HOUSING SATISFACTION OF TENANTS IN MIDDLE SEGMENT RENTAL HOUSING IN AMSTERDAM

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BY

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ABSTRACT

The municipality of Amsterdam wants to allow the middle segment in the rental sector to grow further in size in the coming years, to better facilitate the housing needs of residents between the social rental sector and the owner-occupied sector. However, it is important to gain a better insight into both the quantitative and qualitative housing demand for housing in that middle segment, to make sure that suitable housing supply can also be realized in this housing segment. To be able to realize suitable housing supply in the middle segment rental sector, it is of importance to know which characteristics of the house and the living environment are more decisive for the housing satisfaction of the tenants. The research methods in this thesis are quantitative and qualitative. Quantitative analysis will be done to define the supply and demand in the current housing stock. First the quantitative data will be analyzed by using data from WiMRA (2021), which provides information about the current situation of the middle segment housing, the users and their housing satisfaction. The qualitative research will be done by interviews with tenants of housing provided by housing corporations and private parties in Amsterdam and by analyzing the current state of satisfaction of these tenants, to complement the quantitative research. The goal of this research is to create a solution to match supply and demand from both a qualitative and quantitative perspective for midsegment housing and to increase satisfaction of residents of middle segment housing.

Keywords: Housing, middle segment housing, housing satisfaction, Amsterdam, rent, WiMRA, housing association, private parties

PREFACE

Since the housing market crisis is always in the news especially for bigger cities, this topic had my attention for a very long period. I was always curious about the reasons for the housing crisis and how this could be solved. During my study I heard about the middle segment housing, that it's a relatively new segment within the housing market and that it should help people who fall between the two main segment. The social housing and the free market housing. Since the middle segment is the connecting segment between the two other segments, it could also solve some of the problems within the housing market and for all the segments.

I noticed that many people around me struggle to find a house in Amsterdam and end up renting a house in the expensive free rental sector for a very expensive price just to have a house. Many of them did not know about the middle segment housing when I told them about it, so I concluded that many things within the middle segment housing are still vague and unclear. As I chose to focus on the housing market in Amsterdam for my graduation thesis, I started doing more research about this segment and I realized that there is not much known about the housing satisfaction of the middle segment rental housing. Which made me choose to focus on the housing satisfaction of the tenants in the middle segment housing in Amsterdam. I believe that when understanding the factors for housing satisfaction of the wide variety of tenants in this segment it could improve all housing segments in Amsterdam.

I hope you will enjoy reading my thesis!

EXECUTIVE SUMMARY

Introduction

Middle-income households can no longer access the social housing sector and making the labor market more flexible means that fewer households can buy a home. In the current housing market, a problem has arisen in these sectors; a private rental sector that is too small and too expensive, limiting the freedom of choice for low-middle income households. While, housing associations must rent out at least 90% of their housing to low-income households. For this type of households with an income between € 40.765 and approximately € 60,000 per year (Stec groep, 2020), the social rental sector is not accessible due to the level of their income which is higher than the liberalization limit. Besides, there are increasingly strict rules regarding mortgage lending and the required contribution of own money (from 1 January 2015) has made buying a house more difficult (Stec groep, 2020). The demand for private rental housing will continue to rise in the coming years, it is estimated that this demand will increase by 79%-201% in 2020 (Municipality of Amsterdam, 2017).

Figure A: Ratio of incomegroups vs housingstock (Stec groep, 2021)

The aim of this study is to gain insight into the way in which the municipality of Amsterdam, the housing associations and the landlords balances supply and demand within the new construction (nieuwbouw) of the middle segment (rent) for the current and potential residents within this segment, by examining the characteristics of this housing stock and the current tenants involved. It is important to have a good understanding of the housing satisfaction of the tenants and what increases this housing satisfaction. Also, the differences between the housing provided by the housing associations and housing provided by private parties are important to understand how this market is operating. This allows statements to be made about the connection between supply and demand and whether there is a mismatch, considering different characteristics of the residents which will be used to connect with the housing satisfaction to recognize current trends. In the end this will result in housing satisfaction related to specific characteristics of the dwellers and the design requirements that should be fulfilled.

Method

The method for this research is a mixed method sequential explanatory design/approach. This method exists of two distinct phases: quantitative followed by qualitative (Ivankova, Creswel & Stick, 2006). First, the quantitative data will be collected and analyzed. Afterwards the qualitative data will be collected and analyzed sequentially and will help with the elaboration on the previously collected quantitative results (Ivankova, Creswel & Stick, 2006). In this research the data about the current supply and demand within the existing newly built midsegment housing stock will first be obtained and analyzed. This will be data about the current rental middle segment housing in Amsterdam and its tenants. A distinction between housing provided by housing associations and private market parties will be made to highlight differences between the housing stock and the tenants of the two parties. After that qualitative research

will be used to give more depth to the analyzed data, which will provide more understanding to the conceptions and motivations of the housing satisfaction of the tenants. This will be done by focusing on one specific newly built project in Amsterdam where interviews with approximately 20 tenants will be executed. This qualitative research should thus be as an addition to findings from the quantitative research.

Findings: Middle rental supply and demand

Amsterdam has had a substantial production of middle rental housing since 2014. From 2015, this has been between 1,150 and 1,250 dwellings per year. For a long time, the construction of middle segment rental homes lagged far behind the targets set by the municipal executive committee, but in 2021 a huge catch-up operation took place with the start of the construction of 2,719 middle segment rental housing. Which is still not enough, since there is a demand for approximately 6000 middle rental housing a year. Furthermore, The number and share of middle rental homes increased by approximately 4,500 in the years 2019-2021, almost one percentage point of the total housing stock. In other words there can be an improvement seen in the amount of middle rental housing that is produced in Amsterdam but still the demand of 6000 houses a year is not met.

Furthermore, the biggest group of tenants rents their house from a housing corporation and not from a private owner. While the middle rent segment is divided in: 14% belonging to private landlords and 8% belonging to corporations. But the number of middle rental homes increased by approximately 4,500 between 2019 and 2021, which is almost one percentage point of the total housing stock. But In 2019, the latest year available, the demand for middle rent housing exceeded supply by approximately 45,000 units, which is a "shortage" of almost 11% of the total middle rental stock. The housing shortage for the middle rent housing is the biggest of all housing segments.

Findings: Housing characteristics and characteristics of the tenants

The data shows that the biggest group that live in middle segment rental housing are couples under 35 years without children. This group is very varied. However, in most of the cases people who live in middle segment housing do not have children. Not having children is an important characteristic of the tenants because many choices for a house are based on this. In the interviews most of the people indeed did not have children and their age was for half of the interviews under the age of 35.

Furthermore, according to WiMRA, 31% of the tenants of housing association housing have an income below the lowest middle income limit (€ 40.024,-) and for the private parties it is 33%. These people actually should be allocated in the social housing segment, but since there is a housing shortage the middle segment housing is one of the best options for their financial situation compared to other housing segments. Besides, 27% of the people in the housing associations housing have an income higher than the maximum middle income limit (€64,409,-), for the private housing this is 35%. So, there are many people who could move (doorstromen) to other segments in the current middle segment.

Table A: Overview of the housing characteristics of the houses of the interviewees (Source: author)

	Interview	sqm	Amount of rooms	Housing type	Rent price	Year of construction	Garden/ balcony	Floor	Energy label
Bakemabuurt (Stadgenoot)	1	67 m2	3	Apartment	€ 975,-	2019 (renovated)	French balcony	1st floor	A
	2	57m2	3	Apartment	€ 975,-	2019 (renovated)	French balcony	4th floor	A
	3	57m2	3	Apartment	€ 1035,-	2019 (renovated)	French balcony	1st floor	A
	4	74 m2	4	Apartment	€ 976,-	2019 (renovated)	French balcony	1st floor	A

Filosoof (Stadgenoot)	5	50 m2	3	Apartment	€ 955,96	2019	2 balconies 2 m2 and 4,5 m2	1st floor	A
	6	120 m2	4	Single family house	€ 1095, -	2019	Garden	Ground floor	A
Oosterdokseiland (Stadgenoot)	7	68 m2	2	Apartment	€990,-	2013	French balcony	3rd floor	A
Djakartaterras (Eigen haard)	8	74 m2	3	Apartment	€ 926,-	1984 recently renovated	Balcony	2nd floor	?

Findings: housing satisfaction

When looking at the results from the WiMRA analysis about the housing satisfaction in general of the tenants, one can conclude that overall, the tenants of the housing association and tenants of the private landlords are satisfied with their current house. The interviews also showed that tenants are satisfied with their house. In general people were happy that they could find a house, because they knew the housing market at the moment and how hard it is to find a house. So they took the current circumstances of the market into consideration.

Also, the data about the satisfaction with the area of the house shows that most of the tenants are satisfied. Even if they think it is too small or too big for them. When connecting the household types to the area satisfaction a remarkable difference between housing from housing associations and housing from private owners occurs. The variety in household types has already been noted in the previous chapter, but this analysis shows that the biggest group within the private housing which is the singles younger than 35 is randomly placed within the different housing. It seems that there is not much effort put into the matching of the household types with the right housing. Most household types are definitely singles younger than 35, which needs to be taken into consideration when constructing the housing. Furthermore, the interviewees mentioned that when their house was had the current surface area it was good for their current living situation and not when changes would occur in their household type. For example, when they would have a partner or when their kids would grow older, they would prefer a bigger house or a different housing type. Many of them mentioned that the rooms are very small and that you cannot even put your wardrobe for example.

Actions for the stakeholders

Based on the findings seven actions are proposed towards the three main stakeholders: the municipality, the housing associations and the developers. The eight proposed actions are:

1. The first action is to increase the housing construction for the coming years, to decrease the current shortage
2. In order to make this shortage decrease the middle rental housing should stay within this segment, so making them permanently middle rental housing will help. Which is the second action keeping housing within the middle segment housing.
3. The third action is creating flexibility in the floorplan of the houses to fit the wide variety of the tenants. This flexibility can be done by for example modular housing.
4. Furthermore, the action for more outer space within the designs, also a variety for these spaces is needed. For example, a collective garden for all the housing in the complex or gardens and balconies that provide more privacy.

5. The next action is the allocation of tenants based on their characteristics especially for the private parties. Important for this action is to have a good understanding of the tenants and their characteristics and with the help of the municipalities housing ordinance this can be improved.
6. Action seven is about the rent price, in order to make the housing affordable the point system is proposed as in the social housing system. This will make the price of the rent fairer and measurable. Also the change of the liberalisation limit into a transitional regime could be a solution for the lower income households because then they will still have the right for subsidies.
7. The next action is to also provide owner occupied housing for the middle segment.

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1 INTRODUCTION

The Dutch housing stock consists of an owner-occupied sector, social rental sector and private rental sector. In a properly functioning market, there should be a balance between these three sectors, so that the supply and demand of homes automatically match each other. Middle-income households can no longer access the social housing sector and making the labor market more flexible means that fewer households can buy a home. In the current housing market, a problem has arisen in these sectors; a private rental sector that is too small and too expensive, limiting the freedom of choice for low-middle income households. While, housing associations must rent out at least 90% of their housing to low-income households. For this type of households with an income between € 40.765 and approximately € 60,000 per year (Stec groep, 2020), the social rental sector is not accessible due to the level of their income which is higher than the liberalization limit. Besides, there are increasingly strict rules regarding mortgage lending and the required contribution of own money (from 1 January 2015 has made buying a house more difficult (Stec groep, 2020). The demand for private rental housing will continue to rise in the coming years, it is estimated that this demand will increase by 79%-201% in 2020 (Municipality of Amsterdam, 2017).

