30</sup> "Kopers eigenaar bewone's die is, zijn vaak financieel, hebben wat geld te besteden en denken al, nouja als de gemeente niet wil betalen. Dan betaal ik dat gewoon zelf. En regelen die woningaanpassingen gewoon zelf."

### 5.3 Instruments related to pull factors

Three of the six experts mentioned the temptation of the target group as essential concerning increased willingness to move. In chapter 3, four different groups of pull factors have been discovered: related to lifestyle, related to the dwelling, related to the neighbourhood, and related to social relations.

The developer in particular pointed to the seduction of the target group with pull factors related to the lifestyle of the target group. As she mentioned earlier, the target group is at the top of the Maslow pyramid, which means that showing who you are is important for them. Therefore, we should look at the tourism sector to seduce the target group. The care worker also mentioned factors related to lifestyle as an important factor to pull the target group.

With regards to the dwelling, multiple experts mentioned building suitable houses for the target group. There are, however, differences about what this suitability means. The member of the seniors organisation mentioned the following characteristics: apartment and three rooms with a possible additional room. The importance of three rooms was also mentioned by the developer. She also mentioned: ground floor flat, architectural style, keyless entry but also elements related to sustainability as the EPC and solar panels. The municipal policymaker mentioned: ground floor flat, qualitative good outdoor space, space to meet and space for storing mobility scooters. The care worker mentioned: two rooms with a possible additional room, a larger shower, and enough storage space. He described the perfect situation as follows: "Beautiful, spacious ground-floor flats. Bit of a luxury look, nice balconies, put nice like-minded people together, same lifestyle. Select on that. Ideal, it makes money. People satisfied, everybody satisfied.31" Both the developer as the welfare worker question the effect of home automation as an instrument to pull the target group out of their current dwelling. The real estate agent pointed towards the diversity of the target group, which ensures that there is no generic suitable dwelling. He, however, also mentioned that the supply of dwellings does not match the demand.

With regards to the neighbourhood, the municipal policymaker mentioned accessibility as an important aspect. The developer mentioned: proximity of public transport, the proximity of shops and the proximity of green. The welfare worker also mentioned the proximity of shops and the proximity of green as pull factors. However, all these pull factors are mentioned as indirect consequences of the location where houses are built. Only the developer gave more specific examples of instruments with regards to pull factors in the neighbourhood. One such example was the improvement of routes from a particular project to nearby parks and the city centre. However, the real estate agent mentioned the fact that facilities and services are never far away in the municipality of Rotterdam.

Pull factors related to social relations are mostly mentioned as a result of the characteristics of the new dwelling or the new neighbourhood. Collective forms of living are mentioned (by senior, municipal and developer) as an example due to which the target group can be pulled out of their current dwelling. Both the municipal policymaker as the developer mentioned a collective garden and a room where activities like Christmas drinks or New Year's receptions can be organised as examples of characteristics that create this collective form of living. Collective living is not always the same as living with like-minded people. The developer gave an example about a project in which a deliberate choice was made to combine younger and

<sup>&</sup>lt;sup>31</sup> "Prachtige, ruime gelijkvloerse appartementen. Beetje Luxueuze uitstraling, mooie balkons, mooie gelijkgestemde mensen bij elkaar zetten, zelfde levensstijl. Zet het daar neer. Daarop selecteren. Ideaal, ja, levert geld op. Mensen tevreden, iedereen tevreden."

older residents. The real estate agent also thinks that a combination of younger and older residents should work, as it enhances interaction. The care worker doubted the effectiveness of such collective forms of living. According to him, only a small part of them find it interesting. Besides these indirect ways, there are also more direct ways of pulling the target group with regards to social relations. The developer gave several examples of how this can be done. One example she mentioned was of two women who lived in a certain neighbourhood, and their attention was drawn to a new project in the neighbourhood. At that moment they were not exactly neighbours. But when buying a dwelling in the project, they could live close to each other again. In consultation with the developer, they got a priority status, in return for making their story known. The main reason they moved is the fact that they could live together. Keyword in this is cocreation, which can be seen as an instrument related to both pull factors as well as the evaluation of the new situation.

Besides the four groups discovered in chapter 3, the experts also mentioned some additional factors which can be used to pull the target group out of their current dwelling. A financial bonus when relocating can for example work for owner-occupiers who have a lower income. The welfare worker mentioned the presence of facilities related to health as a possible instrument to pull the target group. This was also recognized by the care worker: "The carrot can only be that pleasant living environment with care close at hand. "2" and "But it is very nice that care is close by. That is a very important aspect, care close by, 24-hour care, well-organised care, good arrangement. "He, however, also stated that there are currently almost no dwellings where people can live with high levels of care. Another possible instrument that was mentioned by the care worker is an arrangement of dwelling, care and pension. The government has separated these elements to reduce the costs. However, the care worker stated: "People realise you have a pension, a dwelling and you need that care. How about we make something that suits you. What do you like within the range of your possibilities? That is the solution."

In conclusion, according to the experts, instruments related to pull factors are essential to increase the willingness to move of the target group. Eight different instruments are distinguished with regards to pull factors: suitable dwellings, collective forms of living, financial bonus, care at home, arrangement of dwelling, care and pension, social arrangements, suitable neighbourhoods and the complete experience.

### 5.4 Instruments related to the transaction costs of relocating

According to the experts, instruments related to the transaction costs of relocating are primarily effective for specific target groups. The member of the seniors organisation formulated it as follows: "I think that for people with limited resources it can certainly be a solution. But, for the average senior citizen who is a bit better off, it's less of a factor.<sup>35</sup>" The municipal policymaker sees more potential in this type of instruments. She mentioned: "Yes, I think that is still rare, but I do think that it is something that has a lot of potential. Because that is something I hear a lot from people. That they are just really not looking forward to the process. Moving is a stressful event for anyone, of course.<sup>36</sup>" Examples of matters in which

<sup>&</sup>lt;sup>32</sup> "De wortel kan alleen maar zijn: die prettige leefomgeving met de zorg dichtbij."

<sup>&</sup>lt;sup>33</sup> "Dat is een heel belangrijk aspect zorg nabij 24uurs zorg, zorg goed georganiseerde zorg, goede arrangement."

<sup>&</sup>lt;sup>34</sup> "Mensen besef je hebt een pensioen op je huis en je hebt die zorg nodig. Als we nou iets gaan maken wat bij je past. Wat jij fijn vindt binnen jouw mogelijkheden? Dat is de oplossing"

<sup>35 &</sup>quot;Ja, ik, ik denk dat dat voor mensen met een beperkte mogelijkheden geldt. Op dat gebied kan er zeker een oplossing zijn. Maar voor de gemiddelde senior die toch wat beter in zn inkomen, hoe zit speelt, speelt dat minder een rol."

<sup>&</sup>lt;sup>36</sup> "Euh, ja, ik denk dat dat nog weinig gebeurt, maar ik denk wel dat dat een heel soort van kansrijk iets is. Want dat is wel iets wat ik heel veel hoor van mensen. Dat het gewoon heel erg opzien tegen het proces. De praktische kant verhuizen sowieso best wel een stressvolle gebeurtenis natuurlijk voor iedereen."

the target group can be helped are getting rid of stuff, doing chores and interior advice. The help can be more than just practical matters, it is also about social interaction. The municipal policy mentioned: "Sometimes it is just nice for someone to have a personal point of contact. That they can call someone to ask a few questions.<sup>37</sup>" But the municipal policymaker also noted that these instruments are primarily effective for specific target groups, for example, elderly who do not have children who help them. This is also recognized by the developer, who encountered questions about the process if, for example, a partner had died. She, however, noticed several problems with regards to the finance and legal aspects of the relocation process. About the financial part she mentioned the following: "I recently approached Rabobank again and said yes, at the moment you are providing excellent mortgages, but when the economy slows down, you are going to let this target group of senior citizens down with a vengeance. They often have their own home and sometimes even a second home elsewhere or a boat, but you don't grant them a bridging mortgage. So why don't you think carefully about a financing concept that helps senior citizens instead of making it so difficult for them to take that step?38" Because the welfare worker has a lot to do with lonely elderly people, she pointed towards the importance of social support as a means to increase the willingness to move. Social support can give help in making choices, eliminate legal or physical barriers, but it can also reduce the costs of relocating by for example finding cheap moving services. Such support can also help with the digital aspects of relocating. Helping people with the digital world will not only reduce transaction costs of relocating, but it can also influence their evaluation of the new situation, as it gives access to more information about the possibilities of relocation. The real estate agent also mentioned the preference of the target group to have physical contact and the negative influence of digital contact on their willingness to move.

An instrument that is also mentioned by the experts that can be related to the transaction costs of relocation is priority rules. The developer gave the example of the two women who were given priority in return for telling their story. Both the municipal policymaker and the care worker referred to the priority rules which are used by housing associations. These associations can label dwellings for certain target groups, which increases the possibility to get this dwelling, reducing uncertainties. The real estate agent formulated as follows: "And then I can imagine all those people thinking, well, if we can qualify for that house more easily, and the more we know about the price we have to pay, then that just might work.<sup>39</sup>" However, the real estate agent doubts the efficiency of such instruments as the price is decisive with regards to owner-occupied dwellings. Additionally, it smacks of (age) discrimination.

In conclusion, the experts believe that reducing transaction costs of relocation can increase the willingness to move of the target group, but they are not unanimous as to how best to help the elderly in this regard. Five different instruments are distinguished with regards to the transaction costs of relocating: Sympathetic ear, good financial arrangements, priority rules, legal help, and basic help.

<sup>&</sup>lt;sup>37</sup> "Soms is het ook gewoon al fijn voor iemand om een persoonlijk aanspreekpunt te hebben. Dat is een keer iemand kan bellen om eens een keer wat vragen te stellen."

<sup>&</sup>lt;sup>38</sup> "Toen heb ik recent bij Rabobank wederom over aangesproken voor ja, op dit moment verlenen jullie prima hypotheken. Maar als het economisch wat minder gaat, dan laten jullie die doelgroep senior ook keihard vallen. Terwijl ze vaak gewoon wel een eigen woning hebben en soms zelfs op een tweede woning elders of een boot of die verlenen jullie geen overbruggingshypotheek. Dus ga nou eens goed nadenken over een financierings concept, waarbij je die senior ook helpt in plaats van het zo moeilijk maakt om die stap te zetten."

plaats van het zo moeilijk maakt om die stap te zetten."

39 "En dan is en dan kan ik me voorstellen dat al die mensen denken van nou, als wij dan gemakkelijker voor die woning in aanmerking komen. En hoe verder we weten welke prijs daar moeten betalen, dan zou dat zomaar kunnen werken."

# 5.5 Instruments related to the evaluation of the existing situation

Increased awareness of the benefits and drawbacks of the current housing situation is one of the most mentioned instruments by the different experts. The municipal policymaker mentioned the following push factors of which the awareness can be raised: maintenance of the dwelling, maintenance of the garden and loss of social relations. The municipal policymaker also mentioned a more proactive approach. As an example, she mentioned sending a letter to residents of which the partner recently died. The intention of this letter should be to help the resident, but it can also be used to enhance their willingness to move by making them aware of the drawbacks of the current housing situation and the benefits of a new situation. According to the welfare worker, the health status is of major importance with regards to the evaluation of the existing situation. This is also recognized by other experts. Awareness of deteriorating health and its influence on the housing situation is an important element.

There are some ethical dilemmas with regards to the increased awareness of existing push factors. The municipal policymaker formulated it as follows: "I find that difficult because then we would actually have to make sure that current image of their neighbourhood is negatively affected, so that they think I'd rather leave here. However, increased awareness about future push factors is something which is less ethically debatable. Similar to instruments related to push factors, the benefits of the instrument is in these cases higher than the possible drawbacks. Relocation can prevent a situation from escalating.

According to the member of the seniors organisation, this awareness should be raised by both professionals, like general practitioners or welfare organisations, and people in the immediate vicinity, like friends and family. The municipal policymaker also points out the importance of family and friends. The care worker also stated the role of the market in educating the target group on how they evaluate.

There are some doubts about the effectiveness of instruments that influence the evaluation of the existing situation. The municipal policymaker mentioned the following: "Look, people don't like getting older. They want to grow old, but they don't want to be confronted with all the shortcomings and all the problems that might come with it. So people don't like to think about that. So they just put it off. Because nobody likes to be confronted with the fact that maybe at some point your health will deteriorate or that your partner will die. So, I don't think it's a good idea to emphasise the negative side. 41" An important remark is, therefore, that this type of instrument should be used in combination with instruments related to the evaluation of the new situation.

In conclusion, instruments related to the evaluation of the existing situation can be effective but are difficult to implement. Three different instruments are distinguished with regards to the evaluation of the current situation: awareness of maintenance, awareness of deteriorating health and awareness of the possible loss of social relations.

### 5.6 Instruments related to the evaluation of the new situation

According to the municipal policymaker, increased awareness of the benefits of a new housing situation is one of the most important types of instruments to enhance the

<sup>40</sup> "Ik vind dat wel lastig, want dan zouden we dus eigenlijk ervoor moeten zorgen dat het dat de huidige woonsituatie voor het huidige beeld van hun wijk negatief beïnvloed wordt, waardoor ze denken dan ga ik hier maar liever weg."

<sup>&</sup>lt;sup>41</sup> "Kijk, mensen vinden het niet fijn om ouder te worden. Ze willen wel oud worden, maar zeg maar niet met alle gebreken en alle problemen die daar misschien bij komen kijken. Dus daar denken mensen niet graag over na. Dus schuiven ze gewoon maar vooruit. Want niemand vindt het leuk om daarmee geconfronteerd te worden dat je misschien op een gegeven moment je gezondheid achteruit gaat of dat je partner overlijdt. Dus het is niet denk ik. Ja, slim om die negatieve kant zo te benadrukken."

willingness to move of the target group. As an example she mentioned a magazine which the municipality of Rotterdam sends to everyone who turns 65. In this magazine, persons are made aware of the fact that they reach a new phase of their life, which may require a new home or a new living environment. This magazine also creates awareness of possible pull factors like the possibilities to live with like-minded people or future-proofing of a ground floor flat. Good information supply is important. The municipal policymaker mentioned the following: "Of course, people can look on Funda, but that's pretty general. And we do have a website for the municipality of Rotterdam: living in Rotterdam. It contains all kinds of information about certain neighbourhoods. What type of neighbourhood is it? What type of people live there? What kind of facilities are there? I think that's good, but I think that for the elderly target group you should be a bit more specific by saying what facilities are there in the neighbourhood. What care organisations are there? Which welfare organisations?<sup>42</sup>" Information about the new situation should contain information about three aspects: housing, care, welfare, but also other facilities and services as the proximity of theatres and parks. This information can be placed on websites but also in flyers or in the previously mentioned magazine. Both the developer and the welfare mentioned the use of social networks. Additionally, private parties as real estate agents and housing associations can be used. The difficulty here is privacy. The welfare worker also mentioned that she personally helped residents with regards to the evaluation of the new situation: "Sometimes we just go out together. Yes, sometimes I take my laptop with me and then I show it as just a picture. And sometimes I just tell a story.43"

Due to different perspectives on the financial situation of the target group, experts also differ on whether the financial aspects of the new dwelling are important. According to the member of the seniors organisation and the care worker, the price is decisive. The member of the seniors organisation gave the following example: "Imagine the situation for a married couple who are going to buy a house and they take a flat which they can afford, but they take a residual mortgage because they have not paid off their mortgage. Then it could be that if the husband suddenly dies, the wife suddenly faces a significant drop in income and has to move again.44" The welfare worker also mentioned the importance of the financial part in the evaluation of the new situation. The possible additional costs combined with less space causes the elderly to be less inclined to move. However, the developer mentioned: "Don't talk about cheap housing now, because I never hear anyone say I want to live cheaply. Everyone wants to live in a nice place where they feel at home. 45" The care worker pointed towards another element of the financial situation: "There's a huge resistance to having one's own house saved up for. There is a great surplus-value on it. Yes, you want to cash in on that. But you don't want to leave that to the government, you don't want to pay that as tax. 46" The developer also mentioned the importance of other elements than the dwelling: "It is about

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<sup>&</sup>lt;sup>42</sup> "Mensen kunnen natuurlijk op Funda kijken, maar dat is toch vrij algemeen. En we hebben wel voor de gemeente Rotterdam ook een website: wonen in Rotterdam. Daar staat ook allerlei informatie op over bepaalde wijken van wat zijn. Wat is het voor een type wijk? Wat voor type mensen wonen er? Wat voor voorzieningen zijn er dus? Dat is denk ik wel mooi, maar ik denk dat je voor de doelgroep ouderen nog iets specifieker zou moeten maken door te zeggen van welke voorzieningen zitten er in de buurt. Welke zorgorganisaties zijn er? Welke welzijnsorganisaties?

<sup>&</sup>lt;sup>43</sup> "Soms gaan we gewoon samen op stap. Ja, soms neem ik mijn laptop mee en dan laat ik het zien als gewoon beeld. En soms vertel ik gewoon een verhaal"

<sup>&</sup>lt;sup>44</sup> "Stel je de situatie voor een echtpaar gaan staan verhuizen en die nemen dan een appartement wat ze goed kunnen betalen, maar daarvoor nog een resthypotheek nemen omdat ze ja eigenlijk hun hypotheek niet afgelost hebben. Dan kan het zijn als de man dan plotseling overlijdt dat dat de echtgenote plotseling een behoorlijke terugval in inkomen geconfronteerd wordt en dan weer moet verhuizen."