Young people are increasingly moving to cities, the main reason being the increase in employment for the highly educated, which, together with the location of their education institution, is mostly concentrated in cities (Brakman et al., 2015). In addition, it has been found that among young people there is a stronger focus on a good work-life balance than among earlier generations and that they attach importance to a multicultural setting. In general, (certain neighborhoods in) cities offer better options for this than the hinterland, which enhances the appeal (Hekwolter or Hekhuis et al., 2017). A solution to this shortage is not only to build more dwellings – a logical step if there are too few houses – but also to make the houses fit the variety of preferences of the different users. It is important to consider both the quantitative and the qualitative side to gain better insight into the qualitative housing demand in the middle segment, so that suitable housing supply can also be realised. According to many young people in Amsterdam they do not always feel at home in their current houses, which is mainly because their houses do not always fulfil their housing needs (Pakhuis de Zwijger, 2020). Also, according to PAM (2017) The aim of the municipality of Amsterdam is to realize at least 10,000 new mid-rental homes by 2025. Homes with sufficient space for starters, (young) families and the elderly, with an income between 1 and 2x average (approximately 40.765, - to 80,000 euros)(Stec Groep, 2021). As seen in figure 1, there is an increasing need for middle segment housing while the supply is the lowest of all segments at the moment. According to NUL20 (2015), there are a lot of examples of middle segment housing which needed to be as small as possible because of the high prices of realization. So based on this point it is essential to fulfill the basic needs of the residents, and this can only be done if you know what increases or decreases the housing satisfaction and what characteristics the tenants find essential in a house.
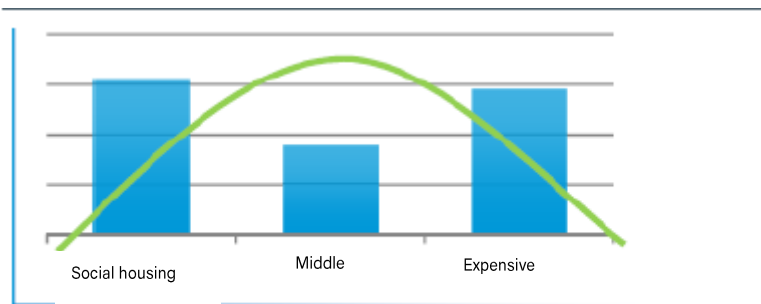
Figure 1: *Ratio of incomegroups vs housingstock (Stec groep, 2021)*

The demand for middle rent is diverse, which results in a varied middle rental housing stock. From urban micro-apartments for yuppies, to family homes for freelancers with children and social tenants moving on (doorstromers), to apartments for senior citizens with on-demand care facilities. To conclude, the need varies regionally, so there is no uniform picture (Stec Groep, 2021).

1.1 Problem statement and goals

There can be a big difference between wish and reality which can also be seen in the supply and demand of the middle segment housing as shown in figure 2. This also applies to the housing needs of households in Amsterdam. The Netherlands has a rich tradition of measuring housing preferences. These surveys identify whether people have plans to move and, if so, what housing characteristics they want, such as the tenure, the housing type, the number of rooms, etc (Boumeester & Lamain, 2019). Various measurement techniques can be applied in which the housing characteristics can be individually (compositional) or as a total package (decompositional) offered and whether or not the degree of mutual importance of the desired housing characteristics is established (Boumeester & Lamain, 2019).
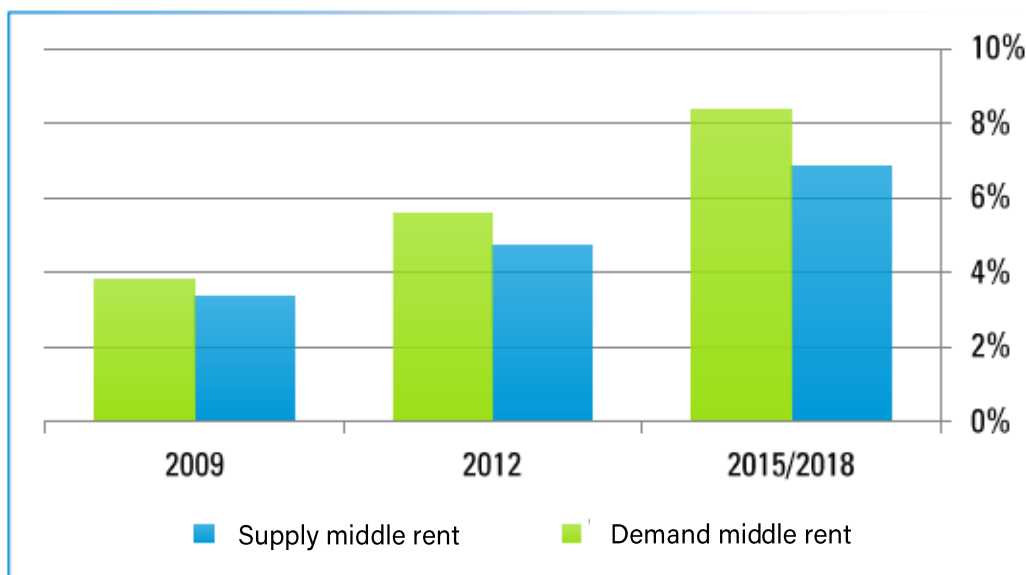
Figure 2: *Housing stock and housing demand development in the Netherlands (Stec Groep, 2019)*

The growing demand as seen in figure 2 for middle rent is evident and threefold: first and foremost, the demand arises from the supply vacuum that has arisen between social rental and owner-occupied

housing: the restricted role of housing corporations means that middle-income households in particular are not able to have social housing. At the same time, buying a house has become unaffordable for a

large portion of them due to low interest rates and years of price gouging by the mortgage interest deduction (hypotheekrenteaftrek) (Geunting, Lentferink & Timmen, 2020). In addition, the demand is also intrinsically motivated by flexibilization of society and a shift from possession to use thinking. As shown in figure 3, there is an increase in the percentage of flexible contracts. Demand therefore comes not only from middle-income households, but also from people with a higher income with a desire for flexibility. Young people with a higher education are switching jobs more often, working with flexible employment contracts and settling later and later. They change their house many times, while their income is relatively high. a middle segment rental home in an urban location fits in well with their way of living. But middle rent is also becoming increasingly popular among older people. Older people currently often live in (too) large, maintenance-intensive single-family homes. Those homes stand for considerable assets, accumulated through mortgage repayments and value appreciation. The move to a comfortable, maintenance-free, ground-floor apartment can be attractive: the accumulated wealth is released and can be used as a retirement pot. In addition, this target group is sorting out the possibility of declining mobility. That is not a luxury, because the extension of care means that people in need of care are spending increasingly longer in their own accommodation (Geunting, Lentferink & Timmen, 2020).
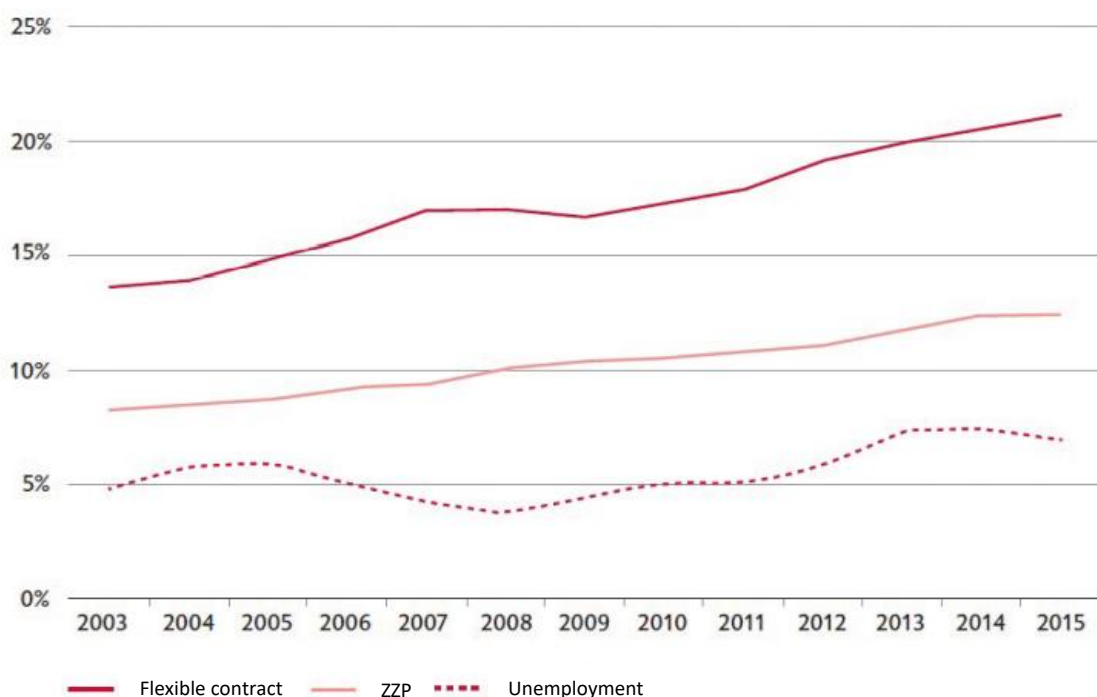
Figure 3: percentage of the amount of working people with a flexible contract or who work as ZZP (Meulenbeld, 2019)

Also, the impact of the corona crisis will have to show itself (Planbureau voor de leefomgeving, 2021). It is expected to increase rather than decrease the demand for midsegment rental housing, according to a survey made among market parties in the province of Gelderland. The uncertainty in the housing market reduces the perspective of positive value development in the owner-occupier market, which makes renting relatively attractive (Planbureau voor de leefomgeving, 2021).

The aim of this study is to gain insight into the way in which the municipality of Amsterdam and the landlords balances supply and demand within the new construction (nieuwbouw) of the middle segment (rent) for the current and potential residents within this segment, by examining the characteristics of this housing stock and the current residents involved. It is important to have a good understanding of the housing satisfaction of the tenants and what increases this housing satisfaction. Also, the differences between the housing provided by the housing associations and housing provided by private parties are important to understand how this market is operating. This allows statements to be made about the connection between supply and demand and whether there is a mismatch, considering different characteristics of the residents which will be used to connect with the housing satisfaction to recognize current trends. In the end this will result in housing satisfaction related to specific characteristics of the dwellers and the design requirements that should be fulfilled.

The choice for Amsterdam is because this city is very popular. Recent research by the Netherlands Environmental Assessment Agency has shown this again; Amsterdam is growing by a thousand residents every month (Municipality of Amsterdam, 2008). Young people stay in the city, even when they start a family. The city is the place where they can find work. So, the pressure on Amsterdam is considerable and, that will not change over the next decade. Besides, there is a development of affordable housing on the one hand and housing in the expensive segment on the other, while there is a great demand for more spacious housing in the middle segment. In different reports, such as in the Housing Agenda report of the Municipality of Amsterdam (2017), the focus is on the 40-40-20 rule, which is the starting point for the housing program: 40% regulated rent, 40% medium-price (rent and sale) and 20% expensive rent and sale. On the other hand, the qualitative side seems a bit forgotten. These results of this research are meant for all the parties that participate in the realization of middle segment housing, which are the Municipality of Amsterdam, the market parties, the housing associations and the developers to have a quick overview of the demanded housing characteristics and designs based on the characteristics of the user. This way it will be easier for these parties to make choices about the characteristics of the housing in the middle segment rent in Amsterdam.

1.2 Relevance

In this section, the research field and related research are discussed in order to describe the added value of this research. A distinction is made between the societal relevance which addresses the added value for society or society and the scientific relevance which describes what this research can contribute on a scientific level.

1.2.1 Motivation

In times of scarcity, it is my personal conviction that the housing market can only be set in motion if there is a good overview of the demands to make also a good cooperation between public and private actors. This requires a clear and unambiguous assessment before new instruments are used, which have the potential to further distort the already cyclical housing market. Away from political color, towards realism and on the basis of facts. This will ensure that we work towards a balanced housing market, which will ultimately be less cyclical and offer equal opportunities to all target groups in the middle segment.

1.2.2 Societal relevance

Housing for households with a middle income has become increasingly important in the Dutch social debate in recent years. Although the Netherlands is now known for its internationally known housing system for low incomes, the middle segment is also regarded as increasingly relevant. Cities such as Amsterdam and Utrecht often make it to the news as the most overwrought housing markets in the Netherlands. Nowadays, efforts to increase the middle segment of the private rented sector do not seem to be bearing fruit, despite the ambition for a larger middle segment being included in the ambitions of

the municipality (Municipality of Amsterdam, 2017). This is mainly because of the high pricing of the development of housing and can be seen in the stagnated increase of the percentage of middle segment housing in Amsterdam

With its housing policy and housing stock management, the municipality of Amsterdam wants to be able to respond better to the housing needs of households regarding renting or buying a home in the middle segment. For this it is important to know which characteristics of the home and the living environment are more decisive in the choices of housing consumers and for housing satisfaction. This research therefore focuses more specifically on desired housing characteristics among current resident for a middle segment rental house in Amsterdam.

Findings from this research contribute to the social debate about not only the stimulation of the middle segment in Amsterdam, but also about making its quality better. Analyzing its supply and demand from the perspective of the residents while considering their characteristics and living conditions. The parties that can benefit from this research are housing associations, the Municipality of Amsterdam and developers/market parties. This research will give insight in matching the housing with the resident, because of the overview that will be created in the end of this research based on the different analysis and data. An overview of the distinctive characteristics of the tenants and with the needed housing characteristics will be made, which can be an easy tool to be used for designing suitable housing.

Besides, there is a lack of trust between the market parties and the municipality, this is mainly because of distrust between these two parties because of different interests which resulted in a lack of conversation (van Gijzel, 2018). Also, many municipalities still had little knowledge about and contacts with market parties. Investors also had little contact with municipalities, which made it difficult for them to obtain information about new construction projects of middle rent homes to be found. By providing an overview in the housing design and characteristics needed from the resident's point of view this can be easily communicated to the market parties without unclarity.

1.2.3 Scientific relevance

Various scientific housing market studies have been conducted in the past, in which housing markets have been compared internationally, including into the affordability of homes and the role of policy in this (e.g., Beer et al., 2007; Milligan, 2003). In general, the effects of housing policy are mainly studied at the national level rather than at the urban level. However, larger cities often experience different challenges than smaller cities or villages in terms of housing, and they sometimes also differ in approach to this from the rest of the country, it is also important to gain insight into this. In addition, there is often a great focus on the position of low incomes in the market instead of middle incomes, while the latter has become more important in social debates in recent years. Besides that, the percentage of midsegment housing in the last couple of years has been increasing in amount and percentage as shown in figure 4. Because the amount of middle segment housing is still below the demanded amount, much research about the quantitative side of this segment is conducted. While there is a gap in the qualitative side of the middle segment housing, by giving insight in the quality and housing satisfaction of the middle segment housing in Amsterdam future research can be more specific and more suitable. Also, there seems to be a gap in the current literature on the housing satisfaction of residents of midsegment housing. Furthermore, this segment is divided in housing provided by housing associations and housing that is provided by private parties, the differences between the housing provided by the two parties is also still not clear and researching the differences can give new insights. This research therefore contributes and is a good addition to the current scientific knowledge on this subject
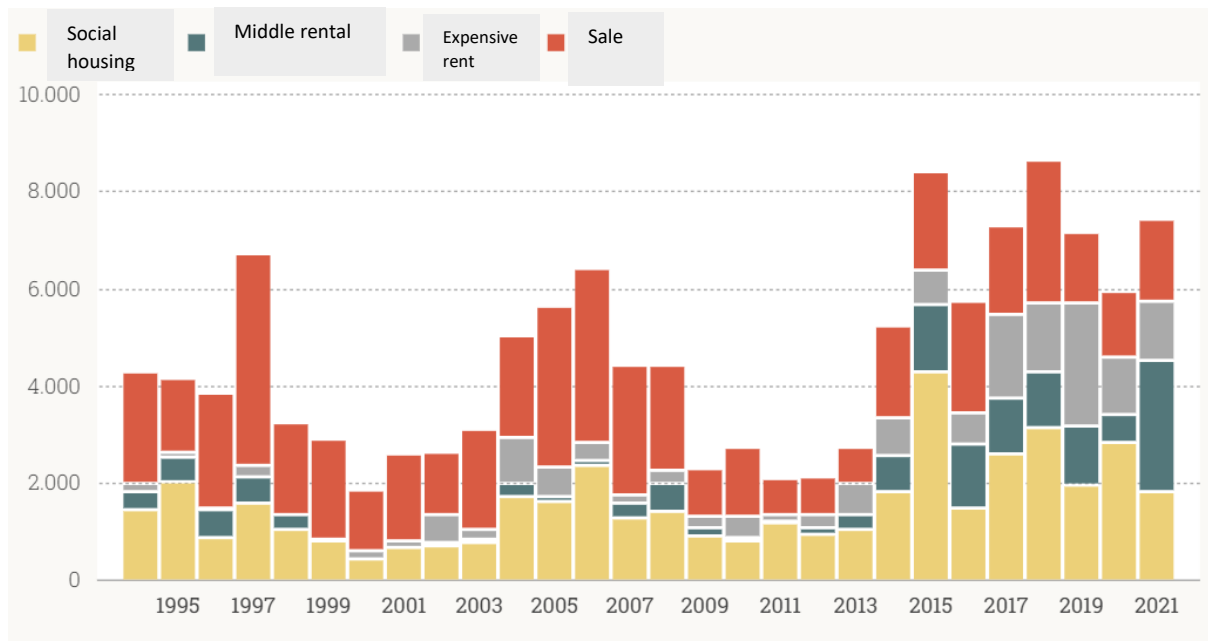
Figure 4: Housing production in Amsterdam (Nul20, 2022)

1.3 Research questions

Based on the objective discussed in the previous chapters, the following central research question and sub questions will be explored.

Main question: *How can the housing satisfaction in the newly built middle rental housing segment in Amsterdam be improved compared to the current situation?*

To answer this main question the following sub-questions will be asked:

1. *How does the current supply and demand of the newly built middle rental segment in Amsterdam operate in terms of quality and quantity comparing the housing corporation stock to the private housing stock?*
2. *What are the characteristics and living conditions of the current residents of the newly built middle rental segment?*
3. *Are dwellers of the newly built middle segment rental housing satisfied with their housing?*
4. *Which housing characteristics are demanded to improve the housing satisfaction?*
5. *What actions can relevant actors take for improving the housing satisfaction within the middle rental segment?*

Current research into middle segment housing in Amsterdam is often quantitative. An example of this is the report by Platform woningcorporaties Noordvleugel Randstad (2019), in which various data on houses in Amsterdam and the residents were collected. However, the underlying motives or thoughts about the house of the residents are not investigated. In addition, in the report of van Gijzel (2018) is discussed what the reasons are for the mismatch in supply and demand within the middle segments, one of the reasons is that market parties play a big role in the realization of the middle segment housing which makes it hard for the Municipality to fulfill all the quality needs for this housing because of the main goal of the market parties, which is making a high profit. Also, in this report (van Gijzel, 2018) the collaborations (samenwerkingstafels) are being discussed, which makes clear that most of the collaboration have been done top down, which means that there is a lack of involvement of the residents. This shows that there is still no overview of the housing satisfaction of the residents at the moment, and that involvement of the tenants/residents can add value to the housing. There is therefore still a lack of qualitative research

in which the experience of residents of middle segment homes and their motives are examined in the context of Amsterdam. By conducting quantitative and qualitative research, the real motivations and experiences about the housing satisfaction of middle segment tenants will become clearer. Answering these research questions leads to recommendations for housing, the future design of middle segment homes, developers, the municipality of Amsterdam, market parties and housing associations where these homes can be better designed. This leads to an increased housing satisfaction.
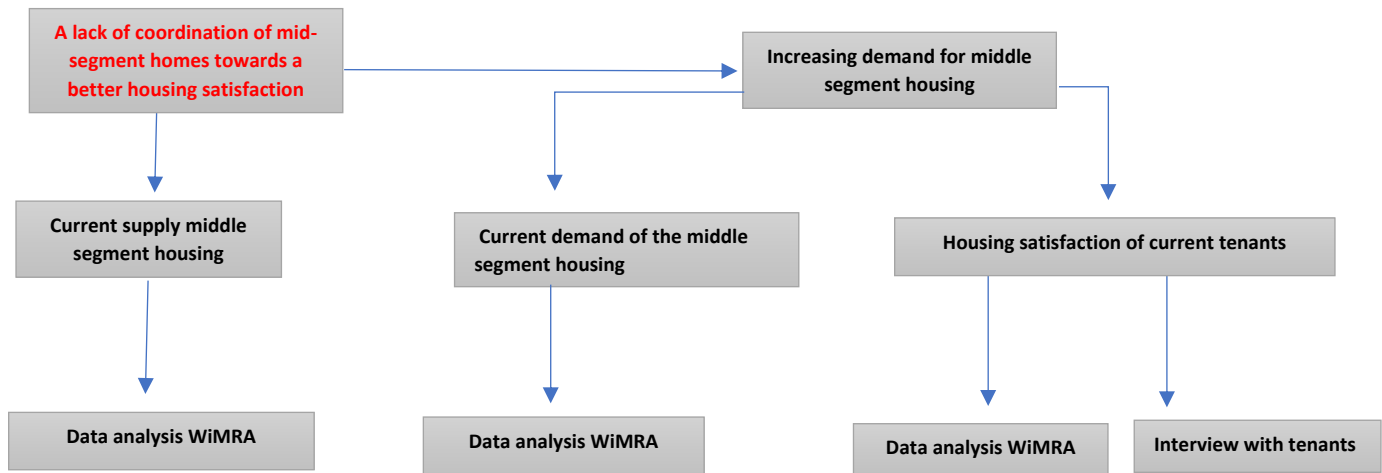
Figure 5: *research implementation (source: author)*

Widening of the gap between social housing and free sector and increasing group of middle-income households

From literature and news articles

Wide variety of people who belong to middle segment

From literature

How does the current supply and demand of the newly built middle rental segment in Amsterdam operate in terms of quality and quantity comparing the housing corporation stock to the private housing stock?

What are the characteristics and living conditions of the current residents of the newly built middle rental segment?

Quantitative supply and demand

From literature review

Characteristics and living conditions of tenants

From WiMRA & interviews

Age
Education
Job
Hobbies
Family situation
Income
Activities from home

Sqm
Amount of rooms
External space
Neighborhood
Design of the house

Quality of the middle segment housing

From WiMRA & interviews

Are dwellers of the newly built middle segment rental housing satisfied with their housing?

Housing satisfaction of current tenants

From WiMRA and interviews

Maintenance
Affordability
Sqm
Neighborhood
Design of the house

Which housing characteristics are demanded to improve the housing satisfaction?

Changes in housing characteristics

Recommendations

What actions can relevant actors take for improving the housing satisfaction within the middle rental segment?

Municipality of Amsterdam
Housing associations
Developers

Defining relevant actors and their current actions

Actions to be taken

Instruments used by different stakeholders

Current policies

Figure 6: *conceptual model (source: author)*

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1.4 Research method

This research uses both qualitative and quantitative research methods and data sources. These resources are described below.

The method for this research is an inductive approach research, which means that it will begin by collecting data that is relevant for analyzing the middle segment housing. Once a substantial amount of data is collected, a break will then be taken from the process of collecting data, which will give the opportunity to have a bird's eye view on the data. This is the moment to look for patterns in the data, and to understand the underlying motivation and reason for these patterns. So, when taking an inductive approach, the starting point will be with a set of data and then moving from those particular experiences to a more general set of propositions about those experiences. In other words, it is a moving from data to theory. The steps of an inductive approach go from gather the data towards the development of a theory, but for this research the goal is not to develop a theory but to understand the researched data and try to describe, interpretate and translate this information to recommendations.