<sup>&</sup>lt;sup>45</sup> "Heb het nu niet over goedkope wonen, want ik hoor nooit iemand die zegt ik wil goedkoop wonen. ledereen wil op een leuke niek waar die zich thuis voel"

more than just the house and the price. We talk to those people about sustainability, partial mobility, about smart applications in homes. That's actually the experience we're giving them.<sup>47"</sup> The person working at a welfare organisation also mentioned the importance of the relative evaluation of the new situation. Actual numbers are less relevant if a person is convinced that for example, a grandchild can stay over or that they can get rid of their things.

In conclusion, according to the experts, instruments related to the evaluation of the new situation are essential to increase the willingness to move of the target group. Five different instruments are distinguished with regards to the evaluation of the new situation: awareness of a new phase in one's life, awareness of the possibilities of the new dwelling, awareness of new care possibilities, awareness of new welfare possibilities, insight in the (new) financial situation.

# 5.7 Development of instruments

From the interviews with the experts' 23 instruments are distinguished, as can be seen in Figure 32. Based on the literature review, the data analysis and the interviews with the experts the instruments are analysed on their efficiency, their effectiveness and their ethical correctness. Efficiency is determined based on time of implementation, financial cost and the level of specification of the instrument. A conclusion with regards to the efficiency is drawn based on the literature review, data analysis, and the perception of the experts. Effectiveness is about to what extent the instrument works. A conclusion with regards to effectiveness is directly related to the literature study, the data analysis and the interviews with the experts. The ethical aspect of an instrument is based on its consequences for the individual and society as a whole. A conclusion with regards to ethics is drawn on the perception of the author, based on the literature review and the data analysis, and the perception of the experts. The results of this analysis can be seen in Figure 33. The green colour means that the subject is positive, the orange colour means that there is no clarity on the subject, and the red colour means that the subject is negative. For example, the instrument of financial inducement is thus expected to be effective, the effectiveness of the instrument is unsure, and it is ethically objectionable.

Туре	Instrument	Effect Literature	ctivene Data	SS Experts	Literature	Ethical Data	Experts	<b>Ef</b> Literature	ficiency Data	<b>/</b> Experts
Push	Financial inducement Removal of care at home									
Ħ	Suitable dwellings Collective forms of living									
Pull	Financial Bonus Care at home									

<sup>47</sup> "Waarbij het over meer dingen gaat dan alleen de woning en het bedrag. Wij praten met die mensen ook echt over duurzaamheid. Over deel mobiliteit. Over smart toepassingen in woningen. Ja. En dat is eigenlijk dus het stukje beleving meegeven."

	Arrangement of			
	dwelling, care			
	and pension			
	Social			
	arrangements			
	Suitable			
	neighbourhoods			
	Complete			
	experience			
	Sympathetic			
	Ear			
ts	Good financial			
Fransaction costs				
٦	arrangements			
읉	Priority			
sac	rules			
ans	Legal			
Ë	Help			
	Basic help e.g.			
	packing stuff.			
<b>=</b>	Awareness of			
- je	maintenance			
ı	Awareness of			
) u	deteriorating			
Evaluation current	health			
na	Awareness of			
val	possible loss of			
ш	social relations			
	Awareness of			
	new phase in			
	life			
	Awareness of			
≥	new dwelling			
ne	possibilities			
on	Awareness of			
ati	new care			
Evaluation ne	possibilities			
E V.	Awareness of			
	new welfare			
	possibilities			
Figure 33	. Ansight in theeffici	ncy, effectiveness and ethi	cal correcteness of the diffe	rent instruments based
on the lit	•	analysis and the interview	with the experts.	
	situation			
D		C		

Based on this analysis a first selection can be made about which instruments can influence the willingness to move of the target group. The most important criterium is the effectiveness of an instrument. If an instrument does not work the ethical correctness and efficiency of an instrument becomes irrelevant. Therefore, an instrument that is coloured red with regards to effectiveness is excluded. However, two remarks have to be made. First of all, the perspective of the experts can be incorrect. There is a difference between the experts perspective on why the target moves, mostly due to push factors, and how they can be influenced to move, mostly due to instruments related to pull factors and instruments influencing the evaluation of the new situation. Therefore, instruments related to push factors or the evaluation of the current

situation can be more effective than the experts believe. Secondly, the effectiveness is also based on the context of the municipality of Rotterdam. Instruments might be more or less effective in other municipalities with different characteristics. The second criterium for the instruments is ethical correctness. When the instruments have significant consequences for an individual or society as a whole, the increased willingness to move becomes subordinated. This is also the case with regards to efficiency. The (financial) costs of an instrument can outweigh the benefits. As mentioned before the most important criterium is effectiveness, followed by ethical correctness and efficiency. However, the remark stated with regards to the effectiveness of an instrument is also applicable with regards to the ethical correctness and efficiency of an instrument. For example, the experts doubt the ethical correctness of priority rules, but they gave also examples of sectors in which these priority rules were used.

A further selection can be made based on the level of implementation as mentioned by the different experts. As mentioned by the experts, instruments work better when used together. If financial inducements are used, but there are no suitable dwellings the willingness to move will not be increased. Awareness of (negative) elements of the current situation should always be matched with awareness of (positive) elements of the new situation. Similarly, it is not effective to make the target group aware of only one single aspect of the new housing situation.

Based on the selections mentioned above, eight different instruments are developed. The first instrument is suitable dwellings. This instrument creates multiple different pull factors for the target group, related to the dwelling, neighbourhood, social relations and lifestyle. In this study, suitability does not only contain physical aspects. The instrument of suitable dwellings includes the instruments of collective forms of living, possible care at home and the complete experience. Although, it is beyond the scope of this study to research the perfect suitability of a dwelling, with the interviews with the target group more insight is created into which aspects are important. There are some doubts about the efficiency of this instrument as it takes a long time to implement and may be costly, but the experts were unanimous about the effectiveness of this instrument.

The second is the financial bonus. This instrument creates financial pull factors for the target group. In addition to enhancement of the willingness to move, this instrument can also be used as a steering tool. For example, residents who leave a single-family house behind or residents who move to an apartment receive a financial bonus. The financial bonus can be provided directly or indirectly. Those who move can be directly provided by a certain amount of money or indirectly by reducing or removing transfer tax. There are some doubts about the efficiency of this instrument. A small amount may only be effective for a small part of the target group while a bigger amount may become very costly.

The third instrument is an arrangement of care, dwelling and pension. This instrument creates financial pull factors for the target group. As mentioned by one of the experts these elements are, from a financial perspective, the most important for the target group. The pension is the main income of the target group, the care is their main costs, while their wealth is in their dwellings. A new housing situation in which all these elements are optimised can therefore be effective in increasing the willingness to move.

The fourth instrument is financial arrangement which reduces the transaction costs of relocating. This instrument differs from the financial bonus as it does not directly provide residents with money, but it creates opportunities and reduces barriers with regards to the finance of a dwelling. An example is bridging mortgages. Residents might have a lower

income but also a higher valued dwelling. In principle, they have enough money to buy or hire what they need. However, they cannot use their money as it is in their dwelling. This makes relocating difficult as they have almost no financial possibilities. A bridging mortgage can solve this problem.

The fifth instrument is priority rules which also reduces the transaction costs of relocating by creating more certainty. Priority can be given to multiple aspects. For example on age; residents which are older than 55. Another example is the type of dwelling left behind; residents who leave a single-family house behind. Priority can also be given based on social relations; families or friends. These priority rules can be effective in increasing the willingness to move of the target group by reducing uncertainty. In addition to explicit priority rules, one can also look at less explicit forms to ensure that the target group is still outcompeted by other target groups with possibly higher urgency. An example is the system used at the Knarrenhof. Here, a waiting list is used for owner-occupied houses. When a house becomes available, it goes to the first person on the waiting list. Since the older target group has a lower priority than, say, families, this ensures that the homes go to the target group. There are some doubts about the ethical aspects of this instrument. The difficulty is (age) discrimination.

The sixth instrument is process help. This instrument intends to reduce the transaction costs of relocating. This help should include multiple different elements which are part of the relocation process, for example, legal aspects. But this process help also includes the instrument of a sympathetic ear. Clustering of these elements will ensure higher effectiveness and efficiency. An example is the senior real estate agent. As mentioned before, the senior real estate agent is currently only used by tenants and housing associations.

The seventh instrument is awareness of the current situation. Raised awareness can reduce satisfaction with a dwelling. The medium which raises this awareness should contain all the different elements of the current situation and why such a new environment is or may become inappropriate. Clustering will ensure higher effectiveness and efficiency of the individual instruments as awareness of maintenance, awareness of deteriorating health and awareness of the possible loss of social relations. An example is the 65+ magazine used by the municipality of Rotterdam.

The eighth instrument is awareness of the new situation. Similar to the instrument related to the awareness of the current situation, the medium which raises this awareness should contain all the different elements of the new situation and why such a new environment should be desired. Elements that should be included are a new phase in life, dwelling possibilities, welfare possibilities and care possibilities. The earlier mentioned 65+ magazine is an example of this type of instrument.

#### 5.7 Conclusion

In this chapter, the perspective of experts working in the field of the housing situation of the elderly is analysed and combined with the results of the literature review and the data analysis to examine what instruments can increase the willingness to move of owner-occupiers aged between 55 and 75. Based on the interviews with the experts' 23 different instruments are discovered. These instruments are analysed on their efficiency, effectiveness and ethical correctness. Based on this analysis and the level of implementation as mentioned by the experts, eight different instruments have been developed which are: suitable dwellings, financial bonus, arrangement of care, dwelling and pension, financial arrangement,

priority rules, process help, awareness of the current situation and awareness of the new situation.

# CHAPTER 6 Verification

# 6. Verification of instruments

In this chapter, the instruments as developed in chapter 5 are verified based on interviews with owner-occupiers aged between 55 and 75. The results of the literature review, the data analysis and the interviews with the experts have resulted in the development of eight different instruments. These instruments are verified by doing interviews with 11 individuals. Additionally, the results of the literature review are verified as well. The interviewees are questioned about their willingness to move and how this is or can be influenced by the different instruments.

Moved	recently	Did not move recently			
55-65	65-75	55-65	65-75		
Respondent 4	Respondent 5*	Respondent 3	Respondent 1		
Respondent 8	Respondent 6	Respondent 7	Respondent 2		
Respondent 9	Respondent 10	Table 13. Selection of respo	andents		
Respondent 11		_			

The 11 respondents are selected based on two elements: their age and if they recently moved to a new dwelling. With regards to age, a difference is made between those aged between 55 to 65 and those aged between 65 to 75. With regards to recent relocation, a difference is made between those who moved in the past 5 years and those who did not move in this same period. Due to covid regulations, all interviews are done online or by phone. The interviewees are

contacted using the professional network of the Langer Thuis Akkoord, the social network of the author, and the social networks of the respondents.

The interviews are done based on two interview protocols. One of these protocols is used for those who moved recently, the other one is focused on those who did not move recently. These interview protocols are based on the results of the literature study, the data analysis and the interviews with the experts. This interview protocol is divided into four parts. First, the interviews are asked about their personal characteristics, dwelling characteristics and neighbourhood characteristics. The second part of the interview is about the willingness to move of the respondents. Here lies the biggest difference between the two protocols. Those who did not relocate are asked about their current willingness to move. Those who recently relocated are asked about why they moved to a new dwelling, what aspects ensured that they had a higher willingness to move. The respondents who recently relocated are thus asked about their past willingness to move. Thirdly, the instruments are verified. This part is also different between the two protocols. Those who did not relocate are directly asked about whether and how an instrument would influence their willingness to move. Those who did not relocate are first asked about the concept behind the instrument. For example how they think about finance or financial arrangements. Based on their answers a follow-up question was asked if an instrument of financial bonus or financial arrangement would have influenced their willingness to move. The interview is closed

Codes
predetermined
Age
Marital status
Nationality
Educational level
Income
Health status
Relation with family
Relation with friends
Relation with neighbours
Length of residency
Dwelling size
Dwelling type
Dwellings age
Perception of dwellings
Neighbourhood physical situation
Neighbourhood social situation
Neighbourhood safety
Perception of neighbourhood
Increased willingness to move
Reduced willingness to move
Push factor
Pull factor
Suitable dwelling
Financial bonus
Arrangement of care, dwelling and
pension
Financial arrangement
Priority rules
Process help
Awareness of current situation
Awareness of new situation
Other instrument
New
Co-Creation
Latent desire
New phase of life
Rotterdam

with some concluding questions. As the interviews are semi-structured, the earlier mentioned structure should be seen as an indication. Interviews evolved based on answers given by the interviewees. Therefore, the structure differed with each interview. A translation of the interview protocol focused on those who moved recently can be found in Appendix D. A translation of the interview protocol focused on those who did not move recently can be found in Appendix E. The interviews with the experts are analysed using both an inductive and a deductive approach. The deductive codes are based on the interview protocols. These codes can be divided into 5 groups: personal characteristic, dwelling characteristics, neighbourhood characteristics, willingness to move, and instruments.

This chapter is divided into four parts: introduction, problem, solution and conclusion. First, the characteristics of the interviewee's are analysed. Secondly, the reasons behind the willingness to move or the lack of willingness to move are discovered. Thirdly, the perspective of the target group with regards to the developed instruments are analysed. Finally, some conclusions are drawn about the validity of the developed instruments.

#### 6.1 Characteristics of interviewee's

As has become clear in the earlier chapters the personal characteristics of an individual determine to a large extent their willingness to move and how they experience instruments that influence this willingness to move. In chapter 3 eight different groups of personal characteristics are discovered. The interviewees are analysed with regards to these eight different characteristics. With regards to nationality, educational level and marital status, the group of respondents is quite homogeneous. All respondents are Dutch and except respondent 2, all respondents have a higher educational level. Additionally, only two of the eleven respondents are single. Most respondents have good self-reported health and good social relations. There are also differences between the respondents. The first one is the status of social relations. All respondents mentioned good relations with friends and families and most respondents mentioned good relations with neighbours. However, Respondent 2, respondent 4 and respondent 5 mentioned average or below average social relations with their neighbours. The biggest difference between the respondents is related to income. Respondent 5 earns less than €50.000,- while respondent 7, respondent 8 and respondent 9 earn more than €100.000,-. There are no significant differences between those who recently relocated and those who did not relocate recently.

Compared to the average owner-occupier aged between 55 and 65 or aged between 65 and 75 and living in the municipality of Rotterdam the group of respondents differs on four elements: nationality, educational level, marital status and health. All respondents are Dutch and almost all respondents have a higher educational level, are part of couple of have good health status. Additionally, there are no respondents who earn less than €35.000,-. Due to these characteristics it is expected that the respondents are more influenced by pull factors than push factors.

respondent	Age	Nationality	Education	Income	Marital status	Health	Social relations	Length of residency
Respondent 1	66	Dutch	High	€50.000- €75.000	Couple	Good	Good	25 years
Respondent 2	>65	Dutch	Low	unknown	Single	Good	Average	44 years
Respondent 3	64	Dutch	High	€50.000- €75.000	Couple	Good	Good	35 years
Respondent 4	56	Dutch	High	€75.000- €100.000	Couple	Good	Average	2 years
Respondent 5	67	Dutch	High	€35.000- €50.000	Couple	Good	Average	2 years

Respondent 6	66	Dutch	High	€75.000- €100.000	Couple	Average	Good	4 years
Respondent 7	55	Dutch	High	> €100.000	Couple	Below average	Good	17 years
Respondent 8	56	Dutch	High	> €100.000	Couple	Good	Good	3 years
Respondent 9	59	Dutch	High	> €100.000	Couple	Good	Good	0.5 years
Respondent 10	66	Dutch	High	€50.000- €75.000	Couple	Good	Good	0.5 years
Respondent 11	60	Dutch	High	€75.000- €100.000	Single	Good	Good	0.5 years

Table 15. Personal characteristics of the respondents.

Willingness to move is not only influenced by personal characteristics but also by characteristics of the housing situation. The dwellings of the respondents are analysed based on the same aspects as the housing stock of the municipality of Rotterdam and the target group: type, size, value, age of the dwelling and satisfaction with the dwelling. Most of the respondents live in apartments that are approximately  $100m^2$ . Only respondent 7 and respondent 8 live in significant bigger dwellings. Most of the respondents who did not relocate recently live in dwellings that are older than 75 years. The respondents who recently relocated mainly moved to newly constructed dwellings. Respondent 1, respondent 2, and respondent 3 live in the same building, which is also the case for respondent 9, respondent 10 and respondent 11.

Compared to the average dwelling characteristics of owner-occupier aged between 55 and 65 or aged between 65 and 75 and living in the municipality of Rotterdam the dwellings of the group of respondents differs only significantly with regards to the age of the dwelling. Five of the eleven respondents live in dwellings that are older than 75 years. Additionally, most respondents live in apartments, but most of the respondents who recently relocated moved from a single-family dwelling. Based on earlier findings it is expected that the dwelling characteristics of those who did not relocate recently ensures lower willingness to move.

Almost all respondents are satisfied or very satisfied with their current dwelling, which is in accordance with the earlier discovered findings that the target group is highly satisfied with their housing situation. Respondents are especially satisfied with their dwelling due to its location: nearby the city centre, nearby the hospital (EMC), good accessibility and proximity of facilities like theatres and cinemas. With regards to the dwelling, respondent 1 mentioned the height of the ceiling, the amount of light and the suitability for an older age as important aspects. Respondent 3 also mentioned the community, the people living there, as a reason for his satisfaction. This is also mentioned by respondent 9 and respondent 10. Other elements which are mentioned by the respondents are architectural style, the view, presence of a garden, (enough) space, parking facilities, and the interior design. Respondent 5 is the only one who is not satisfied with his current dwelling in which he moved two years ago. Therefore, he is already in the process of moving to a new dwelling. Reasons for the low satisfaction with the dwelling are disappointing expectations. The dwelling is smaller than expected and one of the main features of their current dwelling, social interaction, is also disappointing. The frequency of this social interaction was not only low, but this interaction is also negatively evaluated. Despite the high satisfaction of the other respondents they also mention less pleasant aspects of the dwelling, which are: polluted streets, nuisance of neighbours and the existence of stairs.