The method for this research is a mixed method sequential explanatory design/approach. This method exists of two distinct phases: quantitative followed by qualitative (Ivankova, Creswel & Stick, 2006). First, the quantitative data will be collected and analyzed. Afterwards the qualitative data will be collected and analyzed sequentially and will help with the elaboration on the previously collected quantitative results (Ivankova, Creswel & Stick, 2006). In this research the data about the current supply and demand within the existing newly built midsegment housing stock will first be obtained and analyzed. This will be data about the current rental middle segment housing in Amsterdam and its tenants. A distinction between housing provided by housing associations and private market parties will be made to highlight differences between the housing stock and the tenants of the two parties. After that qualitative research will be used to give more depth to the analyzed data, which will provide more understanding to the conceptions and motivations of the housing satisfaction of the tenants. This will be done by focusing on one specific newly built project in Amsterdam where interviews with approximately 20 tenants will be executed. This qualitative research should thus be as an addition to findings from the quantitative research.

1.4.1 Research method per sub question

1. *How does the current supply and demand of the newly built middle rental segment in Amsterdam operate in terms of quality and quantity comparing the housing corporation stock to the private housing stock?*

To answer this question the first part of the research will be based on literature to have a literature framework of the current situation of the middle rental segment housing in Amsterdam. This literature research will be based on previous scientific research and will frame the research and define the important definitions used in the research such as housing types, characteristics, housing satisfaction and living conditions. So, the purpose of this sub question is to provide insight into the current middle rental segment housing and what the problems and particularities are within it. Numbers about the current supply and demand will be showed, within the middle segment rental housing.

2. What are the characteristics and living conditions of the current residents of the newly built middle rental segment?

The distinctive characteristics and living conditions of the tenants will be based on the WiMRA research. This is a sample file but only for the Amsterdam Metropolitan Area (MRA), with a very large sample. This research takes place every 2 years. The WiMRA file that will be used is the one that has been released most recently, which is in February 2022. The data that is most interesting for this question is data about the characteristics and living conditions of the respondents.

This makes the variables about the housing characteristics and living conditions of the respondents interesting for answering the question. These characteristics are based on the variables about the residents themselves, such as: the amount of people in the household, education level, how much the income for the household is, the affordability of the rent and the history of their housing (such as from how long they live in their current house, what was the type of house before they moved to the current house)These target groups will be made in the WiMRA database to be able to categorize the collected data. Furthermore, the variables are about the current house the tenants live in, for example: which party is the landlord, variables about the housing type (square meter of the house, living area, amount of rooms, etc.), the rent, the type of contract, the sustainability measures taken in the house.

By using SPSS the data collected and the selected variables will be analyzed. By using crosstabs, the relationship between different variables can be shown. In a cross-tabulation, the categories of one variable determine the rows of the table, and the categories of the other variable determine the columns. In this analysis the rows show the housing type and segment and the columns are changing for each table, which are the characteristics of the tenants and the housing. The cells of the table contain the number of times and percentage that a particular combination of categories occurred. The "edges" (or "margins") of the table typically contain the total number of observations for that category. This way the trends can easily be recognized in the current supply and conclusions can be taken.

For the purposes of the qualitative research, the qualitative data collection method that is selected is the semi-structured in-depth interview. For these interviews, the projects which also have middle segment housing in Amsterdam will be selected in collaboration with housing association Stadgenoot. These dwellings are in Bakemabuurt and Filosoof in Amsterdam-West and Oosterdokseiland in Amsterdam-centrum. The total number of selected addresses that are approached is 150 in total. For this research ten persons are interviewed. There is awareness that there are several types of interviews that can be conducted (structured, semi structured and open), however, a semi-structured interview provides enough structure to direct the conversation, but also allows room for the participant to expand on certain topics if they choose to. In addition, there will be the ability to interject probing questions if needed to gather relevant information and knowledge from the research participants. It is necessary that the researcher is prepared for each interview beforehand to maximize the time with each research participant and develop a good rapport to gain their trust and confidence to obtain their perspectives and opinions. Ideally, face-to-face interviews are preferred to properly develop a good rapport with each research participant. However, due to the circumstances surrounding the COVID-19 situation and associated restrictions, the interviews will probably be conducted on virtual platforms, either Zoom, with the phone or Microsoft Teams. All households will be approached with a letter where they will be asked to fill in their contact details and their preferred date for the interview (via a personal login code). They will also be sent a paper document with the same details directly along with a reply envelope. This letter will be sent by the housing association that is involved for the specific project, with the help of the Amsterdamse Federatie voor Woningcorporaties, where the internship will be done, this can be possible.

3. *Are dwellers of the newly built middle segment rental housing satisfied with their housing?*

Afterwards, data from WiMRA about the current middle segment housing situation will be used to determine the current housing satisfaction

First of all, this research question will be answered with the WiMRA database also, based on the information about the housing satisfaction. The main variable that will be used is the one about the housing satisfaction. This variable gives the opportunity to describe the housing satisfaction from 1 to 10 (in which 10 is the best). There are also other variables about the satisfaction of various aspects in the living area. For more information about the housing satisfaction in the middle segment the interviews will be a useful tool. This will be answered with the same interview that will be implemented as described in the earlier sub question. Afterwards the trends in the housing satisfaction of the tenants will be recognized and used for further research. Since this interview will be done with current middle segment residents, the purpose of the interview is to provide insight in their current housing satisfaction.

4. *Which housing characteristics are demanded to improve the housing satisfaction?*

To answer this question the collected qualitative and quantitative data will be used to compare the current situation to the ideal housing situation. Based on literature review the connection between the housing characteristics and the housing satisfaction can partly be made. Furthermore, the interviews will be also used to make the connection between the housing characteristics and the trends in the housing preferences. The gaps in the current housing situation will be highlighted and the changes that should be made in the current housing will be described.

5. *What actions can relevant actors take for improving the housing satisfaction within the middle rental segment?*

The stakeholders that have a relevant actor are the municipality of Amsterdam, the market parties and the housing association. To have a good understanding about the actions these stakeholders take at the current moment, first some research needs to be done. For the municipality of Amsterdam current policy agenda's will be used for the understanding of the current situation. For the market parties a literature review will be done to understand their way of approaching the realization of middle segment housing and to understand their motives for the specific choices. Also, the actions that are taken from the point of view of the housing associations will be analysed with a literature review. Based on this research proposals for each actor can be made to increase the housing satisfaction of the tenants of the middle segment housing. Besides, the interviews will be used to define the actions needed to be taken to increase the housing satisfaction of the tenants.

1.4.2 Interview conduction

The interviews are conducted to provide further insights in the observations and conclusions made in the WiMRA data research (next two chapters) about the current housing situation, the characteristics of the current residents and the housing satisfaction.

Nine interviews have been conducted in total, in three main projects provided by housing association Stadegnoot in Amsterdam: De Filosoof (Kolenkit), Bakemabuurt (Dirk Senoystraat) and Oosterdokseiland. These projects have around 150 houses that belong to the middle segment housing stock. The letter has been sent in collaboration with Stadgenoot to all 150 addresses. From these 150 addresses only 7 people responded. Due to fewer responses two more interviews from other project have been added which is Djakarta Terras provided by Eigen Haard in Amsterdam Oost. The interviews are

used as a qualitative exploration to complement the findings from the WiMRA data analysis, and to understand certain reasons for findings in the analysis better. The private housing tenants have been approached within the researchers own network. But only one person applied for the interview, so the comparison between housing associations and private parties is left out in the interview analysis.

People who were interested in taking part of the interview could scan the QR-code in the letter and were redirected to a website to fill in a quick survey (filled in 1 min), about their personal information and if their housing is from a housing corporation or a private party.

The interview is divided into three parts to answer the research questions which are 1. Background of the resident, 2. Satisfaction and 3. Housing career. The interview questions are shown below, in which the research questions are also placed to show the connection between the interview questions and the research questions. The time that was needed for the interview was between 30 and 45 minutes and all interviews were done with zoom or with a phone call. Before the interview, all interviewees had to fill in the consent form and were aware of their anonymity in the thesis.

1.4.3 Interview questions

<u>1. Background of the resident:</u>
Research question 2: *What are the characteristics and living conditions of the current residents of the newly built middle rental segment?*

1. Can you briefly tell us something about yourself? (age, job, education, family situation)

2. Where have you lived before?

3. Why do you live in a middle-rent house? And not in a social rental home, sale etc.?

4. Can you outline how your day is organised during a normal weekday?

5. How do you use your home? Do you work in your home/have many visitors/hobbies?

How much time do you spend in your home?

6. How do you experience your neighbors and neighborhood?

<u>2. Satisfaction:</u>
Research Question 3: *Are dwellers of the newly built middle segment rental housing satisfied with their housing?*

7. How satisfied are you with your housing? And can you explain that?
        Questions about: characteristics of the home, the neighborhood, maintenance, size, neighbors, outdoor space

8. What are you most satisfied with in your home?

9. What are you most dissatisfied with in your home?

Research question 4: *Which housing characteristics are demanded to improve the housing satisfaction?*

10. If you could choose one modification what would it be to reduce dissatisfaction?

<u>3. Housing career:</u>

11.What home would you like to live in five years from now? And where is that home located?

1.4.4 Interview results

The results of the interview analysis are discussed in the next two chapters, which show the WiMRA data analysis about the characteristics of the tenant, their living conditions and the housing satisfaction. The interview data forms a qualitative foundation for the quantitative WiMRA data results. And gives a better understanding of the tenants experience and motivations.

1.5 Data Plans

In order to maximize the added value of the found data in this research, the FAIR guiding principles— Findability, Accessibility, Interoperability, and Reusability- can be used (Wilkinson et al., 2016). All research materials must be Findable, Accessible, Interoperable, and Reusable (FAIR).

The capacity to link datasets together will benefit in obtaining more information from the data available. It will provide for more detailed analysis to aid in the exploration and improved understanding of society's most complicated concerns, but it must be done ethically. Data must be linked in a consistent, dependable, and ethical manner while maintaining privacy (Go Fair initiative, 2021). In this research the link will be mainly made between the information found in the WiMRA data and the information and insights provided with the interviews. The interviews must be used in a way that is ethical which protects the privacy of the participants.

1.6 Research output

The aim of this research is to create more clarity in the housing needs of the current residents and the potential residents of the middle segment homes in Amsterdam. The current housing supply and housing characteristics are analyzed and linked to the housing satisfaction of the residents. In this way, it is possible to see where there is a good match with these housing characteristics and where there is a mismatch. Also defining the current trends where people are satisfied with their housing will give insight on when to choose which characteristic and design. Based on this analysis, advice can be given to the municipality of Amsterdam, developers, market parties and housing associations when they want to participate in the realization of middle-segment homes. This advice will be in the form of characteristics of the residents related to the advised housing characteristics and housing designs.

1.7 Personal study target

Because I also live in Amsterdam and see the problems related to housing a lot in news articles for example an article from AM (2018) and from my friends and family, I hope I can give some insights and solutions for this problem. Many people live in houses they are not satisfied with and do not feel at home in these houses, because there are not many choices in this specific segment. On the one hand because there is not enough budget to experiment with housing varieties within this sector and on the other hand because there is no direct answer on the question: *How can the housing satisfaction in the newly built middle rental housing segment in Amsterdam be improved compared to the current situation?* Mainly because of a lack of research within this frame.

By creating an overview of the division of the current residents with their distinctive characteristics with their corresponding housing requirements, it can be easier to be applied by different instances such as the municipality of Amsterdam, developers and housing associations. So, my main personal study target is to help this housing segment be more suitable for its residents.

1.8 Chapter structure and reading guide

Chapter 2 describes the theoretical framework, which describes the different definitions used in this research and gives background information about the research topic. The research conduction starts in chapter 3, there the current supply and demand of the middle segment will be discussed from qualitative and quantitative perspective. This chapter answers research question: *How does the current supply and demand of the newly built middle rental segment in Amsterdam operate in terms of quality and quantity comparing the housing corporation stock to the private housing stock?*

In chapter 4 the WiMRA datanalysis will be discussed, also the interviews will be discussed and will be complementing the findings from the WiMRA analysis. The WiMRA data analysis shows findings about the housing from housing associations and private parties. While the interviews only show findings about the housing from housing associations. The interviews provide a better insight in the different aspects discussed. This chapter discusses the characteristics and living conditions of the tenants, which answers research question: *What are the characteristics and living conditions of the current residents of the newly built middle rental segment?*

Chapter 5 is about the housing satisfaction of the tenants, here also the WiMRA data analysis and the interviews show different aspects of the housing satisfaction. This chapter answers research question: *Are dwellers of the newly built middle segment rental housing satisfied with their housing?*

Based on the previous conclusions research questions: *Which housing characteristics are demanded to improve the housing satisfaction?* Will be answered. This shows the housing characteristics that should be changed and added to the middle segment housing.

Chapter 6 discusses the current actions of stakeholders in Amsterdam, and based on the previous conclusions future actions for these stakeholders will be advised. So, this chapter answers research question: *What actions can relevant actors take for improving the housing satisfaction within the middle rental segment?*

Chapter 7 discusses the synthesis and chapter 8 conclusion answers the main research question. After that the last three chapters are the discussion, recommendations and reflection.

2 THEORETICAL FRAMEWORK

In this section the definitions and theories used in this research are explained to define their use in the specific context of the research.

2.1 Housing segments in the Netherlands

The Dutch housing market is characterized by substantial government intervention, both direct and indirect, through spatial planning and land policy, housing association control and monitoring, rent regulation, generous mortgage interest deductibility, and other explicit or implicit subsidies (Czischke & van Bortel, 2018). Given the relatively tight supply, price movements have been mostly influenced by fiscal incentives and demand variables (Czischke & van Bortel, 2018). The Netherlands has very high levels of leveraged housing wealth compared to other Euro area members (Vandevyvere & Zenthofer, 2012). The Netherlands has the biggest share of social housing in the EU Member States, with a particularly high-quality stock (33 percent of total housing stock) (Housing Europe 2015) (Czischke & van Bortel, 2018) .

2.1.1 Definition of social housing

Social housing is considered a Service of General Economic Interest (SGEI) in compliance with EU rules on state aid and competition. Eligibility for social housing is bound to a household income ceiling of € 35.739 per year, which is adjusted annually (Rijksoverheid 2017). Allocation is mostly done through waiting lists or Choice Based letting systems, with exception for vulnerable groups (people with a medical indication, social indication, age, homelessness and refugees). The main providers of social housing are housing associations (woningcorporaties), which are private entities assigned with the public task, embedded in the 2015 Housing Act, of supplying housing. The total housing stock owned by housing associations amounts to 2.4 million (Aedes 2015).

2.1.2 Definition middle rent segment

The middle segment and middle income are defined in a variety of ways. Housing that is affordable to middle-income families is referred to as the middle rental segment (Ollongren, 2019). This rental category has a variety of meanings that vary by area. As a result, the following definition is employed in this study: Rents above the liberalization limit (€ 763,47 in 2022) to around € 1,200 per month for properties for middle-income families. Rent regulation is less strict above the regulatory line. While the affordable housing sector's lowest limit can be clearly defined. The upper limit is determined by local market conditions. Furthermore, different institutions may define middle income differently. As a result, until households with incomes up to 1,5 times the average (1.5 x €40.765 = €61.147 in 2019), the middle income is defined in this report as the maximum income for social housing (40.765 in 2022). (Gijzel, 2018).

2.2 Role of the middle rental segment in the housing market

Houses in the middle rental segment have the potential to function as a hub for a balanced housing market, which means that households can use the homes to move up, move through (doorstromen) and flow back. In other words, this means that middle rental housing can be a transition from social rent to private sector rent and between rent and owner-occupied housing. In addition, this housing segment offers a place for people who want to sell their house to free up capital. This way housing is released in the social sector as well as the owner-occupied sector.

However, making a distinction between the role of the middle segment in different regions is important. The actual market value of the house is a variable, because the affordability of middle segment rent is the

norm (the bandwidth of the rent is a fixed number). This creates different markets for middle segment rent (see also Figure 1). As shown in figure 7, In housing markets with high (market) demand (tense housing market) such as Amsterdam and Utrecht, the owner-occupied sector and the social rental sector are not matching each other sufficiently which results in high housing prices and (Vlak, Middelkoop, van Schilder & Eskinasi, 2017). Due to the potential demand, the role of the middle segment in these cities is therefore much bigger than in relaxed markets, where the price difference between owner-occupied and social rental housing is smaller.
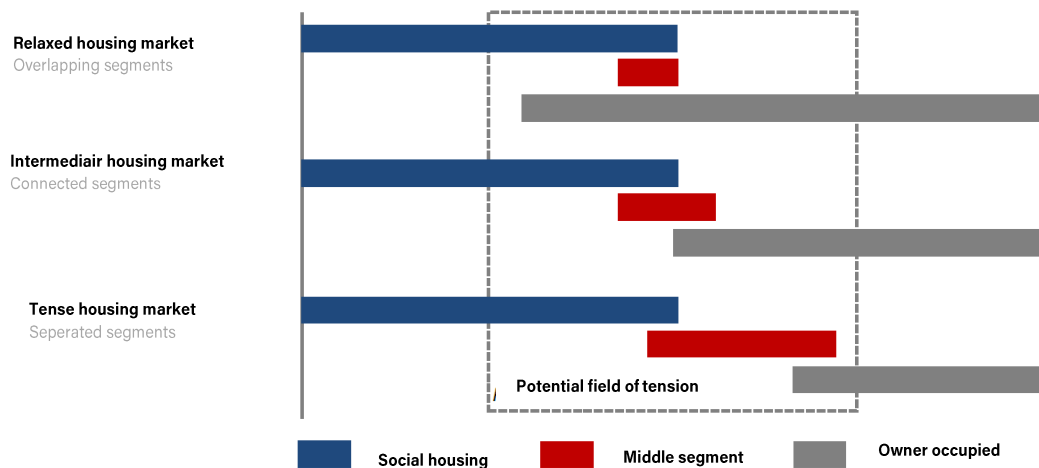
Figure 7: Different market types in the middle segment (Source: Schilder & Conijn, 2015 and Vlak, Middelkoop, van Schilder & Eskinasi, 2017)

2.3 Target groups and current supply

Rob van Gijzel (2016), chairman of the middle rent collaboration (temporary), describes the following diverse target groups for the middle segment in his final report:

- o People who prefer not to buy a house and who would like to remain flexible. For example, because of their profession, contract or stage of life they are in.
- o People who consciously choose a rental house because they do not want to run a risk in terms of assets or do not want to be responsible for the maintenance of the house.
- o Households that are not (or no longer) eligible for social housing for financial reasons but are not (yet) able to buy because of the purchase price or mortgage requirements.
- o Starters on the housing market.
- o Knowledge workers who are temporarily looking for a home in the Netherlands.
- o Elderly people who want to sell their owner-occupied home to free up capital.
- o Households that still live in a house offered by the housing association but would like to move to a home that better suits their preferences.

The target groups described by Rob van Gijzel are probably a combination of both the current and future target groups. There are currently 432,763 households in the Netherlands living in a middle rental home, while more than a quarter of them are in the four major cities. In short, in 2018 only about 5.5% of the total housing stock was a middle priced rental home and less than 7% of the stock belonged to the liberalized rental stock (van Gijzel, 2016).

2.4 Demand middle rental segment

Due to an increase in population and the number of households, the growth of the general demand for housing can be seen in the short term. Without a doubt, migration to the city enhanced this effect specifically for the large cities. This global phenomenon of urbanization is also strongly reflected in Dutch

cities, in which social and economic activities are concentrated in large urban agglomerations. Moreover, a rise in these activities is expected especially in and around the large cities (Nabielek &Hamers, 2015). It should be noted that the population in the four major cities grew almost four times more compared to the average growth of the Netherlands in 2010 (Hekwolter, Nijskens, & Heeringa, 2017).

Undoubtedly, the city acts as a magnet specifically for starters, because of the diverse and high-quality offer of employment, culture and recreation (Hekwolter, Nijskens, & Heeringa, 2017). This move to the city therefore indirectly results in an increasing demand for middle segment rental housing. Also, the labor market has the same trends, it is becoming increasingly flexible due to globalization. That is why it is expected that the demand for (relatively more flexible) housing will also increase due to this more flexible labor market (Hekwolter, Nijskens, & Heeringa, 2017). This is in line with the NVM's findings, indicating that more and more people are consciously choosing to rent instead of owning a house because of more flexibility (NVM, 2016). In addition, middle segment rent is also popular for a growing group of elderly people. This group will likely increase in size due to the aging population. In short, the group of households over the age of 65 grew from 23% in 2012 to 26% of the total households in 2018 and accounted for over 90% of household growth (Ministerie van Binnenlandse Zaken en Koninkrijkrelaties, 2019).

It is striking that numerous publications consulted for this research mention the importance of this segment and its significant shortage, however this shortage is rarely quantified recently. Hence, it stays difficult to accurately interpret the current quantitative demand for middle segment rent for this study. On the other hand, a number of publications are available from previous years which gives possibilities.

The state of the housing market in 2017 shows that 21% of all households have a middle income (an income between €40.765 and €61.147). In other words, 1.5 million households, which is two-third of this group who own a house (Ministerie van Binnenlandse Zaken en Koninkrijkrelaties, 2017). Moreover, the WoON survey published in 2015 (which relates to the period 2009 - 2015) shows that the demand for middle segment rental housing exceeds the supply in the large cities. In the Greater Amsterdam region (MRA), this demand is 43% more than the supply.

Schilder and Conijn (2017) are more cautious in their research and state that based on their analysis it is not possible to make firm statements about the exact demand for the middle segment. These researchers state that the supply in the middle segment is probably smaller than the demand, and that the supply in this segment is insufficient to contribute to the operation of the housing market. However, the researchers conclude that the long-term trends are also on their way to an increasing demand for rental housing in the middle segment. This is also in line with another trend in which using (durable) goods is preferable than its ownership (Schilder and Conijn, 2017).

2.5 New construction/newly built housing

'New construction' is a common term in both the owner-occupied and rental sectors. It refers to homes that have been recently completed. Generally, one speaks of 'new construction' up to three years after the completion of the house, but there is no fixed definition. In general, the occupants of a newly built home are also the first occupants of the house. In this report newly built housing is considered as projects that has been completed in the last 10 years (Nieuwbouwwoningen, n.d.).

The housing market is a stock market, so the supply of housing responds to demand with a delay. Annually, the total stock is expanded by only 1% through new construction (Nieuwbouwwoningen, n.d.). The increased demand for middle rental housing can therefore not be caught up quickly. Building new housing, including the planning process, takes a number of years. Especially for inner-city locations, the construction of housing can be difficult (Nieuwbouwwoningen, n.d.). Many of the "easy" locations have already been developed, which is why the transformation of disused industrial sites into housing or mixed

living/working environments is now often considered (van Gijzel, 2018). Such locations are often expensive to develop because of acquisition, demolition of buildings and rehabilitation of the land. In addition, ownership is fragmented, there are more residents, there are sharper conflicts of interest and therefore more objections procedures. As a result, the realization of homes takes even longer.

2.6 Characteristics

 In the research about the households interested in middle segment rent in Amsterdam, first there is looked at characteristics such as origin (place of residence at the time of registration), household composition, age (oldest person household) and income (total household) (PAM, 2017). This global survey provides a good insight into who the current middle segment tenants in Amsterdam are. For this research, these characteristics such as origin, household composition, age, income etc. will be used to collect the characteristics about the current tenants.