For those who recently relocated the former housing situation plays also a role in their past willingness to move. Although it is not directly asked, some respondents mentioned several aspects of their former housing situation. For example respondent 4 mentioned that she moved from a single-family house in a sub-urban area. Respondent 6 also moved from a

single-family house in the small village in the province of Zeeland to an apartment in the city. Although, respondent 8 did not move to an apartment she did move from a dwelling in a suburban area to the inner-city.

Respondent	Type	Size	Value	Age of dwelling	Satisfaction
Respondent 1	Apartment	100m <sup>2</sup>	-	75+ (1939)	High
Respondent 2	Apartment	100m <sup>2</sup>	-	75+ (1939)	Very High
Respondent 3	Apartment	150m²	€500.000	75+ (1939)	Very High
Respondent 4	Apartment	130m <sup>2</sup>	-	50-75 (1958)	Very High
Respondent 5*	Single-family	100m <sup>2</sup>	-	0-15 (2019)	Low
Respondent 6	Apartment	100m <sup>2</sup>	-	15-35 (1998)	High
Respondent 7	Single-family	225m <sup>2</sup>	-	75+ (1900)	High
Respondent 8	Single-family	400m <sup>2</sup>	-	75+ (1900)	High
Respondent 9	Apartment	105m <sup>2</sup>	-	0-15 (2020)	Very High
Respondent 10	Apartment	125m <sup>2</sup>	-	0-15 (2020)	Very High
Respondent 11	Apartment	125m <sup>2</sup>	-	0-15 (2020)	High

Table 16. Dwelling characteristics of the respondents

# 6.2 Target groups willingness to move

The willingness to move of the target group differs significantly between the individuals. Each of the respondents had his or her own reasons why their willingness to move was either low or high. First, the reasons which reduce the willingness to move are analysed. Secondly, the elements which increase the willingness to move are analysed.

# Reduced willingness to move

The interviewees mentioned multiple elements which reduce their willingness to move. Especially, those who did not relocate recently mentioned several reasons why their willingness to move is low. The most mentioned reason of those who did not relocate recently is satisfaction with the current housing situation. The data analysis of the municipality of Rotterdam already discovered the high satisfaction of the target group with their current dwelling, which is thus also mentioned by the different respondents as an important reason for reduced willingness to move. For example respondent 2 views relocation as something which should lead to progress. At the moment she does not know how relocation can improve her current situation. The location is excellent, and in addition, the dwelling is also future proof as it is ground-level. Respondent 1 is satisfied with the location of their dwelling, she especially valued the proximity of the EMC. Additionally, she mentioned that there are currently no suitable dwellings: 'Besides, if you were to leave, you should be able to buy something that meets your requirements, of course. And that is very difficult in the housing market.48" The process of relocating is also an aspect what reduces the willingness to move of the target group. Respondent 1 formulated it as follows: "No, I think it's too much of a hassle. You also don't like the idea of moving house because it's a lot of stuff, you have to get rid of all the books? Well, that's quite a thing, if you dread it. 49" For multiple respondents, finance is a reason for the reduced willingness to move. Respondent 3 mentioned: "If I want to buy something equivalent, I will have to pay the same amount. It's just, of course, absurdly large sums of money. Yes, if I paid off my mortgage now. The only thing you paid in service costs, I can live well on that too. Then you go to something else, which is a lot more expensive. 50" The

<sup>48</sup> "Daarnaast is het zo dat je er euh. Als je weg zou gaan dan moet je wel iets kunnen kopen wat ook maar na aan je eisen voldoet natuurlijk. En dat is nu ook maar heel moeilijk in de woningmarkt he."

<sup>&</sup>lt;sup>49</sup> "Nee, ik denk dat het een te grote rompslomp ook allemaal is. Je ziet ook wel een beetje op tegen verhuizing omdat het natuurlijk toch wel veel spullen zijn die allemaal, heel boeken je moet allemaal dingen wegdoen? Nou, dat is nogal een dingetje. Zeg maar als je daar ook tegenop ziet."

<sup>&</sup>lt;sup>50</sup> "Als ik gelijkwaardig iets wil kopen ben ik net zoveel kwijt. Het zijn gewoon natuurlijk absurd grote bedragen. Ja ja, als ik nu mijn hypotheek helemaal afbetaald heb. Het enige wat je betaalde servicekosten, daar kan ik ook ruim leven. Ga je naar iets anders, die dan weer een stuk duurder is."

health situation of a resident can also become a reason for reduced willingness to move. Respondent 1 mentions the mental health as an important factor. Residents can become attached to their home, making a change very demanding. A final reason for reduced willingness to move mentioned by the respondents is the presence of children.

As those who did relocate recently have a high willingness to move, they mostly mentioned reasons which increased their willingness to move. They also mentioned some elements which reduced their willingness to move. For example respondent 6 did not want to relocate before their previous house was sold. Respondent 11 mentioned financial arrangements as a possible element that reduces her willingness to move.

In conclusion, there is a difference in elements which reduces the willingness to move of those who relocated recently and those who did not relocate recently. For those who did not relocate recently, it is mainly a lack of push and pull factors that reduce their willingness to move. The most influential element is the lack of reasons due to high satisfaction. Other elements are the high costs of a new dwelling or the presence of children. Those who did relocate, mainly mentioned elements related to the process of relocating as aspects that reduces their willingness to move. No significant difference was found between the age groups.

# Increased willingness to move

Multiple events and situations increase the willingness to move of the respondents. In contradiction to the elements that reduce willingness to move, elements that increase the willingness to move are mostly mentioned by those who relocated recently. One of the most mentioned reasons which increased the willingness to move of the respondents who relocated is the start of a new phase of life. This is also in accordance with the results of the data analysis, in which it was concluded that especially the younger part of the target group is influenced by pull factors related to lifestyle. Respondent 4 formulated it as follows: "But for me, it also played a role that because we have such a long healthy life nowadays. That you don't, at 55 you're already a bit frail. But now, with a bit of luck, I still have 10, maybe 20 healthy years ahead of me. We also wanted to shape this new phase<sup>51</sup>." Respondent 8 mentioned that creating this new phase in life was decisive with regards to their willingness to move. About their former neighbourhood they mentioned: "In that respect, we no longer felt quite at home. Because relatively many young families came to live around us with very young children, while we were out of children. 52" For those aged between 55 and 65, this phase starts when children leave the house. This event creates the awareness that the dwelling may become too big for only two persons. Those aged between 65 and 75 do not mention the event of children leaving the house, but they mention reaching retirement age as a trigger event. Respondent 5 mainly moves due to push factors related to the location of his dwelling and social relations. Additionally, the sale value of their current dwelling increased their willingness to move as well. Respondent 6 also moved due push factors, as boring neighbourhoods and the maintenance of the garden. But she also moved due to pull factors, as going back to Rotterdam.

The willingness to move of those who did not relocate is not necessarily low, some of the residents who did not move recently might even have a latent desire to move. For example

<sup>&</sup>lt;sup>51</sup> "Maar voor mij speelde ook wel een rol dat je omdat we nu tegenwoordig zo lang gezond zijn. Dat je niet, op je 55ste was je al een beetje krakkemikkig. Maar nu, als het een beetje meezit, heb ik nog 10, misschien wel 20 gezonde jaren voor me. Wij wilden ook deze nieuwe fase vorm geven."

<sup>&</sup>lt;sup>52</sup> "Wat dat betreft voelden we ons niet meer helemaal op de plek inderdaad. Omdat daar relatief veel jonge gezinnen om ons heen kwamen wonen met heel jonge kinderen, terwijl wij juist uit kinderen waren."

respondent 1 mentioned: "Indeed, I sometimes dream of a very nice new flat, you know. But what? I'd like that, but I can't imagine it happening with all that stuff.53" Respondent 3 mentioned it as follows: "I regularly look at other houses. Like, what do I want after I retire? And what do I want there? Do I want something on the ground floor with a garden? But when I look at the current prices in the housing market, it's not right now. Is it interesting to sell, but not interesting to buy?<sup>54</sup>" Respondent 7 has also a willingness to move which is related to the size of their current dwelling. About moving to a new dwelling she mentioned: "That has everything to do with age, getting older and the son moving out of the house, so less space is needed.55" For respondent 1 the willingness to move can be increased by push factors related to the dwelling, nuisance of neighbours due to a lack of isolation, push factors related to the neighbourhood, filthy roads, and the pull factor of lifestyle, adventure. The nuisance of neighbours is also mentioned by respondent 3. Respondent 2 only moves when something serious is going to happen. For example, she mentioned deteriorating health status. This is also recognised by respondent 3, who mentioned the following with regards to reasons to move: "If mobility were greatly reduced, I would be trapped here on the fifth floor, so to speak, and there would be no contact at all. I am a person of contacts. That would be one reason. Or that I would need so many moments of care that you just don't think it makes sense to do this.56"

To conclude, the residents who recently relocated seem to be more influenceable for pull factors than those who did not relocate recently. Both groups experienced similar events, like children leaving the house or reaching retirement, but for those who relocated these events created pull factors related to lifestyle. Those who did not relocate recently mostly mentioned push factors as elements which can increase their willingness to move. In addition, there is a difference between those aged 55 to 65 and those aged 65 to 75. For the younger part of the target group it is about children leaving the house for those who did relocate and push factors related to the dwelling for those who did not relocate. For the older target group it is about reaching the retirement age for those who did relocate and deteriorating health for those who did not relocate.

### 6.3 Target groups perspective on instruments

To influence the willingness to move of the target group eight different instruments have been developed in chapter 5. These instruments are developed based on the literature review of the concept of willingness to move, the data analysis of the municipality Rotterdam and interviews with multiple experts. Based on this research 23 instruments are analysed on effectiveness, ethical correctness and efficiency. The final developed instruments are suitable dwelling, financial bonus, arrangement of care, dwelling and pensions, financial arrangement, priority rules, process help, awareness of the current situation, awareness of a new situation. In this paragraph, the main findings of each instrument as they emerged from the interviews conducted are analysed.

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<sup>&</sup>lt;sup>53</sup> "Ik droom inderdaad best wel eens van een heel mooi nieuwbouwappartement, weet je wel. Maar wat? Dat zou ik best zou willen, maar ik zie het niet voor me dat dit gebeurt met al die spullen."

<sup>&</sup>lt;sup>54</sup> "Ik kijk regelmatig wel naar andere huizen. Zo van wat wil ik na mijn pensionering? En wat wil ik daar. Wil ik daar iets gelijkvloers met een tuin? Maar als ik kijk naar de huidige prijzen in de huizenmarkt is het ogenblik niet. Is het interessant om te verkopen, maar niet interessant om te kopen?"

<sup>&</sup>lt;sup>55</sup> "Dat heeft alles te maken met leeftijd, ouder worden en de zoon die de huis het huis uit gaat, dus minder ruimte nodig."

<sup>&</sup>lt;sup>56</sup> "Als de mobiliteit sterk verminderd zou worden dat ik bij wijze van spreken gevangen zou zitten hier op de vijfde etage en er één zou kunnen er geen enkele contact hebben. Ik ben wel een mens van contacten. Dat zou een reden zijn. Of dat ik zoveel zorg momenten nodig zou hebben dat je denkt van dit is gewoon niet logisch om dit te doen."

# Suitable dwelling

The creation of suitable dwellings is an influential factor with regards to the willingness to move. Suitable dwellings pull residents out of their current house as these dwellings align with the new phase of life the respondents are in. Respondent 8 mentioned: "But I also like living around the corner from the terraces and from the cinemas and museums. That has something to do with the phase of life, children leave home, then you just have a lot more time for it. You can hop on your bike for half an hour every time, but you can also just move closer to home. Saves a lot of hassle<sup>57</sup>". The suitability of a dwelling, however, differs significantly between the different respondents. The suitability of a dwelling can be measured by six different aspects: physical characteristics, location, social aspects, care possibilities, financial aspects and involvement in the process.

Different aspects were mentioned to be influential concerning dwelling characteristics. Respondent 4 preferred a dwelling that was bigger than  $100m^2$ . The reason for this minimum is to keep the possibility open that the children can come by. The size of the dwelling is also important for respondent 5, respondent 7 and respondent 8. Respondent 3 preferred a single-family house with a garden. For respondent 5 sustainability is also an important aspect with regards to the suitability of a dwelling. Respondent 9 explicitly wanted a newly constructed dwelling, as these dwellings are more sustainable and practical as compared to existing dwellings. Respondent 11 mentioned the height of the apartment as an important factor with regards to the physical characteristics of the dwelling.

Perhaps the most important aspect of a suitable dwelling is its location. Multiple respondents wanted a dwelling nearby or in the city (centre) or they did not want to leave the city (centre). In response to the concluding question, respondent 8 mentioned the following about the importance of the location: "This is a super cool house, but the underlying wish was: we want to go to the city. Close to amenities, close to cinemas, restaurants, museums, top structure. For those who recently moved, a new dwelling aligns with their new phase of life mostly due to its location. They moved from suburban areas to the inner-city. Respondent 4 formulated the reason for this move as follows: "Now we have actually moved, but we started thinking about it when we were in that single-family house for two in Schiebroek. Schiebroek is very nice, but it is really such a family neighbourhood. Then we thought, we want to live in or out of the city, and not in such a nice suburb. Those who did not move recently, also want to stay in the city (centre).

Social relations in a new housing situation related to the dwelling are not an important factor for the respondents. Only respondent 10 mentioned the interaction of residents as a consideration with regards to their willingness to move. There should be a good balance between privacy and interaction. According to respondent 1, it shouldn't be too anonymous. However, she also mentioned a project in which there was too little privacy. Respondent 4 also pointed towards the importance of having enough privacy. For respondent 3 it is not his personal preference to move to house situations with predetermined social interaction. Due

<sup>58</sup> "Dit is een super gaaf huis, maar de onderliggende wens was: wij willen naar de stad. Dichtbij voorzieningen, dichtbij bioscopen, restaurants, musea, topstructuur"

<sup>&</sup>lt;sup>57</sup> Maar ik vind het ook leuk om om de hoek te wonen bij de terrassen en bij de bioscopen en musea. Daar heb je zeg maar de levensfase, dus kinderen uit huis wel iets mee te maken. Dan heb je er gewoon veel meer tijd voor. Dan kun je elke keer een half uur op je fiets stappen, maar je kan ook gewoon dichterbij gaan wonen. Scheelt een hoop gedoe

<sup>&</sup>lt;sup>59</sup> "Nu zijn we werkelijk verhuisd, maar we zijn er over gaan nadenken. toen we daar in die eengezinswoning met z'n tweetjes in Schiebroek zaten. En het is harstikke leuk in Schiebroek, maar is echt zo'n gezins wijk zeg maar. Toen dachten we, we willen eigenlijk of veel meer de stad in of veel meer de stad uit, en niet in zo een nette buitenwijk."

to prior experiences, respondent 5 does also not prefer dwelling situations that are focused on social interaction.

The possibilities of care in the dwelling is something that most respondents consider but it is not decisive in their choice of a new home. Especially the existence of stairs is something respondents took into account. Respondent 6 gave the example of a scooter lift as something with was not decisive in their choice, but it was a nice feature to have when going into the last phase of their life. Only for respondent 7, a lifelong home is a requirement.

A final aspect with regards to the suitability of a dwelling, which is important for those who did not relocate recently, is the possibility to be involved in the development of the dwelling. For respondent 1 involvement in the process is very important. Respondent 3 is also willing to be involved in the process of a new project. However, respondent 3 does not prefer new dwellings as this has risks with regards to neighbours. In an existing situation, there are fewer uncertainties. For those who did move recently, involvement in the process was not a requirement but it was a nice concomitant.

In conclusion, the construction of dwellings in the inner-city that does not cause health problems and with enough space will significantly increase the willingness to move of the target group.

# Financial bonus

On average the respondents are critical about the effect of a financial bonus. Those who did not relocate are directly asked if a financial bonus would increase their willingness to move. According to respondent 1, a financial bonus would not be decisive with regards to the willingness to move. When asked if such an instrument would work, she replied: "I would consider this, but I don't think it will be decisive, it's just the quality of the house and the place and all that goes with it.60" A financial bonus would also not increase the willingness to move of respondent 2, or the amount should be extremely high. Respondent 3 does also not think that a financial bonus, as a reduced real estate transfer tax, will work, as currently the market is upside down.

Those who did not relocate are not directly asked about a financial bonus, but about how finance influenced their willingness to move. For most of those who recently relocated financial considerations played less of a role. For example respondent 6 mentioned that they had to borrow some additional money, but it did not influence their decisions. Other respondents mentioned that they had a predefined budget they kept to. The financial aspect is a prerequisite for them. Therefore a financial bonus would not have changed their willingness to move.

To conclude, irrespective of age and recent relocation, a financial bonus will not significantly influence the willingness to move of respondents.