2.7 Housing satisfaction

The definition of housing satisfaction has been often discussed in the literature and a variety of meanings have been put forward (Francescato et al., 1989). In this research housing satisfaction is defined as the actual-aspiration gap approach which conceives residential satisfaction as a measure of the gap between residents' actual and aspired needs (Galster, 1987). If their current living circumstances is substantially comparable to their ambitions, they should be satisfied (Galster, 1985). According to Galster and Hesser (1981), two sets of objective elements decide the total level of housing satisfaction. The physical characteristics of the resident's home, as well as the physical and ecological characteristics of the surrounding neighborhood, make up one set. Another is "compositional," which refers to the features of the resident's households, particularly socioeconomic status and life stage. These two sets can either directly affect residential satisfaction or indirectly influence housing satisfaction by influencing residents' subjective attitudes and perceptions of certain components of the residential environment (Li et al., 2021). The characteristics of the house can easily be figured out in WiMRA, for example the amount of rooms, total square meter of the house, outer space etc. Also, the compositional part can be determined with WiMRA, this is mainly about the education, amount of people in a household and age of the tenant. In the interviews these elements will also be questioned to the tenant. In the interviews the housing satisfaction will first be measured with an open question about the housing satisfaction of the tenant. This gives the tenant the possibility to appoint some of the things he or she is satisfied with or not. After this question a couple of other questions will be followed to focus on the points the tenant mentioned, to understand his or her motivation for (dis)satisfaction.

2.8 Living conditions

The living conditions in this research describe next to the characteristic's particular details about the way of living of the different persons, which can influence the housing preferences. An example of a specific living condition is someone with a disability or someone who has a certain hobby. These are not directly a characteristic but can be seen as additional information. In the interviews the living conditions that are interesting are for example if someone has a specific hobby, and how they use their house for example if they invite a lot of people to their house or not. One of the living conditions can also be a disability, which impacts a person in his or her life.

3 CURRENT SUPPLY AND DEMAND

To have a good overview of the current supply and demand in the newly built middle rental segment in Amsterdam the literature research in this chapter is conducted. This literature research answers the first research question: *How does the current supply and demand of the newly built middle rental segment in Amsterdam operate in terms of quality and quantity comparing the housing corporation stock to the private housing stock?*

3.1 Supply middle segment rent

This section discusses the supply of the middle rent housing segment in Amsterdam. It focuses on the amount of housing that is constructed within the last couple of years and the quantity of housing that is already on the market.

Amsterdam has had a substantial production of middle rental housing since 2014 (NUL20, 2022). From 2015, this has been between 1,150 and 1,250 dwellings per year as shown in figure 8. This refers to rents between 720 and 1,000 euros (price level 2019). These houses are mainly developed by commercial parties and mostly purchased by institutional investors (NUL20, 2022). Amsterdam recently made an agreement with these parties to guarantee a flow of middle rent housing in the coming years (NUL20, 2022).
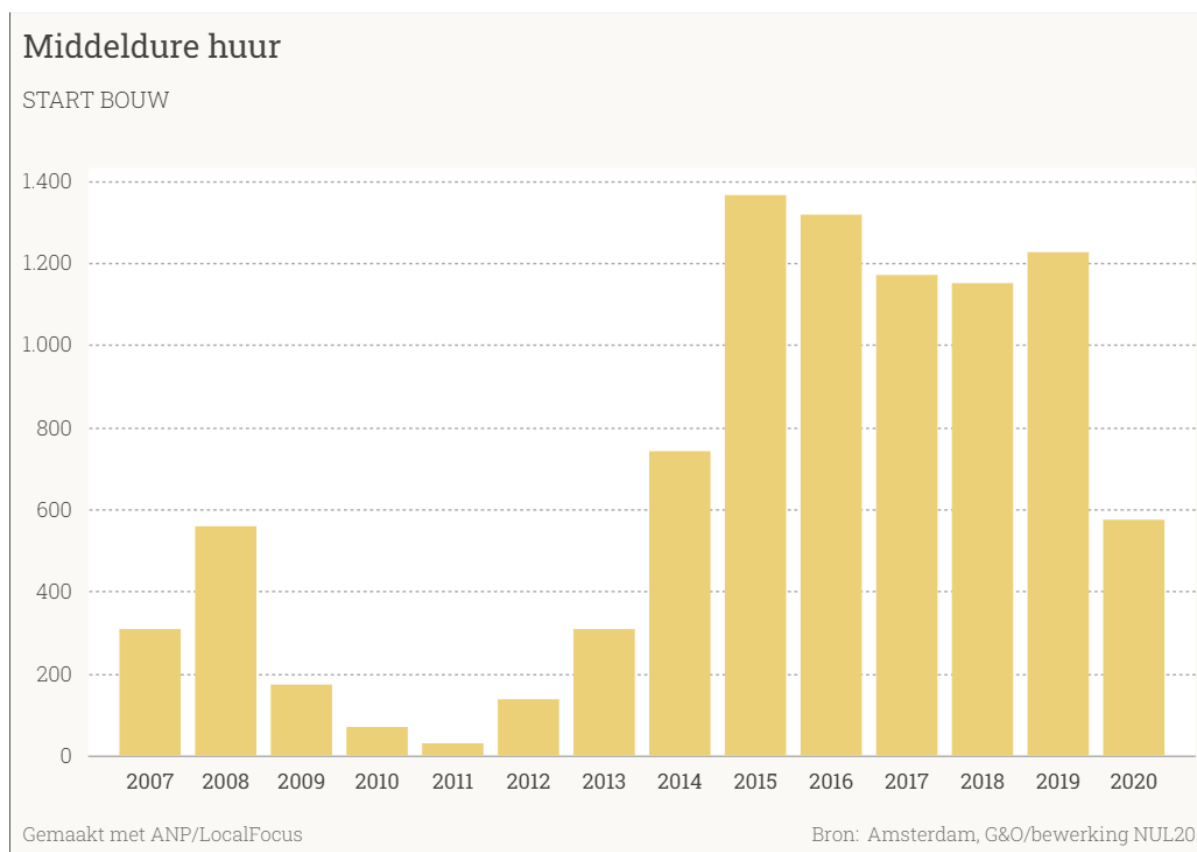
Figure 8: Start of construction middle rent (NUL20, 2022)

As shown in figure 8, In 2019 1,228 middle rental homes were under construction, mainly in Zuidoost (547) and Oost (352). In 2019, 17% consisted of middle rental housing, which is also the average for the last five years in Amsterdam (NUL20, 2022).

For a long time, the construction of middle segment rental houses lagged far behind the targets set by the municipal executive committee, but in 2021 a huge catch-up operation took place with the start of the construction of 2,719 middle segment rental housing (NUL20, 2022). This brings the average construction for the last four years to 1,418 (NUL20, 2022). The municipal executive committee committed itself to build 1,670 homes in the middle rent segment (NUL20, 2022).

Quantities	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Owner occupied housing	119.500		125.600		127.500		139.300		136.200		129.700
Housing corporation housing	195.600		193.200		189.900		184.300		179.600		182.900
Private rent	91.600		92.300		99.700		104.300		125.700		137.400
	406.676	408.750	411.087	413.490	417.096	423.785	427.858	432.632	441.468	447.210	449.982
percentages	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Owner occupied housing	29,4		30,6		30,6		32,5		30,8		28,8
Housing corporation housing	48,1		47,0		45,5		43,1		40,7		40,6
Private rent	22,5		22,3		23,9		24,4		28,5		30,5
	100		100		100		100		100		100

Figure 9: Housing stock by ownership Amsterdam, 2011-20212 (Municipality of Amsterdam Amsterdam & Amsterdamse federatie van woningcorporaties, 2022)

In 2021, the stock remains almost the same in number and percentage as in 2019, after years of decline in previous years (see figure 9). In 2021, there were approximately 6,500 less owner-occupied homes than in 2019. Owner-occupied houses were added, and housing association houses were sold (Municipality of Amsterdam, 2022).

3.1.1 Slow growth in the middle rent segment

The number and share of middle rental homes increased by approximately 4,500 in the years 2019-2021 as shown in figure 10, almost one percentage point of the total housing stock (Municipality of Amsterdam & Amsterdamse Federatie van woningcorporaties, 2022). The number of middle rent homes owned by housing corporations increased by around 2,000 homes between 2019 and 2021. There are also homes with a rent above the liberalisation limit, but with a social contract. However, these are social rental houses. In 2017, there were 5,000 of these approximately, and in both 2019 and 2021 there were 3,800 (Municipality of Amsterdam & Amsterdamse federatie van woningcorporaties, 2022). Due to changes in the income of the tenant, these houses may again have a rent below the liberalisation limit (Municipality of Amsterdam & Amsterdamse federatie van woningcorporaties, 2022). This number fluctuates and therefore influences the size of the middle rental segment housing stock. The growth in the number of middle rental homes is also caused by the construction of private rental homes and the liberalisation of existing private rental homes (Municipality of Amsterdam & Amsterdamse Federatie van Woningcorporaties, 2022). In total, this leads to an increase of approximately 4,500 middle rental houses (Municipality of Amsterdam & Amsterdamse Federatie van Woningcorporaties, 2022).

	2015		2017		2019		2021		Corporatie	Particulier
	Abs.	%	Abs.	%	Abs.	%	Abs.	%		
Quality discount limit	74.200	17,8	66.300	15,5	53.900	12,2	45.700	10,2	17,0	10,6
First capping limit	114.400	27,4	106.500	24,9	121.000	27,4	118.800	26,4	53,4	15,3
Second caping limit	21.700	5,2	20.100	4,7	24.600	5,6	24.000	5,3	10,3	3,8
Liberalisation limit	29.000	6,9	32.400	7,6	24.200	5,5	28.800	6,4	10,4	7,1
Middle rent	23.300	5,6	27.200	6,4	31.100	7,0	35.500	7,9	6,3	17,5
Expensive rent	27.000	6,5	36.000	8,4	50.500	11,4	67.500	15,0	2,5	45,7
Total rentstock	289.600	69,4	288.600	67,5	305.300	69,2	320.300	71,2	100	100

Figure 10: *Housing stock segments 2015-2021 (Municipality of Amsterdam & Amsterdamse Federatie van Woningcorporaties, 2022)*

The increase in the price of rental housing in Amsterdam and the rise of the low-income group in Amsterdam are also visible in the occupancy of rental housing in Amsterdam (figure 11). There are more expensive rental houses, which are increasingly being occupied by households whose income does not match the dwelling. In 2021, 16% of the expensive rental homes are occupied by low-income households. As a result of appropriate allocation, social housing is increasingly occupied by low-income households and increasingly less by households with a middle income. Less middle rent houses are occupied by middle-income households, while low incomes are increasingly living in these houses but these houses are not affordable for them (dure scheefwoners) (Municipality of Amsterdam & Amsterdamse Federatie van Woningcorporaties, 2022).

Renting in Amsterdam is expensive and that translates into high rent ratios, the percentage of net income that households pay monthly in rent, after deduction of rent subsidy. After 2015, the net rent-to-income ratio of tenants with a rent subsidy has declined, compared to 2019 a small increase of half a percentage point in 2021 to 26.8% (Municipality of Amsterdam & Amsterdamse Federatie van Woningcorporaties, 2022). Tenants without a rent subsidy pay an average of 31.1% of their income in rent, and the difference in housing costs between tenants who receive a rent subsidy and tenants who do not receive a rent subsidy is widening, as shown in figure 12. This goes hand in hand with the increasingly expensive free sector, where tenants do not receive a rent subsidy. Average incomes are rising rapidly, but the increase of more than 5 percentage points in 10 years to a net rent-to-income ratio of 31.1% for renters without a rent subsidy shows that rents are rising faster than incomes. Buyers spend a significantly smaller share of their income on the mortgage relative to the quotes of renters. In 2021, the mortgage ratio, after deducting the tax refund on mortgage interest, 18,1%. Households that bought a home spend a larger portion of their income on their mortgage than people who have owned a home in Amsterdam for a longer time, respectively 22.6% and 16.9% (Municipality of Amsterdam & Amsterdamse Federatie van Woningcoporaties, 2022).
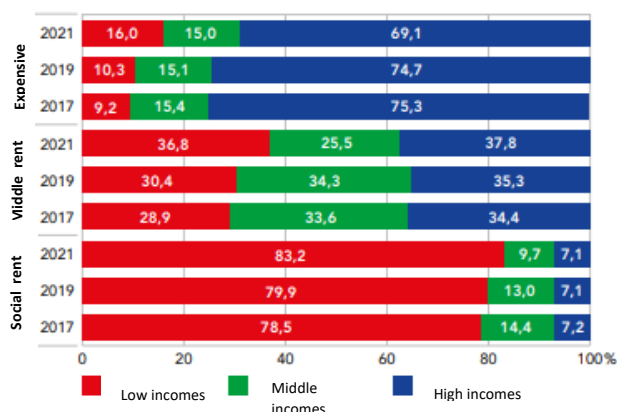
Figure 11: *Occupancy of rental segment by income groups, 2017-2021 (Municipality of Amsterdam, 2022)*

	2011	2013	2015	2017	2019	2021
With rent subsidy	24,4	26,7	28,2	27,3	26,3	26,8
Without rent subsidy	25,5	26,6	28,4	28,8	29,9	31,1
All renters	25,2	26,6	28,3	28,3	28,9	29,9

Figure 12: *Net rent-to-income ratio of tenants with and without rental subsidy 2011- 2021 (Municipality of Amsterdam, 2022)*

The middle rent segment remained almost as small in the recent supply as it was in 2019 (14% at private landlords, 8% at corporations) (Municipality of Amsterdam, 2022). Housing associations were very active in the middle rental segment until 2015 (Dantuma, 2022). The ownership of housing associations

increased from 43% to 48% of the middle rental stock between 2012 and 2015 (Dantuma, 2022). Due to the focus on the core task that followed from the Housing Act 2015, for a time corporations were only in the picture when the market failed to deliver when it came to building middle rent housing. With the so-called market test, municipalities first had to investigate whether there were no interested market parties (Dantuma, 2022). For housing associations, this meant uncertainty about development possibilities and additional delays in the realization of construction plans in a segment that was not part of their core business anyway. Consequently, the construction of middle rental housing fell back, and middle rent housing was phased out. In 2018, according to the WoON 2018 survey, 37% of middle rental housing was still owned by housing corporations. According to Dantuma (2022) In 2020, a share of only 25% of middle rental housing owned by housing associations remained.

3.1.2 Occupation of middle rent housing

If middle-income households live in the rental sector, it is most often in a social rental home provided by a housing association (Municipality of Amsterdam & Amsterdamse federatie van woningcorporaties, 2022). When they rent from a private landlord, it is relatively often a deregulated house, but still mostly a regulated one (Municipality of Amsterdam & Amsterdamse federatie van woningcorporaties, 2022). Especially young people and families have high(er) housing expenses (Municipality of Amsterdam & Amsterdamse federatie van woningcorporaties, 2022).

The middle rental homes owned by housing association and those owned by private landlords are not occupied in the same way (Municipality of Amsterdam & Metropoolregio Amsterdam and Platform Woningcorporaties Noordvleugel Randstad, 2022). The middle rental housing of the housing associations has fewer households living at an expensive angle (dure scheefwoners): 26% have an income up to the social rent limit. While this group is shrinking in the case of housing associations, it is growing in the middle rent from private parties. In the private middle rented sector, both the middle-income group and the high-income group have declined (Municipality of Amsterdam, Metropoolregio Amsterdam & Platform Woningcorporaties Noordvleugel Randstad, 2022). The middle rent from private parties is more often occupied by young households (<35 years) than the middle rent from housing associations (44% versus 20%) (Municipality of Amsterdam & Metropoolregio Amsterdam and Platform Woningcorporaties Noordvleugel Randstad, 2022). In addition, more singles live in private middle rentals than in middle rentals from housing associations (49% versus 25%) (Municipality of Amsterdam & Metropoolregio Amsterdam en Platform Woningcorporaties Noordvleugel Randstad, 2022).

Furthermore, a small proportion of the households with a middle income end up in the social rental of housing associations (10%) (Municipality of Amsterdam & Metropoolregio Amsterdam and Platform Woningcorporaties Noordvleugel Randstad, 2022). This mainly concerns people who are moving from the social rental sector, for whom the share is 23%. These middle-income social tenants also relatively often end up in the private rental sector of housing corporations (19%). People with a middle-income who already own a house are much more likely to end up in a owner occupied house (68%) than those who rent (social: 18%; private: 29%).
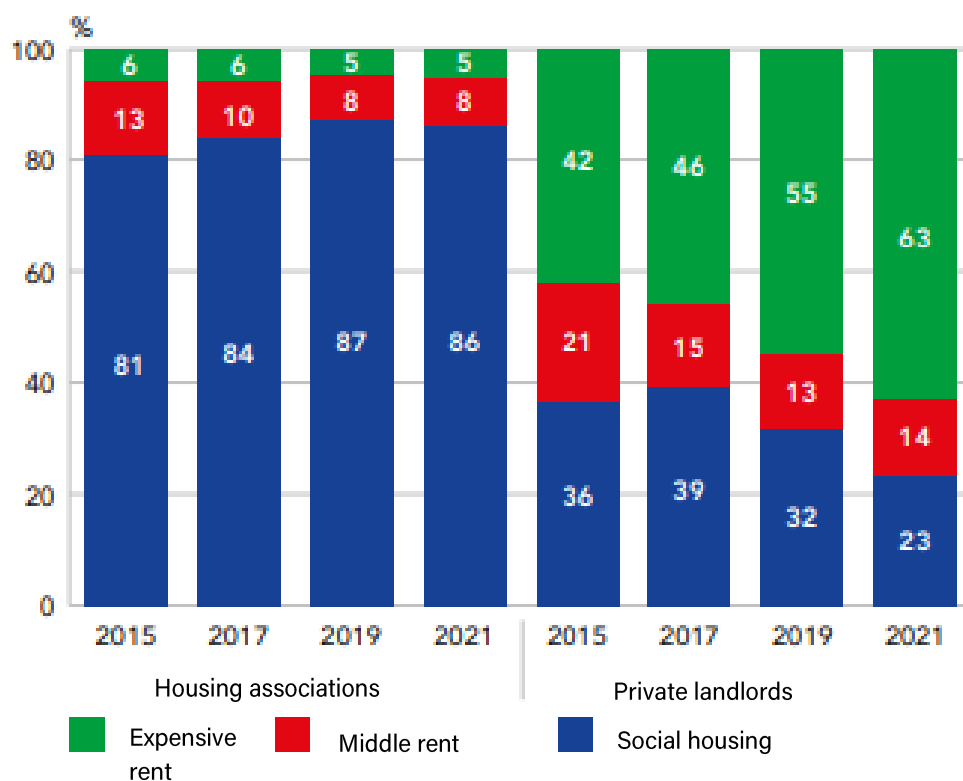
Figure 13: Recent residents per rental class, corporation and private parties 2015-2021 (Municipality of Amsterdam & Amsterdamse Federatie van Woningcorporaties, 2022)

Housing corporations are allowed to rent 20 percent of their social housing stock to households with an annual income above € 38,035, which are the middle income households (Dantuma, 2022). As shown in figure 13, the percentage of middle rent households in the housing association housing has been 8% in the recent years. This is still below the defined 20%, which means that housing associations are not optimally focusing on placing middle income tenants in their housing. However, it is no longer a given that such households with a (low) middle income will approach a housing corporation for a house, because they will look for other housing opportunities. In 2011 it was extensively communicated that housing corporations are only there for households with an annual income up to € 38,035 (price level 2019). But this changed recently and there is now room again to place households with a (low) middle income in the social housing stock, but many of the low middle income tenants are not registered anymore (Dantuma, 2022).

3.2 Demand

This section discusses the demand within the middle rent housing segment. It focuses on the amount of housing that needs to be constructed within the coming years based on the demand.
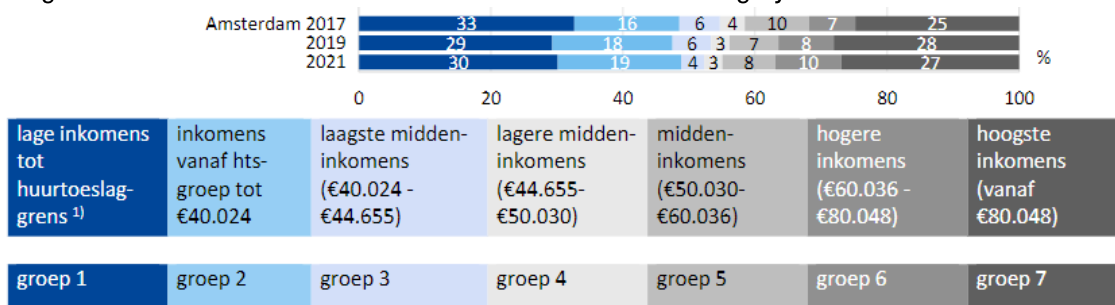
Figure 14: Incomegroups, 2017-2021 (%) (Municipality of Amsterdam & Metropoolregio Amsterdam en Platform Woningcorporaties Noordvleugel Randstad, 2022)

The demand for middle segment rental housing has been increasing in recent years. As seen in figure 14, the percentage of people with a middle income (in figure: group 4 and 5) has been increasing with 3% the last three years in Amsterdam. In 2018, 8% of households considering to move were mainly looking for a middle rent house, while this proportion never exceeded 5% before 2009 (Municipality of Amsterdam & Metropoolregio Amsterdam en Platform Woningcorporaties Noordvleugel Randstad, 2022). An important cause of the growing demand is the limited access to the owner-occupied segment for middle-income households due to:

- The tightening of financing standards when buying an owner-occupied home. In particular, the lowering of the maximum mortgage ('loan-to-value') from 2013 has had an impact (Dantuma, 2022).

- Rising house prices. Partly stimulated by tax exemptions, such as the exemption from transfer tax for first-time buyers and the extended exemption from gift tax on owner-occupied homes (the so-called 'jubilee fund') which Rutte IV wants to abolish (Dantuma, 2022).

Following the 2015 Housing Act (woningwet 2015), housing associations began to offer fewer middle-rent housing, as the law requires them to focus primarily on their core mission: providing affordable housing for people with low incomes (Dantuma, 2022). Due to rent increases, sold middle rent housing then shifted to "expensive rent" of above €1,000 per month.

In 2019, the latest year available, demand for middle rent housing exceeded supply by approximately 45,000 units (Dantuma, 2022). This amounts to a "shortage" of almost 11% of the total mid-rental stock (Dantuma, 2022). The middle rent scarcity in that year was almost three times higher than the average scarcity for the entire housing market of about 4% (Dantuma, 2022).

An increased number of homes shifted from the middle segment to the expensive segment due to rent increases in recent years. This has caused a growing shortage of middle rent housing. While the share of middle rent in free sector rental homes that came on the market in 2017 was still almost 80%, in 2020 it was just under 50% (Dantuma, 2022). At the same time, the demand continues to grow. Without extra investment, the annual 'shortage' in the medium rental segment will remain proportionally the largest of all housing segments up to 2035 (Dantuma, 2022). For that period, Dantuma (2022) states that the desired net stock growth at over 6,000 per year. Realizing this growth will require the construction of at least 4,750 medium rental houses per year (Dantuma, 2022). The difference is in the balance of rent adjustments on the one hand and on the other hand the sale and demolition of rental homes.

3.3 Conclusion: Answer research question 1

To conclude, the previous section discussed the supply and demand in terms of quantity and quality in the newly built middle rental segment. This answers the first research question: *How does the current supply and demand of the newly built middle rental segment in Amsterdam operate in terms of quality and quantity comparing the housing corporation stock to the private housing stock?* The answer to this research question will be

Amsterdam has had a substantial production of middle rental housing since 2014. From 2015, this has been between 1,150 and 1,250 dwellings per year. For a long time, the construction of middle segment rental homes lagged far behind the targets set by the municipal executive committee, but in 2021 a huge catch-up operation took place with the start of the construction of 2,719 middle segment rental housing. Which is still not enough, since there is a demand for approximately 6000 middle rental housing a year. Furthermore, The number and share of middle rental homes increased by approximately 4,500 in the years 2019-2021, almost one percentage point of the total housing stock. In other words there can be an improvement seen in the amount of middle rental housing that is produced in Amsterdam but still the demand of 6000 houses a year is not met.