# Arrangement of care, dwelling and pension

An arrangement of care, dwelling and pension does not appeal to the respondents. Respondents are asked about each of the elements separately. Additionally, some respondents are asked about the relationship between these elements. Although care is something important for the respondents most of them do not think about the financial

<sup>&</sup>lt;sup>60</sup> "Dit zou ik wel in overweging nemen, maar het zal niet doorslaggevend zijn denk ik, het gaat gewoon om de kwaliteit van de woning en de plek en alle dingen die daarbij horen."

aspects of it. Care is related to the physical aspects of the dwelling or the proximity of services. For example respondent 7 mentioned about reaching retirement age, that a new phase in life is created including additional care, but according to her, a new dwelling will do with regard to care. The younger part of the target group does not think about reaching retirement age or they do not view it as a big change. Respondent 4 formulated it as follows: "Now I sometimes think that one day I will not work anymore, but at that time it was not a consideration that we would want to retire as well....... I was also thinking about it at times when I was working. But I didn't see myself yet as someone who, very bluntly of course, has to take it into account<sup>617</sup> Only respondent 3 related his income to care. In reaction to the question about the relation between the different elements he mentioned the following: "And you know, as you get older, your care needs increase. But your expenditure pattern becomes lower.<sup>627</sup> Additionally, the pension can be spread out over time, to ensure that when costs are at their highest, revenues are also at their highest.

In conclusion, respondents do not relate the elements of pension, care and dwelling to each other. Additionally, most of the respondents did not mention care or pension as important elements. This might be due to the characteristics of the respondents, as almost all of them have currently good health and have a relatively high income. It is therefore difficult to generalise the results of these interviews, an arrangement of dwelling, care and pension might still appeal to a selective part of the target group.

# Financial arrangement

Due to prior experiences most respondents do not encounter problems with regards to financial arrangements. Those who did relocate are asked about how they experienced the process of relocating. Almost all respondents mentioned that they did not encounter problems with regards to financial arrangements. For example respondent 5 mentioned: "Since my wife and I have already moved several times in our lives, we are not afraid of it. We know everything, all the things that surround it, like the mortgage. 63" Only respondent 4 encountered problems with regards to financial arrangements. These problems concern the non-transparency and the complexity of these arrangements. Respondent 4 mentioned: "Really a complicated story. Well, I'm really not that stupid, but it's really hard to understand. And don't you know, they sit around explaining all kinds of regulations to you to the so-andso and always think it should be easier. I find that quite a challenge myself. I can think logically and I can hardly understand it. Isn't that also the case for many people? 64" Additionally, there might also be a lack of financial arrangements. As mentioned by respondent 11 her financial situation is different from the average empty-nester, this caused difficulties with regards to the financial part of the relocation. Tailor-made arrangements can remove such barriers. This includes not only assessing the current income or future income of residents but also assessing their wealth, including dwellings and savings accounts. However, financial arrangements are only important for a select part of the target group. On average financial considerations played less of a role for the respondents. The respondents who did not

<sup>61</sup> "Nu denk ik wel eens na dat ik op een dag niet meer zal werken, maar dat was toen helemaal geen overweging dat we ook nog met ons pensioen zouden willen zitten......Ook toen ik voor m'n werk was ik er wel eens mee bezig. Maar ik zag mezelf nog niet als iemand die, heel flauw natuurlijk, die er ook rekening mee moet houden"

<sup>&</sup>lt;sup>62</sup> "En je weet ook naarmate je ouder wordt word je je zorgbehoefte groter. Maar je uitgavenpatroon wordt lager."

<sup>&</sup>lt;sup>63</sup> "Aangezien mijn vrouw en ik al een aantal keren verhuisd zijn in ons leven, zien we daar niet tegenop. We kennen alles, alle dingen die zich daar omheen afspelen, zoals de hypotheek."

<sup>&</sup>lt;sup>64</sup> "Echt een ingewikkeld verhaal. Nou ja, ik ben echt niet zo dom, maar dat is echt heel moeilijk te begrijpen. En weet je niet, die zitten allerlei regelingen aan je uit te leggen aan de zus en zo en denken altijd een beetje. Dat zou eenvoudiger moeten kunnen. Dat vind ik zelf best wel een hobbel. Ik kan best logisch denken en ik kan het maar nauwelijks begrijpen. Is dat ook niet voor veel mensen?"

relocate are asked about how they look forward to the process of relocating and how they look back to earlier relocations. None of these respondents mentioned anything about financial arrangements. Therefore, it is expected that it will not significantly influence their willingness to move.

To conclude, due to prior experiences and less of a focus on the financial aspects respondents think that they have had good financial arrangements. However, as mentioned by one of the respondents the current financial arrangements are so cluttered that it is unclear if such a financial arrangement is really the right arrangement. Clear, well-structured arrangements might have a bigger influence on the willingness to move of the target group as such arrangements will have a direct impact.

# Priority rules

Respondents are divided on the effectiveness of priority rules. Priority rules are currently not much used with regards to owner-occupiers dwellings. Only respondent 9, respondent 10 and respondent 11 encountered some sort of priority rules in their relocation process. These respondents are satisfied with the results of the priority rules. Respondent 10 formulated it as follows: "Then I also noticed that there were many more applicants than there were houses. And then I asked the estate agent how do you deal with that? Whoever bids the most gets it. And that's what bothers me. I think that's so unfair. And when I was here and heard that the procedures were so pure and open, like you said, I thought this gives me confidence. However, they are divided about the way the instrument is used. About the selection procedure respondent 9 mentioned: "I think the project developer, the contractor, looked at a certain composition of the people who applied. But what kind of criteria? No idea. ..... but I think such things should be transparent. ""

Those who did not experience such priority rules are divided about this instrument. Respondent 1 for example thinks that priority rules can lead to positive results while respondent 5 does not believe that such arrangements are even possible. Respondent 4 has some doubts about priority rules. Such rules can cause people to feel driven away from their own homes. Additionally, she mentioned: "And besides, let me do my own thing. I decide for myself, not in an arrangement.<sup>67"</sup>

Besides the observations of these respondents, there are some additional elements in favour of the instrument of priority rules. For example respondent 8 mentioned the following with regards to negotiation: "Maybe if I had gone to Berkel en Rodenrijs, I wouldn't want to negotiate at all. Then they should be glad that I come. No, no, no, but when you move to the city and to an upcoming neighbourhood, you know you have to negotiate. 68" In the municipality of Rotterdam negotiating is usual. This is also visible in the numbers of registrations, respondent 10 mentioned that around 400 people registered for only 30 apartments. These high numbers ensure outbidding. Respondent 10 mentioned the following about this phenomenon: "Then I also noticed that there were many more applicants than there were houses. And then I asked the estate agent God, how do you deal with what they offer me?

<sup>65 &</sup>quot;Toen viel mij ook op dat er veel meer gegadigden waren dan dan een woning waren. En toen vroeg ik aan de makelaar God, hoe ga je mee om waar ze mij aan? Wie het meeste biedt krijgt het. En dat staat, dat stuit mij tegen de borst. Dat vind ik zo niet eerlijk. En toen ik hier was en hoorde dat die procedures zo zuiver en open was, zoals jij zei toen dacht ik dit geeft vertrouwen" 66 "Ik denk dat de projectontwikkelaar de aannemer, een bepaalde samenstelling gekeken heeft van de mensen die zich hebben aangemeld. Maar wat voor criteria? Geen idee. ..... maar ik vind dat zulke dingen transparant moeten zijn" 67 "En bovendien laat mij mijn eigen gang gaan. Bepaal ik zelf wel, niet in een regeling."

<sup>68 &</sup>quot;Misschien was ik in Berkel en Rodenrijs gaan kijken, dan wil ik helemaal niet onderhandelen. Dan moeten ze blij zijn dat ik kom. Nee, nee, nee, maar als je naar de stad verhuist en ook naar een wijk die upcoming is dan weet je gewoon dat je moet onderhandelen"

Whoever bids the most gets it. And that disgusts me. I think that is so unfair.<sup>69</sup>" Priority rules can change this phenomenon.

To conclude, due to a lack of experience most respondents are unclear about the instrument of priority rules. Those who have experienced priority rules are positive about the results of the instrument. However, they are divided about the use of the instrument. Therefore, it is expected that transparent priority rules can enhance the willingness to move of the target group.

# Process help

According to the respondents, the instrument of process help does not change perceptions concerning willingness to move. As mentioned before respondents are asked about their perspective on the process of relocating both in the past for those who recently relocated and in the future for those who did not relocate recently. Most respondents did not encounter problems with regards to the process or see the relocation process as a significant barrier. Respondent 8 mentioned her and her husband's professional background and prior experiences as reasons why the process of relocating went smoothly. According to respondent 9 complete packages are very helpful with regard to the process of relocating. The real estate agent guided all different aspects, from visiting the notary to assessing tenders. Although respondent 1 mentioned the process of relocating as something that reduces the willingness to move, she did not think that help with regards to this process will increase their willingness to move. Similarly, respondent 4 encountered some problems during the physical part of the relocation, but she does also not see these problems as significant or something that would heavily influence her decisions with regards to relocating. Therefore, additional process help is not necessary. Respondent 6 did not like the process of relocating, especially the part of getting rid of stuff. However, due to the fact they are not old yet and her husband already retired, the move went smoothly.

Due to prior experiences, the respondents do not see many difficulties with regards to the process of relocating. Therefore, on average the instrument of process help will not significantly influence their willingness to move. However, several respondents mentioned that when becoming older the process becomes more difficult. For the older part of the target group, the instrument can become more influential.

#### Awareness of the current situation

In general, respondents appear to be very well aware of their current housing situation. The respondents are asked about how they experience their dwelling. They all mention different aspects of why they are satisfied with their dwelling. Based on these elements they compare their current situation with other housing situations. On the question of whether relocation would improve her situation, respondent 2 answered: "So far, I do not know why<sup>70</sup>" She, however, also mentioned several elements that she did not prefer about her current dwelling. Additionally, when taking a closer look, it becomes clear that at least with regards to some aspects the knowledge of the respondents about their current housing situation is incomplete. An example is the value of a dwelling. Most respondents who recently relocated used a real estate agent to determine the value of their current dwelling. The awareness of other elements of the current housing situation is, however, solely based on personal

<sup>&</sup>lt;sup>69</sup> "Toen viel mij ook op dat er veel meer gegadigden waren dan dan een woning waren. En toen vroeg ik aan de makelaar God, hoe ga je mee om waar ze mij aan? Wie het meeste biedt krijgt het. En dat stuit, dat stuit mij tegen de borst. Dat vind ik zo niet eerlijk"

<sup>&</sup>lt;sup>70</sup> "Tot nu toe zou ik niet weten waarom"

experiences. For example, with regards to care, almost all respondents mentioned the ground-floor level of their dwelling and the existence of lifts as reasons why the dwelling is future-proof. Other elements as thresholds or the accessibility of the shower are not taken into account. Another example is related to the fair perception of the dwelling. Respondent 1 and respondent 3 mentioned living nearby the most polluted street in the Netherlands as a less pleasant aspect of their dwelling, while respondent 2 who lives in the same building only mentioned the bustle of the streets. None of the respondents gained information about their current (or previous in the case of respondents who recently moved) housing situation from external parties. The uncertainty of the respondents about their housing situation is also reflected in their answers. For example respondent 2 mentioned: "Well, you can't look ahead, maybe I'll think differently in a year's time. At the moment I feel great and just live here. But I don't know what can happen in one or two years."

To conclude, at first glance, the respondents appear to be well aware of all aspects of their housing situation. However, when taking a closer look it becomes clear that the knowledge of the respondents about their current housing situation is incomplete. Increased awareness of their current housing situation can reduce their satisfaction, increasing their willingness to move.

#### Awareness of a new situation

Awareness of the new situation is an important aspect and can be highly influential with regards to the willingness to move. The respondents who did relocate recently used multiple different methods to gather information about the new situation. Funda is one of the most mentioned instruments with regards to information supply. Other instruments are developers, social network, but also interaction with future neighbours. Another used instrument is information brochures. These brochures do not only contain information about the dwelling but also about the neighbourhood and the design process. However, despite all these instruments that give information about the new situation, multiple respondents who recently relocated mention that it is difficult to have complete information. Respondent 4 formulated it as follows: "It's a bit of a leap in the dark. You have an image of what it's like to live in the Scheepvaartkwartier. How the view will be, but you only really know when you live there. How the sun falls in. Whether the neighbours are meddlesome or keep their distance. Whether the costs are disappointing or better than expected. So you think you already have information, but in real life it's different.72" The respondents mention several solutions to eliminate this lack of information. Respondent 4 mentioned: "We went to those information meetings of all the new build projects when we were looking. And there we could walk through a house with these Virtual Reality glasses. And I thought that was a real find.73" The benefits of using VR was also recognised by respondent 10. Respondent 4 also mentioned: "I would say you want a new house, you would actually want to sleep there for a night before you go. 74" This possibility is also used by respondent 5 who mentioned the following about their new housing situation: "And even during one of those weekends when we stayed there, I already noticed the difference in air quality. That's when the feeling started to grow, like, oh,

<sup>&</sup>lt;sup>71</sup> "Nouja je kijk, je kan niet vooruitkijken, misschien denk ik er over een jaar wel anders over. Op het moment voel ik me heerlijk en woon gewoon heerlijk hier. Maar ik weet niet wat er in 1 of 2 jaar kan gebeuren."

<sup>&</sup>lt;sup>72</sup> "Het is toch een beetje een sprong in het duister. Je hebt een beeld bij hoe het is om in het Scheepvaartkwartier te wonen. Hoe het uitzicht zal zijn, maar je weet het pas echt als je er woont. Hoe de zon naar binnenvalt. Of de buren bemoeieal zijn of dat ze afstand houden. Of de kosten tegenvallen of meevallen. Dus je denkt wel dat je al informatie hebt, maar in het echt is het toch anders"

<sup>&</sup>lt;sup>73</sup> "We gingen naar die voorlichtingsbijeenkomsten van allemaal nieuwbouwproject in de tijd dat we zochten. En daar konden we met zo'n VR bril door een woning lopen. En dat vond ik echt wel een vondst."

<sup>74 &</sup>quot;Ik zou zeggen je wil van een nieuw huis. je zou er eigenlijk een nacht willen slapen voordat je er heen gaat"

why don't we live here?<sup>75</sup>" According to respondent 5 involvement in the process is another instrument by which the awareness of the new situation can be increased.

Most respondents who did not relocate recently mention that they gradually look for new dwellings. However, respondent 2 mentioned that she is satisfied with her current dwelling and does not have a reason to look into new dwelling opportunities. Those who gradually look for a new dwelling mentioned that they have enough information about a new situation. Information supply is adequate. They are proactive with regards to information supply. They gather information using websites, real estate agents but also by visiting the location. However, they do not get the feeling as mentioned by the respondents who did relocate.

In conclusion, experiencing the new situation and knowing what the new situation brings is of great importance for the respondents. Digital and physical tools like virtual reality and staying for a day and night in a new situation can significantly enhance the willingness to move of the target group.

# 6.4 Synthesis willingness to move and instruments

There are three main linkages between the (reduced) willingness to move of the respondents and how they perceive the different instruments: direct relation, hidden relation and lack of relation.

The first linkage is a direct relation between the aspects of the willingness to move of the respondents and the instruments. The most direct linkage is between push and pull factors related to the dwelling and the instrument of suitable dwellings. Characteristics of the current dwelling were frequently mentioned as reasons for reduced willingness to move, while characteristics of a new dwelling were frequently mentioned as something which increases or could increase the willingness to move. The instrument of suitable dwellings reacts to these elements by providing these pull factors.

A second linkage is a hidden linkage. An example is the relation between the (positive) result of the evaluation process resulting in high satisfaction and the instrument of awareness of the current situation. For most of the respondents who recently moved, the awareness of the current situation combined with the awareness of the new situation led to lower satisfaction with their former dwelling. Especially, awareness of the new situation has been an important factor for those who recently relocated in increasing their willingness to move. Awareness of the current situation might be especially effective for those who did not relocate recently. They mention high satisfaction with their current dwelling while simultaneously they do not know about all the elements of their current housing situation. Increased awareness about currently unknown push factors might reduce their high satisfaction increasing their willingness to move.

The third linkage between willingness to move and instruments is the lack of relation. Respondents sometimes mention a problem that reduces their willingness to move, but an instrument that is related to this problem is not seen as a solution. For example respondent 1 experiences the process of relocating as difficult, but she does not think that external help with regards to the process will increase her willingness to move. Another example is related to finance. Multiple respondent mention the financial situation as a reason for their reduced willingness to move. However, a financial bonus or an arrangement of care, dwelling and pension is not something that will change their perception with regards to their willingness

<sup>&</sup>lt;sup>75</sup> "En zelfs in zo'n weekend als we daar logeerden merkte ik al het verschil van luchtkwaliteit. Dat gaf eigenlijk zo ging het gevoel groeien van joh waarom gaan we niet hier wonen."

to move. A possible reason for this phenomenon is that people need time to get used to an idea. For example respondent 10 mentioned the following about their process: "No, for us it has been a process of over two years. In those two years, you can grow towards it and you know that that step is going to come." This aligns with the remark of multiple respondents that they want to have a feeling with their new situation.

#### 6.5 Conclusion

In this chapter the willingness to move and the influence of eight different instruments on the willingness to move of owner-occupiers aged between 55 and 75 is analysed. Irrespective of age there is a difference in willingness to move between those who relocated recently and those who did not move recently. The first group is more influenceable by pull factors. Additionally, they might be less connected to their dwelling. Those who did not relocate recently are highly satisfied with their current dwelling which, in combination with a lack of pull factors, causes a low willingness to move. With regards to elements that increase the willingness to move there is a difference between those aged 55 to 65 and those aged 65 to 75. For the younger part of the target group, it is about children leaving the house for those who did relocate and push factors related to the dwelling for those who did not relocate. For the older target group, it is about reaching the retirement age for those who did relocate and deteriorating health for those who did not relocate.

Concerning the developed instruments it can be concluded that three instruments are highly influential. These are suitable dwellings, awareness of the current situation and awareness of the new situation. The instrument of suitable dwellings is influential for all of the target group independent of age or whether they moved or not. Construction of dwellings in the inner-city that does not cause health problems and with enough space is expected to significantly increase the willingness to move of the target group. Awareness of the current situation reduces satisfaction with the current housing situation, increasing the willingness to move of the target group. The instrument of awareness of the new situation increased the willingness to move of those who recently move by creating a sense of familiarity with the new housing situation. The instruments of financial arrangement and priority rules are also expected to positively influence the willingness to move of owner-occupiers aged between 55 and 75. Financial arrangements are barely mentioned by the respondents to influence their willingness to move. However, they also mentioned it as opaque and it is unclear if the chosen arrangement is really the right financial arrangement. Clear, well-structured arrangements might influence the willingness to move of the target group as such arrangements will have a direct impact. The instrument of priority rules can give respondents more certainty about whether they get a dwelling or not, but also about the social context of a new situation. The instrument of process help might be influential for some individuals who do not have much experience with the process of relocating. Additionally, it is expected to be more influential for the older target group as with the increase of age the process of relocating becomes more difficult. It is expected that the instrument of financial bonus and the instrument of arrangement of care, dwelling and pension do not influence the willingness to move of the target group.

The relation between the developed instruments and willingness to move is twofold. Instruments directly influence the different elements of the willingness to move, e.g. by providing pull factors or by reducing the transaction costs of relocating. The influence can also be indirect. For example, the instrument of awareness of the current situation creates awareness of existing push factors.

# CHAPTER 7 Conclusion

#### 7. Conclusion

This research aimed to examine how the willingness to move of older adults can be increased. The main research question of the study was: How can the willingness to move of owner-occupiers aged between 55 and 75 be increased by instruments on a municipal level? Three sub-questions have been drawn up based on the three main concepts of the research question: willingness to move, municipal context and instruments. To give an answer to these questions a literature review and a case study have been conducted. The case, which is the municipality of Rotterdam, is studied with data analysis, interviews with experts and interviews with the target group. In this chapter first the sub-questions are answered after which the main question is answered.

# Willingness to move

The first sub-question was: What influences the willingness to move of owner-occupiers aged 55-75? The willingness to move of owner-occupiers is influenced on two aspects: by a triggering mechanism and by an evaluation mechanism. These aspects reflect the objective reality and the subjective perception of this reality.

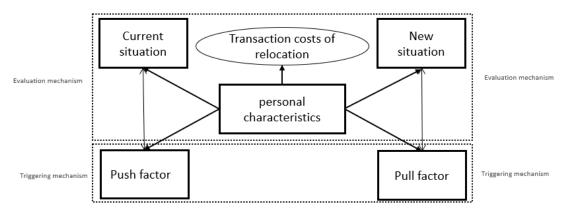


Figure 34. Triggering mechanism and evaluation mechanism

The triggering mechanism consists of two elements: push factors and pull factors, as can be seen in Figure 34. Ninety-two different push and pull factors are found. These factors are divided into nine groups, five of them are push related and four of them are pull related. The groups of push factors are dwelling, neighbourhood, health, finance and social relations. The groups of pull factors are dwelling, neighbourhood, lifestyle and social relations. Both the literature and the interviews with the target group showed that on average factors related to lifestyle and dwelling are more important than those related to finance or social relations. Health-related factors are more important for the older part of the target group, those aged between 65 and 75.

The evaluation mechanism consists of the current housing situation, the new housing situation, the transaction costs of relocation and personal characteristics. The current and the new situation are evaluated based on multiple elements. These elements are related to the characteristics of the dwelling, but also to social relations and the financial costs of living. The perception of both the push factors, the pull factors, the transaction costs of relocation and the evaluation of the elements of both situations are based on personal characteristics. Twenty-two personal characteristics are discovered which are clustered into 7 groups: age, nationality, marital status, relation with the dwelling, income, educational level and social relations. Each of these groups has a different relationship with the triggering mechanism and willingness to move in general. Based on the literature and the interviews it can be

concluded that younger residents, with higher income and higher education, are more likely to be pulled by factors related to lifestyle, while single, older residents with poor health are more likely to be pushed by factors related to the dwelling or health. Older age, poor health, being single and having a lower income also ensures that residents experience more problems with regards to the process of relocating. Evaluation of the current or the new situation is mainly based on prior experiences but is also influenced by educational level. In general, residents with younger age, Dutch nationality, who are single, with a shorter time of residency, higher income and limited social relations are more willing to move than their opposites.

The interviewed experts mostly mentioned push and pull factors as elements that influence the willingness to move. Evaluation of the current situation, evaluation of the new situation and elements related to the process of relocating are mostly mentioned as reasons for reduced willingness to move. The interviews with the target group draw a similar picture. Without push and pull factors the willingness to move cannot be increased. Only influencing the evaluation mechanism is thus not effective.

In conclusion, the willingness to move of owner-occupiers is strongly influenced by multiple different push and pull factors. As a result of these factors, the willingness to move is also influenced by characteristics of the current housing situation, characteristics of the new housing situation and the transaction costs of relocation. The perception of these elements is based on personal characteristics.

# Municipal context

The second sub-question was: What is the municipal context regarding willingness to move? The context of the municipality regarding willingness to move consists of four different elements: the personal characteristics of the inhabitants of a municipality, the characteristics of the housing stock, neighbourhood characteristics and the policy context. Except for the policy context, these elements are analysed for the municipality of Rotterdam and compared to the national average and the other three big cities. What has become clear is that the four big cities are significantly different from other municipalities in the Netherlands. Firstly, the number of owner-occupiers in these municipalities is significantly lower. Secondly, dwellings are also smaller and there are relatively more older buildings. Thirdly, residents in these municipalities experience their neighbourhood as much more unsafe than the average Dutch citizen.

Furthermore, the four big cities also differ from each other. The personal characteristics of inhabitants of the municipality of Rotterdam differ from the ones living in Amsterdam, The Hague or Utrecht. For example, the municipality of Rotterdam has relatively more elderly, more tenants and more couples. Housing characteristics also differ between the different municipalities. The average value of a dwelling is a lot lower for the municipality of Rotterdam. Additionally, inhabitants of the municipality of Rotterdam experience their neighbourhood significantly worse than the residents of the other three big cities. The context of the municipality is therefore influential with regard to both the triggering mechanism, due to different possible push and pull factors, as well as the evaluation mechanism, due to different personal characteristics.

In addition to these characteristics, the willingness to move of residents is also shaped by the policies of the municipality and other stakeholders operating within the municipality. This influence can be direct or indirect. Direct interventions are instruments focused on the inhabitants, for example the senior real estate agent. Indirect interventions are related to legislation and regulations which influences the stakeholders operating within the municipality. In the municipality of Rotterdam, there are currently almost no policies or interventions with regards to the willingness to move of owner-occupiers aged between 55 and 75.

The context of the municipality thus determines the willingness to move of its inhabitants with regards to the personal characteristics, dwellings characteristics, neighbourhood characteristics and policies of public and private parties. In the municipality of Rotterdam all these aspects ensure that the propensity to move of the target group of owner-occupiers aged 55 to 75 can be most effectively influenced by focusing on three different aspects. First of all, by influencing the evaluation of the current situation. As the data analysis showed the target group is extremely satisfied with their current housing situation. However, both the data analysis as the interviews with the target group showed that this high satisfaction might not be real. A significant number of the target group lives in single-family houses, which are unsuitable due to their size and maintenance, and in family-friendly neighbourhoods, which are unsuitable due to a lack of facilities and services. Secondly, by creating push factors for those aged between 65 and 75. Due to their personal characteristics, e.g. age and health status, the older part of the target group is especially influenced by push factors related to dwelling and health. Thirdly, by creating pull factors for those aged between 55 and 65. Due to their personal characteristics, e.g. age, educational level and income, the younger part of the target is especially influenced by pull factors related to lifestyle.

In conclusion, the context of the municipality with regards to the willingness to move is shaped by its inhabitants, the physical situation and policies.

### <u>Instruments</u>

The third sub-question was: What instruments can influence the willingness to move of elderly owner-occupiers aged 55-75? Based on the literature review, the data analysis within the municipality of Rotterdam, and the interviews with the experts eight different instruments are developed which can influence the willingness to move of owner-occupiers aged 55-75: suitable dwelling, financial bonus, arrangement of care, dwelling and pension, financial arrangement, priority rules, process help, awareness of the current situation, awareness of the new situation.

The first instrument is suitable dwellings. Suitable dwelling is about the construction of dwellings that are interesting for the target group due to the physical characteristics of the dwelling, but also due to its location, possibilities with regards to care and social interaction. The instrument is intended to pull the target group out of their current dwellings to a new more attractive housing situation. The instrument of suitable dwellings relates all the groups of pull factors, as it involves the physical dwelling, the location, and social interactions. Additionally, it relates to the lifestyle of a resident. From the data analysis, it has become clear that especially the younger part of the target group in the municipality of Rotterdam is highly influenceable by pull factors. The impact of suitable dwellings is also confirmed by the experts. Additionally, the respondents of the interviews also mentioned suitable dwellings as an important factor with regards to their willingness to move. There is, however, a difference between the experts and the target group about the exact interpretation of suitability. They especially differ about the location of the dwelling. The experts mentioned building in the neighbourhoods where the target group lives. However, the target group prefers the innercity irrespective of their former or current location. Additionally, according to the experts, social relations are an important factor with regards to the suitability of a dwelling while the

target group mentioned it as less relevant. The effectiveness of this instrument is high, the instrument is ethically correct, but there are doubts about the efficiency of the instrument.

Justification – suitable dwellings			
Literature	Pull factor – dwelling/neighbourhood/lifestyle/social relations		
Data analysis 55-65 highly influenced by pull factors			
Interviews experts	Dwelling combination of multiple pull factors		
Interviews target group	Essential, lifestyle but also affordability		

The second instrument is financial bonus. This instrument is intended to pull residents out of their dwelling by giving them a financial bonus either direct or indirect by for example reducing taxes. Based on the data analysis it is expected that the instrument is especially effective for part of those living in the municipality of Rotterdam who are aged between 65 and 75, as around 40% of this target group earn less than the modal Dutch income. The experts mentioned the instruments as one of the possibilities to pull the target group out of their dwellings. However, the respondents are critical about the effect of a financial bonus on their willingness to move. There are thus doubts about the effectiveness of the instrument. Additionally, there are doubts about the ethical correctness and the efficiency of the instrument. To conclude, it is expected that the instrument of financial bonus will not significantly influence the willingness to move of owner-occupiers living in Rotterdam and aged between 55 and 75.

Justification – financial bonus		
Literature Pull factor – finance		
Data analysis 40% of 65-75 <€35.000,-		
Interviews experts Interesting for residents with lower income		
Interviews target group	Not interested	

The third instrument is an arrangement of care, dwelling and pension. This instrument is also intended to pull residents by focusing on the dwelling while simultaneously reacting to the push factors of care and financial situation. This instrument might especially be effective for the older part of the target group in the municipality of Rotterdam as their income is lower and they have poorer health. The experts mentioned that such an instrument can create a perfect balance for the target group. However, respondents of the interviews do not relate the three different elements to each other but see those as separate elements. An arrangement of care, dwelling and pension does not appeal to them. The instrument of arrangement of dwelling, care and pension is therefore not effective in enhancing the willingness to move of target group.

Justification – arrangement of care, dwelling and pension			
Literature Pull factor – finance			
Data analysis -			
Interviews experts Optimised financial situation			
Interviews target group Not interested			

The fourth instrument is financial arrangement. This instrument creates opportunities and reduces barriers with regards to the finance of a dwelling, reducing the transaction costs of relocating. As mentioned in chapter four, due to the financial situation of the target group and their educational level especially the older part of the target group might be influenced by

this instrument. In the municipality of Rotterdam, the younger part has a higher income and is higher educated, which reduces their need for such an instrument. The experts also mentioned that such arrangements are effective for specific target groups. Due to prior experiences and limited focus on the financial aspects, respondents think that they have had good financial arrangements. However, the current financial arrangements are so cluttered that it is unclear if such a financial arrangement is really the right arrangement. Clear, well-structured arrangements might have a bigger influence on the willingness to move of the target group as such arrangements will have a direct impact. Additionally, such arrangements give the target group more influence in the process of relocating. The instrument might thus be effective while it is also ethical correct and efficient.

Justification – financial arrangement		
Literature	Transaction costs of relocating - creating financial possibilities	
Data analysis >40% of 65-75 is lower educated & 40% of 65-75 <€35.000,-		
Interviews experts Lack of arrangements -> barrier		
Interviews target group	Increases possibilities	

The fifth instrument is priority rules. This instrument is also intended to reduce the transaction costs of relocation. As mentioned in the subparagraph about the policy context within the municipality of Rotterdam, not many dwellings are constructed specifically focused on the target group. In combination with the existing problems in the housing market, competition is high. The priority rules increase the accessibility for the target group. Both the experts as the target group themselves are divided about the instrument of priority rules. They are unsure whether it will work and if it is ethically correct. However, the interviewee's who encountered such priority rules evaluate the results of this instrument as positive. They pointed towards transparency as a means to make the instrument ethically correct. To conclude, the instrument of priority rules is effective, efficient and when transparent also ethically correct.

Justification – priority rules			
Literature	Transaction costs of relocating - certainty		
Data analysis Dozens of applicants for 1 dwelling			
Interviews experts	Positive experience of priority rules by housing associations		
Interviews target group	Preferred above outbidding		

The sixth instrument is process help. While the instruments of financial arrangement and priority rules are focused on certain aspects of the process, e.g. finance and accessibility, the instrument of process help covers multiple elements of the relocation process. For example by having a sympathetic ear but also giving legal support etc. Similarly to the other instruments related to the transaction of relocation, due to the characteristics of the target group, the instrument can be effective for a certain part of the target group. This is also mentioned by the different experts. Due to prior experiences, the respondents do not see many difficulties with regard to the process of relocating. Therefore, on average the instrument of process help will not significantly influence their willingness to move. However, several respondents mentioned that when becoming older the process becomes more difficult. For the older part of the target group, the instrument can become more influential. The instrument of process help might not be as effective as the instrument of suitable dwellings, but it can increase the willingness to move of at least some owner-occupiers aged between 55 and 75. Additionally, the instrument is ethically correct and might be efficient.

Justification – process help		
Literature	Transaction costs of relocating – clarity & reducing barriers	
Data analysis	>40% of 65-75 lower educated & >30% single	
Interviews experts	Positive experience with senior real estate agent	
Interviews target group	Unnecessary due to (prior) experience*	

The seventh instrument is the awareness of the current situation. This instrument intends to influence how the elderly evaluate their current situation. More than 90% of the target group in the municipality of Rotterdam is satisfied with their dwelling. Resetting their (unreal) expectations will reduce their satisfaction and can increase their willingness to move. Increased awareness of the benefits and drawbacks of the current housing situation is also one of the most mentioned instruments by the different experts. During the interviews with the target group it became clear that the knowledge of the respondents about their current housing situation is incomplete. Their high satisfaction does not always correspond to reality. Increasing the awareness of the reality will increase their willingness to move. Although there are some doubts about the ethical correctness of this instrument, it is still effective and efficient.

Justification – awareness of current situation		
Literature	Evaluation current situation & awareness of push factors	
Data analysis	Unreasonable high satisfaction (>90%)	
Interviews experts	Future drawbacks -> provide solution	
Interviews target group	Unawareness	

The eighth instrument is the awareness of a new situation. This instrument is intended to influence the evaluation of a new situation. According to the experts increased awareness of the benefits of a new housing situation, is one of the most important types of instruments to enhance the willingness to move of the target group. The respondents of the target group also mentioned that experiencing the new situation and knowing what the new situation brings is of great importance for their willingness to move. The instrument of awareness of the new situation is effective, ethically correct and efficient.

Justification – awareness of new situation		
Literature	Evaluation new situation & awareness of pull factors	
Data analysis	-	
Interviews experts	Importance of complete information in increasing willingness to	
	move	
Interviews target group	Complete picture creates feeling with new place	

To conclude, six different type of instruments are suitable to influence the willingness to move of elderly owner-occupiers aged 55-75 living in the municipality of Rotterdam. These are: suitable dwelling, financial arrangement, priority rules, process help, awareness of the current situation and awareness of the new situation.

#### General conclusion

The main question of this research was: How can the willingness to move of owner-occupiers aged between 55 and 75 be increased by instruments on a municipal level? Instruments on a municipal level can influence the willingness to move of owner-occupiers aged between 55 and 75 in five different ways. First of all, instruments can influence the triggering mechanism

by making residents more aware of existing push and pull factors. Examples of such instruments are 'awareness of the current situation' and 'awareness of a new situation'. Secondly, by creating pull factors for the target group. The construction of suitable dwellings is an example of how instruments can create pull factors for the target group to increase the willingness to move. Thirdly, instruments can influence the evaluation of the target group by influencing the evaluation of the current situation. The instrument of awareness of the current situation is an example. Fourthly, instruments can influence the evaluation of the target group by reducing the transaction costs of relocation. The instruments of financial arrangement, priority rules and process help are examples of such instruments. Fifthly, instruments can influence the evaluation of the target group by influencing the evaluation of a new situation. An example of such an instrument is the awareness of a new situation.

There is a dependency between the different instruments that increase the willingness to move. Without push or pull factors, instruments related to the evaluation mechanism will not influence the willingness to move. Therefore, instruments that influence the triggering mechanism, e.g. push factors and pull factors or awareness of these factors, have priority over instruments that influence the evaluation mechanism, e.g. evaluation of the current situation, transaction costs of relocating, and evaluation of a new situation.

The exact influence of the instruments differs between individuals, due to their characteristics and the context of the municipality. As has become clear personal characteristics influence all different elements with regards to the willingness to move, and therefore also the effectiveness of the instruments that influence this willingness to move. One of the most influenceable elements with regards to the effect of the instruments is age. The research showed that instruments have a different influence on those aged between 55 and 65 and those aged between 65 and 75 as we can see in Figure 35. In addition to specific targeting of instruments based on personal characteristics, instruments should also be adjusted based on these characteristics. For example, a suitable dwelling is something different for those aged between 55 and 65 than for those aged between 65 and 75.

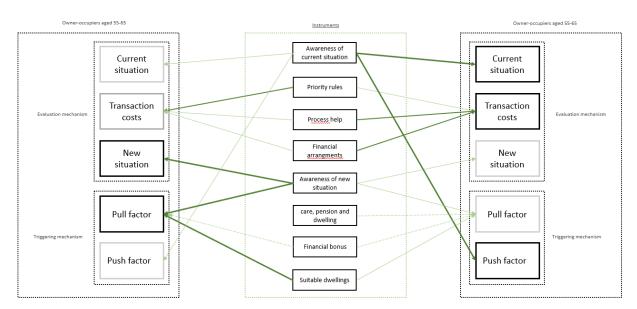


Figure 35. Influence of instruments on the two different target groups in the municipality of Rotterdam.

As has become clear the municipal context also influences the functioning of the different instruments. The personal characteristics of inhabitants, dwelling characteristics, neighbourhood characteristics and the policy context determine the willingness to move but

also the functioning of the instruments. The effectiveness and efficiency of the instruments are influenced by these contextual factors. For example, the existence of the Langer Thuis Akkoord ensures a smoother exchange of instruments between different areas. An example is the senior real estate agent which is already used for tenants but can relatively easily be used for owner-occupiers. Additionally, the proximity of facilities in the inner-city makes the construction of dwellings in these neighbourhoods suitable for the younger part of the target group as it corresponds to their lifestyle.

To influence the willingness to move of an individual it is thus important to know their characteristics. These characteristics include personal characteristics, e.g. age and educational level, but also contextual factors related to the dwelling and the neighbourhood. As these characteristics of an individual are known, instruments can be applied. If there is, for example, a single resident with poor health, lower income and lower educational level the instrument of process help is expected to significantly increase his or her willingness to move. With regards to a group of individuals, owner-occupiers aged between 55 and 75 in this case, the process is relatively similar. First of all, the characteristics of the target group have to be investigated and analysed. Based on this analysis it becomes clear which aspect of the willingness to move has the most potential to increase the willingness to move. For example, in the municipality of Rotterdam it has become clear that due to their characteristics, the willingness of owner-occupiers aged between 55 and 75 can best be increased by instruments that provide pull factors.

To conclude, instruments can influence the willingness to move by creating pull factors, influencing the evaluation of the current situation, reducing transaction costs of relocating and by influencing the evaluation of the new situation.

# CHAPTER 8 Discussion

# 8. Discussion

In this chapter, the results and conclusions of this study are discussed. The additional value of the research is analysed, what is missing, but also what the value of the study is and how it can be used. This chapter is divided into three parts. First, the limitations of the study are discussed. Secondly, some recommendations are made for both practice and further research. Thirdly, both the product and the process of this graduation project is reflected on.

#### 8.1 Limitations

Although this study is conducted meticulously it still has some limitations. First of all, the research is conducted as a single case study. As mentioned in chapter 4, the municipality of Rotterdam differs significantly from other municipalities in the Netherlands. Therefore, the results of this study cannot directly be implemented in another municipality. However, other municipalities can still use this research as a basis for their own research or policies. After all, the results of the literature study are not bounded to a specific context.

Secondly, no literature was found which linked personal characteristics to elements of the evaluation mechanism. This might have had a negative influence on the selection of the interviewee's as characteristics like income or educational level are more impactful than age. Based on the data analysis, the interviews with the experts and the interviews with the target group new insights were created about the relationship between personal characteristics and the elements of the evaluation mechanism. These results confirmed the hypothesis that especially age is important with regards to the willingness to move.

A third limitation is that, as mentioned in chapter 2, not all data in chapter 4 is focused on the municipal level. Some of the personal characteristics of the target group are studied based on the WoON2018. Data of the WoON study cannot be specified for the municipal level, instead, housing regions are used. These housing regions consists of multiple different municipalities. Therefore, the data is less specific than preferred. This creates the risk that the actual characteristics of the inhabitants of the municipality are different from those exhibited. This will have an influence on the efficiency of an instrument but not on the effectiveness or the ethical correctness. The influence of these possible differences is therefore expected not to be significant with regards to the selection of the instruments, as efficiency is also the least important criterium.

Fourthly, due to time limitations, only one expert is interviewed for each profession. This creates the risk that this individual is not representative of the whole profession. This is not a direct problem as this study has a qualitative character, but multiple professions were chosen to incorporate multiple different perspectives. As mentioned in chapter 5 these perspectives are based on individual characteristics and professional background. The experts are selected based on their professional backgrounds. If only one individual for each profession is selected their individual characteristics may be dominant over their professional perspective. This can ensure that the perspective of the selected profession is not completely captured. However, these individuals can still provide valuable insights, regardless of their professional background. Knowledge and new insights are not solely created by professional knowledge but can also be provided due to personal experiences.

A final limitation is the homogeneous composition of the group of respondents. As mentioned in chapter 6, the respondents are contacted using the professional network of the Langer Thuis Akkoord, the social network of the author and the social networks of the respondents. Especially this last method of getting in contact with the interviewee's ensured that respondents have similar characteristics and have a quite similar view on the process of

relocating and willingness to move. For example, almost all respondents are higher educated. This is not representative of the whole target group. Due to their knowledge, higher educated people are expected to encounter fewer problems with regards to the willingness to move and are influenced by other push and pull factors than lower educated residents. However, education is just one of the eight personal characteristics of a resident.

# 8.2 Recommendations

Based on this research multiple recommendations can be made. First, recommendations for practice are discussed. Secondly, recommendations for further research are presented. All recommendations are based on lacunae found during the research and the final results of this study.

# Recommendations for practice

With the development of the Langer Thuis Akkoord, the municipality of Rotterdam already showed progress with regards to the willingness to move of its inhabitants. The municipality shows its willingness to change the existing situation, which is also a sign for private stakeholders. However, as we have seen in chapter 4 there are currently not many concrete interventions. Therefore, based on this study some additional recommendations are made.

First of all, the municipality of Rotterdam should not focus on one solution for solving its problems. As this study showed the willingness to move of owner-occupiers is influenced by multiple different elements and differs between individuals. Therefore, developing multiple instruments focused on different elements of the willingness to move will be most effective. The study also showed that although the group of owner-occupiers aged 55 to 75 is relatively small within the municipality of Rotterdam, their influence is significant. Therefore, by only focusing on tenants opportunities are missed. An example of a missed possibility to have an integrated approach is the website woneninrotterdam.nl. For students or starters there are a lot of articles but if you are belonging to the target group 'children out of the house, back into the city' there are no articles.

Secondly, the municipality should use existing interventions for tenants to increase the willingness to move of owner-occupiers. As has become clear from the policy analysis there are already interventions to increase the willingness to move of elderly tenants e.g. senior real estate and priority rules. However, these interventions are currently only focused on tenants. These instruments can also influence the willingness to owner-occupiers. These instruments can be relatively easily extended to owner-occupiers. Small changes might be made as the situation of owner-occupiers differs as compared to the tenants. For example, the senior real estate agent helps owner-occupiers with legal issues with regards to the transfer of ownership while they help tenants with signing the right contract. However, these changes do not change the essence of the interventions.

Thirdly, the municipality of Rotterdam should try to motive and inspire other stakeholders. For example, developers should be given more space, and possibly additional rewards, for developing suitable dwellings for the elderly. As has become clear, suitable dwellings are an important factor with regard to the willingness to move of the target group. The most important aspect of these dwellings is their location. Both those who did not relocate as those who did relocate preferred a dwelling in or nearby the city centre. With regards to the physical aspects of these dwellings, some additional recommendations can be made. The target group prefer dwellings that are at least  $100 \, \text{m}^2$  which creates the possibility to have children come over. In addition, it is a nice bonus for the target group if the homes are future-proof concerning care. Additionally, the municipality should discuss finance concepts with for

example banks. Clear and well-structured financial arrangements should be developed. As mentioned by the respondents of the interviews, they do not encounter many problems with regard to financial arrangements, but this is mainly because they outsource this part of the process. They do not have sufficient knowledge to choose the right arrangement themselves. Therefore, clear and well-structured financial arrangements create more influence for the target group, enhancing their willingness to move. Finally, raising awareness of private stakeholders can also create awareness of the target group.

A final recommendation is to focus on younger residents. As has become clear, events like children leaving the house and reaching retirement create new phases in life creating opportunities for relocating. Additionally, older residents experience more problems with regard to relocating due to deteriorating health. Currently, the elderly are determined as residents above the retirement age, which is around 65. Residents younger than 65 are not taken into account. An example is the 65+ magazine of the municipality of Rotterdam. Such a magazine can also be developed for those aged between 55 and 65 who experience other events but for who increased willingness to move is evenly important.

# Recommendations for further research

Further research can be conducted by studying other cases. As mentioned before the municipality of Rotterdam is an extreme case. Due to the characteristics of the inhabitants, the physical characteristics of the housing stock and the policy context the municipality of Rotterdam differs significantly as compared to other municipalities. Conducting this study using other cases will create more insight into the influence of the context. Based on this knowledge the instruments can be implemented in more and different municipalities.

Based on the results of this study a quantitative study can be conducted to gain more insights into how each of the personal characteristics interacts with the instruments. For example, if the effectiveness of the instrument of process help depends on prior experience, educational level and/or financial situation. Additionally, it can give more insight into whether the developed instruments can also be effective for other target groups. For example, owner-occupiers aged between 25 and 55 or tenants aged between 55 and 75. The results of this quantitative study can be related to the results of the data study to optimize the use of instruments for different regions and neighbourhoods.

Additionally, more research can be done into the importance of the neighbourhood level. The data analysis and the interviews with the experts showed the distinct character and the importance of the neighbourhood level. The data analysis showed that there are huge differences between different neighbourhoods. The experts mentioned the importance of the neighbourhood with regards to the implementation of instruments. However, the respondents of the interviews with the target group were divided about staying in the neighbourhood. Those who did relocate did not prefer to stay in their previous neighbourhood. However, those who did not relocate did prefer to stay in their current neighbourhood. Therefore, additional research has to be conducted to examine whether the neighbourhood level significantly influences the implementation and use of the different instruments.

Another element that can be researched is what elements are influenced by changed expectations to increase satisfaction. As mentioned by Golant (2011) older adults are inclined to change their goals and expectations to bring satisfaction back to its original level. However, it is unclear if this is the case for all elements of the housing situation. The results of this study seem to suggest that the target group changes their expectations of the dwelling to

increase their satisfaction, while they accept lower satisfaction concerning the neighbourhood or social relations.

A final aspect that can be researched is the time needed for the target group to get used to the idea of relocating and how this influences their willingness to move. As mentioned before respondents sometimes mentioned a problem while they do not recognize an instrument that addresses the problem as a solution. It is expected that this has to do with the time elderly residents need to get used to an idea.

#### 8.3 Reflection

In her research about criteria for excellent qualitative research Tracy (2010) developed eight key markers of quality in qualitative research: worthy topic, rich rigor, sincerity, credibility, resonance, significant contribution, ethics and meaningful coherence. This study is reflected based on these criteria.

### **Worthy topic**

According to Tracy (2010), a worthy topic means that the qualitative study is relevant, timely, significant and interesting. As mentioned in the sub-paragraph 'social relevance', this study is relevant due to the influence on sustainability, the housing market, and the wellbeing of the ageing population. These are and will remain relevant in the coming years. The importance of these themes also became visible during the Dutch elections in 2021. For example, an article in Het Parool headlined: This time, the elections to the Lower House are about the climate (van Zoelen, 2021). In an article by rtlnieuws (2021) it was stated that voters considered the housing market one of the most important issues in the elections. Not only the three global themes remain important, but the residential mobility of the target group remains important as well. In an article by ruimteenwonen (2021) it was stated that around 70% of the Dutch electorate believes that the elderly should be helped financially when moving to a new dwelling.

## Rich rigor

Rich rigor is about the variety and correctness of the used methods. With regards to variety, this study uses multiple different methods. Data is obtained from literature, (local) databases, and two sets of interviews. Correctness of the study is about the time, effort, care and thoroughness of the author. The time of this study was predetermined, therefore it is difficult to reflect on whether the author has spent enough time to gather enough data. However, the study was carefully planned and the study is finished according to this plan. On average the used methods are used with care. In the literature study, multiple different sources are used to confirm different statements. As mentioned in the paragraph of limitations the data analysis had some problems with regards to the specificity of the data. The interviews are also conducted with care. These interviews are transcribed using a digital tool, after which these transcriptions were double-checked by the author. This caused high accuracy of the transcriptions. The analyses of the interviews are also done using a digital tool: AtlasTI. The use of this tool ensured higher accuracy.

## **Sincerity**

The sincerity of a study can be achieved through self-reflexivity, vulnerability, honesty, transparency and data auditing (Tracy, 2010). With regards to these elements, a distinction can be made between the process and the product of the study. In the process, sincerity has been achieved with multiple different feedback sessions with both supervisors of the TU Delft

as supervisors of the municipality of Rotterdam. However, in this document, the goals and biases of the author are barely mentioned. The earlier described elements of sincerity are discussed in this chapter but are hardly dealt with anywhere else in this document.

#### Credibility

The credibility of this study is obtained by thick description, triangulation and multivocality. Thick description is achieved by describing the complete process including details that at first glance seem unimportant. For example, the personal characteristics of the respondents are included to give readers the possibility to form their own conclusion based on all accessible information. Additionally, the protocols which have been used for the interviews are added in the appendices. Triangulation is achieved with the use of multiple methods: the results of the literature study, together with the input of both interviews with the experts and the target group. Multivocality is achieved by conducting interviews with experts who have different professional backgrounds. However, within these different professions, only one expert is interviewed. This creates the risk that this person is not representative for this profession. The results of the interviews are therefore not based on professional expertise but on expertise with the housing situation of the elderly. This risk also appears with the interviews with the target group. As mentioned before social networks have been an important instrument to get in contact with the respondents. This, however, ensured that respondents had similar characteristics. Member reflection, another element that ensures credibility, is not applied in this study.

#### Resonance

Resonance is one of the weaknesses of this study. According to Tracy (2010) "resonance can be achieved through aesthetic merit, evocative writing, and formal generalizations as well as transferability". The author is not fully proficient in English, which ensures problems with regard to evocative writing and formal generalizations. Although the document is read and corrected by other students there might still be some difficult or 'typical Dutch' sentences. There is still some work to be done regarding the aesthetic merit of this rapport. A coherent style, also with regard to the figures, would be an improvement.

## Significant contribution

A study can be significant in four different ways: theoretically, heuristic, practically and methodologically (Tracy, 2010). The current theoretical relevance of this study is a combination of bringing together literature about willingness to move, data about the characteristics of the target group, the perspective of experts in the field of senior housing, and the perspective of owner-occupiers aged between on the concept of willingness to move and the influence of different instruments on this. The link with instruments gives a new perspective and an additional layer to the concept of willingness to move. Therefore, this research is an addition to the original push and pull framework developed by Wiseman (1980). Heuristic significance relates to the possibilities of future research. As mentioned in chapter 8.2 this study offers several opportunities for further research. The study is practically relevant as it gives more insight into how the target group of owner-occupiers aged between 55 and 75 can be persuaded to move. This study showed that relocation is about more than the current adagium of constructing, constructing and constructing. For residents, it is also important to know more about their current housing situation, to have the possibility to have a feeling with the new situation, and to have good financial arrangements. This study is not methodological significant as no new or creative methods are used in conducting the research.

#### **Ethics**

With regards to ethics, a distinction can be made between the process and the product. As mentioned before the developed instruments can lead to various ethical dilemmas. The main ethical dilemma is the influence of external parties on the freedom and choices of an individual. An example of this is the instrument of additional taxes for the target group. This will heavily influence an individual while the benefits for society are debatable. With regards to the process of relocation, there were ethical dilemmas about the privacy of respondents and the fair representation of sources. The interviews with both the experts and the target group are recorded and the transcripts of these interviews are anonymised added to this study. The respondents are asked to give permission for doing the interview, including the recording and transcription of the interview. However, before and during the interviews with the experts the suggestion may have been made that the transcripts would be removed. Therefore, an additional mail sent to these experts to request permission to add their anonymised transcripts to this study. In this study, an attempt has been made to correctly reflect these ethical dilemmas. Based on the literature review, the data analysis and the experiences of the experts and the target group, cautious conclusions have been drawn.

## Meaningful coherence

Coherence is twofold: does the study what it proposes to do and is there a logical relation between the literature, the method, results etc. With regards to the first aspect, this study intended to develop more insight into how instruments can influence the willingness to move. In the concluding chapter, it has become clear how instruments can do this including several examples of instruments. There is also a logical relation between the different elements of this study. The literature addressed the why for this study. The method section treated the how question. The literature review, data analysis, interviews with experts and interviews with the elderly provided the what. Additionally, the coherence of the study is enhanced by the addition of sub-paragraphs related to instruments for each chapter. These sub-paragraphs provide a red line throughout the document.

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# Appendices

Appendix A: Push and pull factors

Appendix A: Push and pu			
FACTOR	STUDIES research	% mentioned	SOURCE*
FACTOR	by (Roy	in studies	SOUNCE
	et al.,	III Studies	
	2018)		
	2010)	Health - pu	ch
Feeling stressed	4/6	49.1%	(Crisp et al., 2013; Roy et al., 2018)
General health status	32/40	10% +	(Hansen & Gottschalk, 2006; Pope &
General nealth status	32/40	24.8% +	Kang, 2010; Roy et al., 2018; Smetcoren
		35% + 34%	et al., 2017; Stimson & McCrea, 2004;
		26%	van Iersel et al., 2009)
Quality of medal care	_	25%	(Carlson et al., 1998)
Physical limitations	44/59	5%	(Roy et al., 2018; van Iersel et al., 2009)
Not being able to drive	-	4%	(Stimson & McCrea, 2004)
Doctor and health	6/6	-	(Roy et al., 2018)
professional opinion	5,5		(110) 11 41., 2010)
Domestic activities	20/22	_	(Roy et al., 2018)
(including IADL)	,		(415) 21 21, 2212,
Needs anticipation	5/6	-	(Roy et al., 2018)
Personal care activities	21/25	-	(Roy et al., 2018)
(including ADL)	-		, , ,
Informal help available	6/9	-	(Roy et al., 2018)
·	Dw	elling – push	· · ·
Dwelling size	19/25	51% + 29%	(Hagen & Neijmeijer, 2020; Hansen &
_		40%	Gottschalk, 2006; Pope & Kang, 2010;
			Roy et al., 2018; van Iersel et al., 2009)
Presence of	5/8	22% + 53%	(Hansen & Gottschalk, 2006; Roy et al.,
garden/yard		37,5%	2018; Stimson & McCrea, 2004; van
			Iersel et al., 2009)
Maintenance	25/26	25.1% +	(Roy et al., 2018; Smetcoren et al., 2017;
requirements		37%	Stimson & McCrea, 2004; van Iersel et
		31,1%	al., 2009)
Presence of stairs	-	14%	(Hansen & Gottschalk, 2006)
Geographic location	36/41	12%	(Hagen & Neijmeijer, 2020; Hansen &
			Gottschalk, 2006; Roy et al., 2018)
Dwelling beauty and	4/6	8% + 12%	(Hansen & Gottschalk, 2006; Roy et al.,
general condition		10%	2018; Stimson & McCrea, 2004)
Number of storeys	6/10	10%	(Roy et al., 2018; van Iersel et al., 2009)
Familiarity with place	9/9	5%	(Roy et al., 2018; van Iersel et al., 2009)
Dwelling potential	10/11	5%	(Roy et al., 2018; van Iersel et al., 2009)
adaptability	n /n		(Danie C. Karra 2010, D
Convenient dwelling	7/7	-	(Pope & Kang, 2010; Roy et al., 2018)
Sustainability	- 01/07	-	(Hagen & Neijmeijer, 2020)
Housing building type	21/27	-	(Roy et al., 2018)
Tenure status	26/30	-	(Roy et al., 2018; van Iersel et al., 2009)
Adapted dwelling	19/21	-	(Roy et al., 2018)
Knowledge of housing	5/6	-	(Roy et al., 2018)
options			

Attachment/sense of	18/22	-	(Roy et al., 2018)
belonging to dwelling			
No. of years in current	12/17	-	(Roy et al., 2018)
dwelling/neighbourhood			
	Neigh	<u>bourhood – p</u>	
Community size	-	69%	(Carlson et al., 1998)
Residential density	4/6	68%	(Carlson et al., 1998; Roy et al., 2018)
Traffic and car facilities	2/4	65%	(Carlson et al., 1998; Roy et al., 2018)
Proximity of services	14/15	11% + 55% 33%	(Carlson et al., 1998; Crisp et al., 2013; Roy et al., 2018)
Climate	-	44%	(Carlson et al., 1998; Pope & Kang, 2010)
More attractive	-	39.9% +	(Smetcoren et al., 2017; Stimson &
environment		35% 37,5%	McCrea, 2004)
Neighbourhood	14/19	43% +	(Crisp et al., 2013; Pope & Kang, 2010;
facilities	, . ,	20.3%	Roy et al., 2018; Smetcoren et al., 2017;
		31.8%	van Iersel et al., 2009)
Governmental	-	28%	(Carlson et al., 1998)
regulations		2070	(0011001101 011011)
Racial/ethnic	_	23%	(Carlson et al., 1998)
composition			(**************************************
Proximity of nature	-	5%	(Hansen & Gottschalk, 2006)
Neighbourhood beauty	5/6	_	(Pope & Kang, 2010; Roy et al., 2018)
and general quality	.,		3, 11, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1
Programs and services	13/15	-	(Roy et al., 2018)
Neighbourhood	4/5	-	(Roy et al., 2018)
accessibility	·		
Presence of public	3/4	-	(Hagen & Neijmeijer, 2020; Roy et al.,
facilities			2018)
Access to public	6/8	-	(Roy et al., 2018)
transport			
Functional mixity	6/9	-	(Roy et al., 2018)
No. of years in current	12/17	-	(Roy et al., 2018)
dwelling/neighbourhood			·
	social	relations – p	ush & pull
Social and support	19/21	25,8% +	(Crisp et al., 2013; Pope & Kang, 2010;
network		16% + 11%	Roy et al., 2018; Smetcoren et al., 2017;
		17.6%	Stimson & McCrea, 2004)
Availability of the family	4/5	5% + 28%	(Carlson et al., 1998; Hansen &
		16,5%	Gottschalk, 2006; Roy et al., 2018)
Proximity and presence	27/31	15% + 23%	(Carlson et al., 1998; Roy et al., 2018;
of friends		+ 7%	Stimson & McCrea, 2004; van Iersel et
		15%	al., 2009)
Death of spouse or	-	2% + 20%	(Hansen & Gottschalk, 2006; Pope &
person living with		11%	Kang, 2010; Stimson & McCrea, 2004)
Household composition	34/45	10% + 7%	(Roy et al., 2018; Stimson & McCrea,
		8.5%	2004; van Iersel et al., 2009)
Proximity and presence	38/44	7%	(Pope & Kang, 2010; Roy et al., 2018;
of children			van Iersel et al., 2009)
Relation to neighbours	15/15	-	(Roy et al., 2018; van Iersel et al., 2009)

Social activities	17/18	_	(Roy et al., 2018)
Proximity of siblings	9/10	_	(Roy et al., 2018)
Pressure from family	16/18	_	(Roy et al., 2018)
Expression of family	18/21	-	(Roy et al., 2018)
roles	•		
Expression of social	7/9	-	(Roy et al., 2018)
role			
Number of Children	5/8	-	(Roy et al., 2018)
		Finance - pu	ısh
Housing taxes	4/6	45%	(Carlson et al., 1998; Roy et al., 2018)
Regional taxes	-	45%	(Carlson et al., 1998)
Housing costs	16/18	54% + 14%	(Carlson et al., 1998; Hansen &
		+ 16%	Gottschalk, 2006; Roy et al., 2018;
		28%	Stimson & McCrea, 2004; van Iersel et
			al., 2009)
Investment return	5/5	-	(Roy et al., 2018)
Financial problems	-	14.7%	(Smetcoren et al., 2017)
Housing market	8/8	-	(Roy et al., 2018)
Housing value	8/10	-	(Roy et al., 2018)
Equity	6/8	-	(Roy et al., 2018)
Active economic assets	5/7	-	(Roy et al., 2018; van Iersel et al., 2009)
Current/anticipated	33/48	-	(Roy et al., 2018; van Iersel et al., 2009)
income	- 1-		
Mortgage/reverse	1/3	-	(Roy et al., 2018)
mortgage			
<u> </u>		lifestyle - p	
Quality of life	-	82%	(Carlson et al., 1998)
Change in preferred	-	73%	(Carlson et al., 1998)
lifestyle		700/	(C
Slower pace of life	-	72%	(Carlson et al., 1998)
Preference to spend	-	30% +	(Crisp et al., 2013; Hagen & Neijmeijer,
more time with people		34.6%	2020; Stimson & McCrea, 2004)
of similar background	18/24	32.3% 56% + 44%	(Carlson et al., 1998; Crisp et al., 2013;
Feeling of security/fear	10/24	12% + 31%	Roy et al., 2018; Smetcoren et al., 2017;
		35.8%	Stimson & McCrea, 2004; van Iersel et
		33.0%	al., 2009)
Preference of more free		29%	(Stimson & McCrea, 2004)
time		2776	(Stillison & Meorea, 2004)
Feeling of	23/24	16.2%	(Roy et al., 2018; Smetcoren et al.,
independence	20,24	10.270	2017)
Marital status	_	11%	(Carlson et al., 1998)
Retirement	-	4% + 9%	(Hansen & Gottschalk, 2006; Stimson &
		6,5%	McCrea, 2004; van Iersel et al., 2009)
Employment/prior	8/16	1% + 16%	(Carlson et al., 1998; Hansen &
occupation	-,	8,5%	Gottschalk, 2006; Roy et al., 2018)
Feeling of control over	21/21	-	(Hagen & Neijmeijer, 2020; Roy et al.,
decision and	,		2018)
environment			
Personal identity	13/13	-	(Roy et al., 2018)
Routine and habits	11/11	_	(Roy et al., 2018)

Feeling of comfort	6/6	-	(Hagen & Neijmeijer, 2020; Roy et al., 2018)
Values and Religion	6/7	_	(Roy et al., 2018)
Satisfaction	15/18	-	(Roy et al., 2018)
Feeling of intimacy	9/11	_	(Roy et al., 2018)
Past residential	8/10	_	(Roy et al., 2018)
experiences			
Ethnic background	12/17	_	(Roy et al., 2018)
Residential	5/7	_	(Roy et al., 2018)
preconceptions			
Residential aspirations	9/13	_	(Roy et al., 2018)
Residential preferences	7/11	_	(Roy et al., 2018)
Age	33/52	_	(Roy et al., 2018)
Education	14/25	_	(Roy et al., 2018)
Gender	14/38	-	(Roy et al., 2018)

<sup>\*</sup> The studies of Crisp et al. (2013), Hansen and Gottschalk (2006) and Sommers and Rowell (1992) are also part of the study of Roy et al. (2018).

Appendix B: Personal characteristics

Factors	Effect*	Signifi	Sources
		cance	
Haveing average	Himbon		ncome
Housing expenses in relation to	Higher	1/1	(Hansen & Gottschalk, 2006)
disposable income			
Disposable income	Higher	5/7	(Akkermans et al., 2020; Carlson et al., 1998;
Disposable income	income	0, .	Hagen & Neijmeijer, 2020; Hansen &
	(change)		Gottschalk, 2006; Pope & Kang, 2010; Sommers
			& Rowell, 1992; Weeks et al., 2012)
		educa	tion - work
Education	х	3/5	(Carlson et al., 1998; Hagen & Neijmeijer, 2020;
			Pope & Kang, 2010; Sommers & Rowell, 1992;
		0.40	Stimson & McCrea, 2004)
Retirement age	Older age	2/3	(Crisp et al., 2013; Hansen & Gottschalk, 2006;
D		1 /1	Stimson & McCrea, 2004)
Preretirement type	Х	1/1	(Stimson & McCrea, 2004) Jusehold
Relationship status	Single	5/7	(Crisp et al., 2013; Hagen & Neijmeijer, 2020;
Relationship Status	Siligle	3/1	Hansen & Gottschalk, 2006; Smetcoren et al.,
			2017; Sommers & Rowell, 1992; Stimson &
			McCrea, 2004; Weeks et al., 2012)
Number of adult	More	1/1	(Sommers & Rowell, 1992)
children	children		, ,
Household	х	1/1	(Feijten & Visser, 2015)
structure			
	1		al relations
Relation with	Bad	2/3	(Akkermans et al., 2020; Crisp et al., 2013;
neighbours	relations		Hansen & Gottschalk, 2006; Stimson &
Relation with	Bad	2/2	McCrea, 2004) (Crisp et al., 2013; Stimson & McCrea, 2004)
family	relations	2/2	(Crisp et at., 2013, Stillison & McCrea, 2004)
Relation with	Bad	2/2	(Crisp et al., 2013; Stimson & McCrea, 2004)
friends	relations	2,2	(0113p et al., 2013, 3till13011 & Meorea, 2004)
	rotations		health
Self-reported	Poor health	2/5	(Akkermans et al., 2020; Hansen & Gottschalk,
health		,	2006; Pope & Kang, 2010; Sommers & Rowell,
			1992; Weeks et al., 2012)
Mental health	х	1/2	(Pope & Kang, 2010; Smetcoren et al., 2017)
Use of support	Higher	1/1	(Sommers & Rowell, 1992)
services	levels		
Informal care	No informal	1/1	(Akkermans et al., 2020)
	care		
Physical	-	0/1	(Akkermans et al., 2020)
limitations		4 h	Bananada sinkkan katal
L amouth of			ling and neighbourhood
Length of	shorter	2/3	(Hansen & Gottschalk, 2006; Sommers &
residency	lengths	2/2	Rowell, 1992; Weeks et al., 2012)
Homeownership	Renting	2/2	(Smetcoren et al., 2017; Sommers & Rowell, 1992)
			177 <b>L)</b>

Earlier residence	х	1/1	(Carlson et al., 1998)				
		othe	r personal				
Age	Younger	8/9	(Akkermans et al., 2020; Carlson et al., 1998; Feijten & Visser, 2015; Hansen & Gottschalk, 2006; Pope & Kang, 2010; Smetcoren et al., 2017; Sommers & Rowell, 1992; Stimson & McCrea, 2004; Weeks et al., 2012)				
Gender	Women	5/5	(Carlson et al., 1998; Pope & Kang, 2010; Smetcoren et al., 2017; Stimson & McCrea, 2004; Weeks et al., 2012)				
Race	X	1/2	(Feijten & Visser, 2015; Pope & Kang, 2010)				

<sup>\*</sup> Effect is determined as which aspect of the element creates the highest willingness to move. 'Women' in the row of 'gender' thus means that on average female residents have a higher willingness to move. Only studies who related the elements to the generic concept of triggering mechanism are incorporated.

- x Element is related to specific push and pull factors
- No significant results

## Appendix E: Interview protocol target group - not recently moved

#### Interview requirements

- Recorded conversation via Zoom/MSTeams
- Word tab for notes
- Signed informed consent form
- Transcription software

## **Preparation**

Before we start, I would like to thank you for participating in this study. So I am Jan van Vliet, final year student at the Faculty of Architecture of TU Delft in the master Management in the Built environment. For my graduation, I am doing research on the flow of buyers in the age of 55 to 75 years.

This interview will be used to get more insight in which instruments could work to influence the flow of buyers in the age of 55 to 75 years. The interview consists of 4 parts: general about yourself, willingness to move, how tools can influence that willingness and some concluding questions.

In order to be able to transcribe the interview, I would like to ask you if you are okay with me recording this interview. The recording will only be used by myself to listen back for academic purposes, after which I will delete the recording. The transcript will be anonymised and attached to the thesis. Do you agree?

Before we start the interview, I would like to ask you to sign and return the informed consent form to me. In this form you declare that you agree with the participation and the agreements mentioned above. OR: Finally, I would like to thank you for completing the informed consent form.

# **Interview questions**

## **General Information**

- 1. Can you briefly explain who you are?
  - a. What is your age?
  - b. What is your gender?
  - c. What is your marital status?
  - d. What is your nationality?
  - e. What is your highest education?
  - f. What is your (gross annual) income?
    - i. < 35.000
    - ii. 35.000-50.000
    - iii. 50.000-75.00
    - iv. 75,000-100,000
    - v. >100.000
  - g. How do you rate your health? As good or as less good?
  - h. How do you judge your relations with friends, relatives? As good or as less good? Why?
    - i. Do they live nearby?
    - ii. Do you have frequent contact?
  - i. How do you rate your relationship with the neighbours?

- i. Do you have frequent contact?
- j. Do you see yourself as an introvert or extravert?
- 2. How would you describe your current home?
  - a. What type of home do you live in?
  - a. How big is your home? OR How many rooms does your property have?
  - b. How old is your property? OR What is the state of maintenance of your property?
  - c. How long have you lived in your present residence?
- 3. How would you describe the neighbourhood where you live?
  - a. How would you describe the physical quality of your neighbourhood? Such as facilities, public transport, etc.
  - b. How would you describe the social quality of your neighbourhood?
  - c. How safe do you think your neighbourhood is?

# Willingness to move

- 4. Why would you want to move?
  - a. Health reasons?
  - b. New home?
- 5. How do you rate your current home? What do you like, what do you dislike?
- 6. If you knew more about negative aspects of your current home, would it make you want to move? Why yes/no?
  - a. For example regarding the maintenance of the house
- 7. What would you pay special attention to when assessing a possible different home/living situation?
- 8. If you could find out more about the positive aspects of another property, would it make you want to move? Why yes/no?
  - a. For instance with regard to (new) care possibilities
- 9. How do you perceive the relocation process?
  - a. Would help with the process of moving help you? Why yes/no?
    - i. For instance, a sympathetic ear or a moving service.
  - b. Would (better) mortgages or other financial resources help? Why yes/no?
  - c. Would preferential rules help? (explain) Why yes/no?
- 10. What in a different home would persuade you to move?
  - a. Aspects of the home, such as the number of rooms?
  - b. Living together with like-minded people?
  - c. Living together with a mixed target group?
  - d. Care in the home?
- 8. You just indicated that you might/ might not be inclined to move, and we have just been talking about possible barriers to moving. Would a financial bonus for

moving make you more inclined to move? Why yes/no? And how high should this amount be in order/amount?

9. (In the future) probably the biggest costs will be related to care. This will only increase as your income comes from retirement. While at the moment, much of your money is probably tied up in the home. a package with care and pension income tied to the home would make you more likely to move? Why yes/no?

## **Concluding questions**

- 11. Can you summarize in two or three sentences what made you move?
- 12. What would you like to add to this interview?

Then I would like to thank you very much for your time and willingness to participate in this research.

## Appendix C: Interview protocol experts

#### Interview requirements

- Recorded conversation via Zoom/MSTeams
- Word tab for notes
- Signed informed consent form
- Transcription software

## **Preparation**

Before we start, I would like to thank you for participating in this study. I am Jan van Vliet, final year student at the Faculty of Architecture at TU Delft, following the master Management in the Built Environment. For my graduation, I am doing research on the willingness to move of older owner-occupiers in the age of 55 to 75 years.

This interview will be used to get more insight in what instruments could work to increase the flow of owner-occupiers in the age of 55 to 75 years. The interview consists of 4 parts: general information about yourself, the concept of willingness to move, instruments in general, instruments specific and some concluding questions.

In order to transcribe the interview, I would like to ask you if you are okay with me recording it. The recording will only be used by myself to listen back to it for academic purposes, after which I will delete the recording. The transcript will possibly be shared with my supervisors from TU Delft, but will remain confidential. Do you agree?

Before we start the interview, I would like to ask you to sign and return the informed consent form to me. In it you declare that you agree with the participation and the above-mentioned arrangements. OR: Finally, I would like to thank you for completing the informed consent form.

# **Interview questions**

#### **General information**

- 1. Can you briefly explain who you are and what your activities are?
  - a. How do you deal with the passage of elderly people?
  - b. What is your role in the Langer Thuis Akkoord?

## Willingness to move

In my research, I focus on the willingness to move of owner-occupiers aged 55 to 75

- 2. What do you think are the most important characteristics of this target group?
  - a. Do you see a difference between the target group 55-65 and 65-75 years of age?
- 3. What do you think the propensity to move of this target group (buyers 55-75 years old) is based on?
- 4. Research shows that the propensity to move of this target group is low. Do you have any idea why this is the case?

#### Instruments

5. How do you think the willingness to move of this target group can be increased?

- a. Do you see a distinction between those who are 55 to 65 and those who are 65 to 75? If so, what kind of distinction?
- 6. Research shows that residents are pushed and/or pulled out of their homes. When it comes to being pushed out of their homes, one thinks of not being able to walk up the stairs, not being able to pay for the house anymore, etc. How could such negative elements be used to increase the propensity to move?
  - a. What would be the influence of financial incentives such as (for instance) the addition of an extra tax for owner-occupiers over 55 years old who live in an oversized house?
  - b. What do you think about the addition of health-related incentives such as denial of care as a possible means of forcing people to move?
  - c. What would be the influence of adapting the neighbourhood, such as reducing facilities, on the propensity to move?
  - d. What would be the influence of home modifications?
  - e. Do you see any distinction between those who are 55 to 65 and those who are 65 to 75? If so, what kind of distinction?
- 7. As well as being pushed out of their homes, residents can also be pulled out of their homes. This might include extra facilities in the new environment, but also the presence of children, for example. How could such positive elements be used to increase the target group's willingness to move?
  - a. How can the target group be attracted out of the house by a certain lifestyle?
  - b. How can characteristics of a (new) residence increase the target group's willingness to move?
  - c. How can characteristics of a (new) neighbourhood increase the target group's willingness to move?
  - d. How can social contacts attract the target group out of the dwelling?
  - e. Do you see any distinction between those who are 55 to 65 and those who are 65 to 75? If so, what kind of distinction?
- 8. Another reason that emerged from the literature is that older people can also evaluate their current home too positively. How could the evaluation of the current residence be influenced to make people more inclined to move?
  - a. Do you see any distinction between those who are 55 to 65 and those who are 65 to 75? If so, what kind of distinction?
- 9. Just as people can evaluate their current housing situation too positively, they can evaluate the new housing situation too negatively. How can the evaluation of the new situation be influenced to make people more willing to move?
  - a. How, for instance, can residents be given the idea that the new dwelling can feel just like home as their current home? An example is to make them realise that their current belongings will also fit in the new (possibly smaller) house.

- b. Do you see any distinction between those who are 55 to 65 and those who are 65 to 75? If so, what kind of distinction?
- 10. The process of moving can often be a major barrier for the target group. In your opinion, how can we make sure that the move is no longer, or at least less, seen as a problem?
  - a. How can financial barriers be removed? That is, the financial costs of moving.
  - b. How can legal barriers be removed? The notary.
  - c. How can physical barriers be removed? That is, packing the goods.
  - d. How can other (psychological) barriers be removed? Total overview.
  - e. Again, do you see any difference between the different age groups?

## Responsibility

- 11. Who, what sector, do you think could use the earlier mentioned instruments to increase the willingness to move?
- 12. How do you see the role of your professional group (name) in this?

#### Municipal context

- 13. How do you think the context of the municipality of Rotterdam, i.e. laws and regulations but also stakeholders involved, may influence the use of instruments to increase the propensity to move?
  - d. To what extent does Rotterdam differ from other municipalities in this respect?
    - i. With regard to the inhabitants
    - ii. With respect to the housing stock
    - iii. Concerning the neighbourhood
    - iv. With regard to laws and regulations

## Concluding Questions

- 14. In your opinion, how could the reluctance to move of the target group be increased in 2 or 3 sentences?
- 15. What would you like to add to this interview?

Finally, I would like to thank you for your time and willingness to participate in this research. The results of this research will be presented and can be found on Chainels.

## Appendix D: Interview protocol target group - recently moved

#### Interview requirements

- Recorded conversation via Zoom/MSTeams
- Word tab for notes
- Signed informed consent form
- Transcription software

## **Preparation**

Before we start, I would like to thank you for participating in this study. So I am Jan van Vliet, final year student at the Faculty of Architecture of TU Delft in the master Management in the Built environment. For my graduation, I am doing research on the flow of buyers in the age of 55 to 75 years.

This interview will be used to get more insight in which instruments could work to influence the flow of buyers in the age of 55 to 75 years. The interview consists of 4 parts: general about yourself, willingness to move, how tools can influence that willingness and some concluding questions.

In order to be able to transcribe the interview, I would like to ask you if you are okay with me recording this interview. The recording will only be used by myself to listen back for academic purposes, after which I will delete the recording. The transcript will be anonymised and attached to the thesis. Do you agree?

Before we start the interview, I would like to ask you to sign and return the informed consent form to me. In this form you declare that you agree with the participation and the agreements mentioned above. OR: Finally, I would like to thank you for completing the informed consent form.

# **Interview questions**

## **General Information**

- 1. Can you briefly explain who you are?
  - a. What is your age?
  - b. What is your gender?
  - c. What is your marital status?
  - d. What is your nationality?
  - e. What is your highest education?
  - f. What is your (gross annual) income?
    - i. < 35.000
    - ii. 35.000-50.000
    - iii. 50.000-75.00
    - iv. 75,000-100,000
    - v. >100.000
  - g. How do you rate your health? As good or as less good?
  - h. How do you judge your relations with friends, relatives? As good or as less good? Why?
  - i. Do they live nearby?
    - i. ii. Do you have frequent contact?
  - j. How do you rate your relationship with the neighbours?

- i. Do you have frequent contact?
- k. Do you see yourself as an introvert or extravert?
- 2. How would you describe your current home?
  - a. What type of home do you live in?
  - e. How big is your home? OR How many rooms does your property have?
  - f. How old is your property? OR What is the state of maintenance of your property?
  - g. How long have you lived in your present residence?
- 3. How would you describe the neighbourhood where you live?
  - a. How would you describe the physical quality of your neighbourhood? Such as facilities, public transport, etc.
  - b. How would you describe the social quality of your neighbourhood?
  - c. How safe do you think your neighbourhood is?

## Willingness to move

- 4. Why did you move?
  - a. Health reasons?
  - b. Previous residence?
  - c. New home?
  - d. Location?
  - e. Social network?
- 5. How do you evaluate your previous home? What do you like, what do you dislike?
- 6. How would you evaluate your current home? What do you like, what do you dislike?
- 7. What did you pay attention to when assessing your current home/living situation?
  - a. Did care aspects play a role in the assessment?
  - b. Did a possible combination of retirement and care play a role?
- 8. Did money play a role in your considerations? Why or why not? Would a financial bonus have changed your considerations? Why or why not?
- 9. How do you evaluate your relocation process?
  - a. Would help with the process of moving help you? Why yes/no?
    - i. For example, a sympathetic ear or a moving service.
  - b. Would (better) mortgages or other financial resources help? Why yes/no?
  - c. Would preferential rules help? (explain) Why yes/no?

## **Concluding questions**

- 10. Can you summarize in two or three sentences what made you move?
- 11. What would you like to add to this interview?

Then I would like to thank you very much for your time and willingness to participate in this research.

## Appendix F: Transcriptions interviews experts

## Municipal policy maker

The municipal policy maker works at the municipality of Rotterdam and focusses on senior housing. Reasons to move of the target group are according to her: children leaving the house, dwelling becoming too big, and health issues. Reasons mentioned why the target group does not move are: high satisfaction, good social network and the barrier of the process of relocating. The willingness to move can be influenced by on the one hand awareness created by sufficient information and on the other hand the development of suitable dwellings. – For a complete transcript (in Dutch) contact the author

#### Member of senior organisation

The member of the senior organisation is a member of several elderly people's organisations and also represents these organisations in the Langer Thuis Akkoord. He especially mentioned the diversity of the target group. The willingness to move differs thus between individuals. Therefore, general instruments are expected to be less effective. Each residents should be made aware about what a suitable contains in the coming years. Another important element with regards to instruments is to have an integral approach on the neighbourhood level. – For a complete transcript (in Dutch) contact the author

## **Developer**

The developer works at a medium sized developing company. In conclusion she mentioned the following with regard to influencing the willingness to move of the target group: "Look closely at your data. Engage in conversation and really listen. Seduce the target group." During the interview she especially focused on the seduction of the target group. Besides seduction she also mentioned to reduce barriers with regards to the process of relocating. For example by providing suitable financial arrangements. – For a complete transcript (in Dutch) contact the author

## Welfare worker

Due to her professional background the welfare worker works mostly with people with different problems. This also influences how she sees the target group and how instruments can influence the willingness to move. She especially mentioned the importance of awareness and information supply with regards to the willingness to move. The process should thereby made less difficult or stressful – For a complete transcript (in Dutch) contact the author

#### Care worker

The care worker is an freelancer hired by one of the bigger care organisations for the elderly in the municipality of Rotterdam. The core of the message of the care worker is the carrot and the stick. The focus should be on the carrot; seduction. The stick is capital tax. Besides the carrot and the stick, education also important for influencing the evaluation of the target group – For a complete transcript (in Dutch) contact the author

#### Real estate agent

The real estate agent works for one of the biggest real estate agency in the municipality of Rotterdam. According to the real estate agent the main problem is a shortage of suitable supply. He is also a bit sceptical about intervening in the market. Some instruments can work but are ethically undesirable. As a real estate agent he did not see much residents struggling with the process of relocating. – For a complete transcript (in Dutch) contact the author

## Appendix G: Transcriptions target group

## Respondent 1

Respondent 1 is a women aged 66, living in the inner-city of the municipality of Rotterdam who did not relocate recently. Together with her husband, she lives happily in her present home. The main reason for her satisfaction is the location of her dwelling. The dwelling is nearby the EMC and easy accessible. She is not willing to move due to these positive elements of the location and the current state of the housing market. Health status, both physically and mentally, is highly influential with regard to her willingness to move. A dwelling developed in co-creation together with priority rules can positively influence her willingness to move. Other instruments are mentioned as less influenceable. – For a complete transcript (in Dutch) contact the author

respondent	Age	Nationality	Education	Income	Marital status	Health	Social relations	Length of residency
Respondent 1	66	Dutch	High	€50.000- €75.000	Couple	Good	Good	25 years

## Respondent 2

Respondent 2 is a single women who lives in the inner-city of Rotterdam for more than 40 years. During the interview she especially mentioned the fact that she currently has no reasons to move as she is satisfied with her current dwelling. She only relocates if a new situation improves her current situation. And she currently does not know new housing situations which are better than her current housing situation. – For a complete transcript (in Dutch) contact the author

respondent	Age	Nationality	Education	Income	Marital status	Health	Social relations	Length of residency
Respondent 2	>65	Dutch	Low	Unknown	Single	Good	Average	44 years

#### Respondent 3

Respondent 3 is a men who is also living in the inner-city of Rotterdam. He works as in the field of housing provision, therefore, he has adequate information about his current housing situation and a possible new situation. He has a willingness to move but this is low as he does not see good opportunities in the current market. Additionally, he is satisfied with his current housing situation due to the characteristics of the dwelling, the location, and the social relations. His willingness to move can be increased by a change in the market that will reduce the unhealthy situation. – For a complete transcript (in Dutch) contact the author

respondent	Age	Nationality	Education	Income	Marital status	Health	Social relations	Length of residency
Respondent 3	64	Dutch	High	€50.000- €75.000	Couple	Good	Good	35 years

#### Respondent 4

Respondent 4 is a women who recently moved to the inner-city of the municipality of Rotterdam. The main reason for her relocation was that because her children moved out of the house the current dwelling did not match there current phase in life. Especially the neighbourhood they lived in did not correspond to their needs and wishes. The current location in the inner-city has a better match with their current phase in life. She mentioned the process of getting the right financial arrangement as something that was unclear and which can be improved. Additionally, she mentioned that having a good feeling by a place

created by for example Virtual Reality increases the willingness to move. - For a complete transcript (in Dutch) contact the author

respondent	Age	Nationality	Education	Income	Marital status	Health	Social relations	Length of residency
Respondent 4	56	Dutch	High	€75.000- €100.000	Couple	Good	Average	2 years

## Respondent 5

Respondent 5 is a men who recently moved to a new location but who is already in the process of relocating to another location. The reason for this relocation is low satisfaction with the current situation due to social relations. Additionally, he got pulled to a new situation due to its location outside city with clean air. Their willingness to move was increased by gradationally experiencing the new place. They stayed for some nights in the new situation and this gave them the feeling that this dwelling would improve their satisfaction. – For a complete transcript (in Dutch) contact the author

respondent	Age	Nationality	Education	Income	Marital status	Health	Social relations	Length of residency
Respondent 5	67	Dutch	High	€35.000- €50.000	Couple	Good	Average	2 years

## Respondent 6

Respondent 6 is a woman who recently moved to a new dwelling nearby the inner-city of the municipality of Rotterdam. They lived in a small town in the province of 'Zeeland' but they wanted to move back to city again. Main reason for this relocation is the fact that the small town was experienced as 'boring' while the city of Rotterdam has much more to offer and has a better match with their current phase in life. With regards to the process they did not encounter much problems but she mentioned that when they were older the process would have been more difficult. – For a complete transcript (in Dutch) contact the author

respondent	Age	Nationality	Education	Income	Marital status	Health	Social relations	Length of residency
Respondent 6	66	Dutch	High	€75.000- €100.000	Couple	Average	Good	4 years

#### Respondent 7

Respondent 7 is a women who already lives for some time in her current dwelling. However, she has a willingness to move. She mentioned that when her son would leave the house a new phase in life would come. The current dwelling will not be suitable anymore. They will then search for a dwelling that is future-proof. – For a complete transcript (in Dutch) contact the author

respondent	Age	Nationality	Education	Income	Marital status	Health	Social relations	Length of residency
Respondent 7	55	Dutch	High	> €100.000	Couple	Below average	Good	17 years

## Respondent 8

Respondent 8 is a women who recently moved to a dwelling nearby the inner-city. The main reason for her relocation have been the preference to live nearby facilities and services in the inner-city. Additionally, she did prefer a dwelling with a specific architectural style. So, she moved mainly due to pull factors related to the dwelling. Due to her professional background and earlier experiences she did not encounter problems with regard to the

process of relocating. However, indirectly she mentioned that in the municipality of Rotterdam priority rules might work. – For a complete transcript (in Dutch) contact the author.

respondent	Age	Nationality	Education	Income	Marital status	Health	Social relations	Length of residency
Respondent 8	56	Dutch	High	> €100.000	Couple	Good	Good	3 years

## Respondent 9

Respondent 9 is a couple who recently moved to a new dwelling in the inner-city of Rotterdam. The couple wanted to move back into the city. Especially, because their kids leaved the house. In their process of relocating they experienced some kind of priority rules. Although they like the result of these rules they do not agree with the way these rules are used as the rules are not transparent. The real estate agent ensured that the process went like clockwork. – For a complete transcript (in Dutch) contact the author.

rocpondent	Age	Nationality	Education	Income	Marital	Health	Social	Length of
respondent					status		relations	residency
Respondent 9	59	Dutch	High	> €100.000	Couple	Good	Good	0.5 years

## Respondent 10

Respondent 10 is a couple who recently moved to a new dwelling in the inner-city of Rotterdam. Because both partners reached the retirement age they preferred a new dwelling that brought the adventure back in their lives. Due to good information supply with, among others, Virtual Reality and brochures the couple get a feeling with the new situation which increased their willingness to move. Additionally, because priority rules have been applied there was no such thing as outbidding, this also increased their willingness to move. – For a complete transcript (in Dutch) contact the author.

respondent	Age	Nationality	Education	Income	Marital status	Health	Social relations	Length of residency
Respondent 10	66	Dutch	High	€50.000- €75.000	Couple	Good	Good	0.5 years

## Respondent 11

Respondent 11 is a single women who recently moved to a new dwelling in the inner-city of the municipality of Rotterdam. She also preferred a more vivid location. As a freelancer she encountered some problems with the financial part of the process of relocating. As a freelancer it is difficult to get the right financial arrangement. Having good financial arrangements can therefore increase willingness to move. – For a complete transcript (in Dutch) contact the author.

respondent	Age	Nationality	Education	Income	Marital status	Health	Social relations	Length of residency
Respondent 11	60	Dutch	High	€75.000- €100.000	Single	Good	Good	0.5 years