Furthermore, the biggest group of tenants rents their house from a housing corporation and not from a private owner. While the middle rent segment is divided in: 14% belonging to private landlords and 8% belonging to corporations. But In 2019, the latest year available, the demand for middle rent housing exceeded supply by approximately 45,000 units, which is a "shortage" of almost 11% of the total middle rental stock. The housing shortage for the middle rent housing is the biggest of all housing segments.

Tenants without a rent subsidy pay an average of 31 % of their income in rent, which the middle segment tenants also belong to. This is even more than people who bought a house in Amsterdam. To conclude, in terms of rent to income ratios renting a middle rental house without a subsidy in Amsterdam belongs to the most expensive housing segment.

To conclude, There are not enough middle rental houses in Amsterdam, despite the construction of middle rental houses and the liberalization of existing rental houses. One of the reasons for the slow increase of the total number of the middle rental housing stock is the rent increase. This can cause that housing in the middle rent housing does not belong to the middle segment anymore within a couple of years due to the rent price increase. Furthermore, an additional problem for middle-income households is that rental homes in the middle segment can also be rented by high-income households. Which means more competition to find a house. As a result, high-income households are crowding out middle-income households in the middle segment. The shortage of middle rental housing is a problem that requires additional actions. Furthermore, many middle-income households live in regulated rental housing and are encouraged to move with extra rent increases from their social houses. But still there are not enough middle rental houses which makes them have very few housing opportunities. The price difference between regulated rent and prices in the free sector is currently large. When people move on to a free sector rental house they often start paying significantly more which is not affordable for a lot of people with a middle income, since there are not enough middle rental houses.

4 CHARACTERISTICS AND LIVING CONDITIONS

The WiMRA Database is used to analyse the different housing characteristics, the characteristics of the tenants and the newly built middle segment housing stock in Amsterdam. In the previous chapter which defines the quantity and quality of the middle rental segment housing has been described and discussed in general, in this WiMRA data research there has been specifically looked to the middle rental newly built (in the last 10 years) housing in Amsterdam. In this data research a distinction between the different housing segments has been made. A distinction between the following segments has been made: social housing belonging to housing associations, middle segment housing belonging to housing associations, free sector rent belonging to housing associations, private social housing, private middle segment housing, private free sector rent and owner-occupied housing The important observations in this research are mainly the differences between the middle segment housing belonging to housing associations and private middle segment housing. This chapter of the research answers the second research question which is: *what are the characteristics and living conditions of the current residents of the newly built middle rental segment comparing the housing corporation stock to the private housing stock?*

Interview findings are added throughout the following chapters to serve as a qualitative foundation for the WiMRA data analysis. The interviews only show findings about the housing provided by the housing associations in the last ten years (newly built housing).

4.1 Characteristics of the tenants

The first section of this chapter is about the characteristics and living conditions of the tenants, in which an overview of the found results from the WiMRA data analysis and the interviews will be shared. First the results of the WiMRA data analysis will be shared and after that the interview results.

The data from WiMRA shows that the biggest group that lives in middle segment rental housing are couples under 35 years without children. However, this group is very varied. The second highest group in this segment are couples without children above 35. So, in most of the cases people who live in middle segment housing do not have children. This is important to know, because many decisions about the housing characteristics and the living area are based on whether people have children. And when looking to figure 15 it stands out that the largest group is in between 35 to 55 years old within the middle segment rental housing when it is provided by the housing corporations. In contrast to the private middle segment housing which has 74% of the residents below the age of 35. This can also be an indication for the higher flexibility, which is important for tenants below 35, and which is provided mostly by private parties.

Interview data

The interviews support the above findings. The people who participated in the interviews were between the age of 24 and 57. Approximately 50% was under the age of 35 and the other half was above 35. Most of the people under the age of 35 explained that they do not see their current house as a place to stay in

for after 5 years, which indicates their flexibility. Most of the people above 35 wanted to stay in their house and were happy with their current house. As one of them stated:

"I am very happy with my house, since I just got divorced and had the opportunity to have such a big house with my two children makes me satisfied enough to still live here after 5 years." - interviewee 1 (Filosoof)

Table 1: Age of tenant (source: author)

		Age of the tenant				
		up to 35	35 to 55	55 to 75	75 and older	Total
Housing association middle rent	Count	388	490	238	35	1151
	percentage	34%	43%	21%	3%	100%
Private middle rent	Count	2888	630	368	15	3901
	percentage	74%	16%	9%	0%	100,0%

4.1.2 Income

The middle rental homes of housing corporations and those of private landlords are not occupied in the same way. Housing corporations' middle rentals have fewer households with expensive skewed housing: 30% have an income up to the social rental limit (40.024, - a year). In the private middle rental market, this applies to 33% (see figure 16). And while this group is shrinking in for the housing associations, it is growing in the middle rentals from private parties. In the private middle rental market, both the middle-income group and the high-income group have declined. These groups have both increased slightly in the medium rent from corporations. The middle rental from private parties is more often occupied by young households (<35 years) than the medium rental from corporations (32% versus 27%). In addition, more singles live in the private medium rental than in the medium rental of corporations (49% versus 25%) (Municipality of Amsterdam Amsterdam & Amsterdamse federatie van woningcorporaties, 2021).

The income of the residents is also mainly between € 40.024 and € 60.036 which is what was expected for this segment. But there is also a large group with an income higher than the modal income, which means that this group does not belong in this specific housing segment. This is 27% for housing that belongs to the housing associations and 34% for households in the private sector. It is striking that there is also a large group within both groups with an income higher than € 80.048 17% and 24%. Rental housing in the free sector is more often occupied by households with an income up to the social rental limit (€40,024), they live 'expensive skewed' (dure scheefwoners). The share of households with such an income has risen from 22% to 25% (Municipality of Amsterdam Amsterdam & Amsterdamse federatie van woningcorporaties, 2021). This is partly related to the general growth in the share of low incomes in Amsterdam (Municipality of Amsterdam Amsterdam & Amsterdamse federatie van woningcorporaties, 2021).

		Income								
		up to €1701 (yearly €23.725)	€1701 to €2089 - (yearly €32.200)	€2089 to €2502 - (yearly €40.024)	€2502 to €2767 - (yearly €44.635)	€2767 to €2994 - (yearly €50.030)	€2994 to €3419 - 1,5x modal (yearly €60.036)	€3419 to €4206 - 2x modal (yearly €80.048)	€4206 and more	Total
Housing association middle rent	Count	27	6	200	36	130	148	81	129	757
	Percentage	4%	1%	26%	5%	17%	20%	11%	17%	100%
Private middle rent	Count	149	202	698	356	231	454	347	752	3189
	Percentage	5%	6%	22%	11%	7%	14%	11%	24%	100%

Interview data

Because of privacy not all interviewees wanted to share their income. So not enough interview data is available.

4.1.3 Education

Most of the tenants are highly educated, which is more that 60% in both groups as shown in figure 17. A small group has a lower education which the percentage is higher within the housing provided by the housing associations. However, there are differences when the household composition is considered: household types with a relatively large number of middle incomes are single people with a higher education (25%) and couples without children with a lower or middle level of education 27%. For some of the higher-educated people who are living alone, this is a temporary situation; when they start living together, their income is easily in the high range. Couples without children with a lower or middle level of education are often older. For them, this middle income is more often a permanent situation.

Interview data

The people who took part of the interviews had different education levels, some of them had an MBO education level and are already working for a longer period. And some of them belonged to the group of people with a lower education level. But most of them had a university or HBO degree. The differences are mostly seen in the type of household, which defined if people were still able to rent in the middle segment. For example, one of the interviewees has a degree from the TU Delft and does not live with his partner, which made it possible for him to have the chance for getting a middle segment housing. But the possibility that the income level will be too high after he will live with his partner is too high if she is highly educated also. This interviewee mentioned that Stadgenoot gives different priorities when allocating housing to people with a family. On the website of Stadgenoot is also mentioned that there is a priority for people with a maximum income of €64,409 (price level 2022) (Stadgenoot, 2022). Beside the income level household types play a noticeably crucial role in deciding if people still belong to the middle segment or not. But in the end it is a combination of different factors. Furthermore, a difference that was clearly noticed during the interviews is that highly educated people (HBO or University) where almost always singles or did not live with their partner. And people with a lower education than HBO which could result in a lower income most often were couples.

		Education				
		Low education	secondary education	highly educated	unkown	Total
Housing association middle rent	**Count**	212	205	724	9	1150
	Percentage	18%	18%	63%	1%	100%
Private middle rent	**Count**	196	758	2862	86	3902
	Percentage	5%	19%	73%	2%	100%

4.1.4 Household type

When looking at the compositions of the households as shown in table 4 one can conclude that the housing provided by the housing associations consists of 61% of people with a partner and 39% singles. This is different for the private middle segment housing, 62% is single and 38% has a partner. This can again be because of the temporary use of the residents within the private sector. Couples without children with a lower or middle level of education are often older. For them, this middle income housing is more often a permanent situation (Municipality of Amsterdam & Amsterdamse Federatie van Woningcorporaties, 2021).

Interview data

The interview data aligns with the data from WiMRA. Three of the interviewees had children, two of them lived with a partner and one of them lived as a single mother with her two children. One of the interviewees just got married and lived with her partner. The other interviewees were singles and lived on their own. But the variety as showed in the table below could also be seen in the interviews.

Table 4: *Type of household (source: author)*

		Householdtype distinguished by age							
		singles up to age 35	singles older than 35	couple without kids up to 35	couple without kids older than 35	singleparent family	couple with kids	other	Total
Housing association middle rent	**Count**	160	152	178	219	110	331	0	1150
	Percentage	14%	13%	15%	19%	10%	29%	0%	100%
Private middle rent	**Count**	1696	569	1155	180	141	141	19	3901
	Percentage	43%	15%	30%	5%	4%	4%	0%	100%

4.1.5 Previous housing

Also, as seen in table 5, almost 47% of the people living in housing form the housing association came from a former house provided by the housing association also, which can indicate that they moved from

the social segment to the middle segment (doorstromen). The 18% of people who came from student housing can also be linked to the big group of people underneath the age of 35 in the private sector, these are mainly starters and prefer the flexibility and the small amount of restrictions in the private sector.

Table 5: Previous living situation (source: author)

		Previous living situation							
		Studenthousing	Homesharing	Living with parents/family	independant rental house	independent rental home from housing corporation	owneroccupied house	other	Total
Housing association middle rent	Count	89	61	110	228	542	70	51	1151
	Percentage	8%	5%	10%	20%	47%	6%	4%	100%
Private middle rent	Count	683	501	1007	806	462	246	143	3848
	Percentage	18%	13%	26%	21%	12%	6%	4%	100%

Interview data

The previous housing situation of the interviewees is very varied. The people under the age of 35 mostly lived with their family or had student housing before coming to this house. And the people who are above the age of 35 mostly came from housing provided by the housing association. Three of the interviewees lived outside Amsterdam before. For example, one interviewee lived in Almere because of a lack of supply within an acceptable price range. And the waiting time to get their current house seems to be relatively short.

"I waited approximately 5 months to get my current house, I must say I was not always very actively involved within the process" - Interviewee 7 (Oosterdokseiland)

"I got my house within almost two weeks with a priority arrangement for care workers, because I work as a pharmacy assistant" – interviewee 8 (Djakartaterras)

Compared to the waiting lists of the social housing this is a very fast process to find a house in Amsterdam.

One of the interviewees got divorced short before the corona pandemic, so she came from a owner occupied housing which she lived in with her previous husband. He stayed in that house since he owned that house. She did not have any right for any other housing than the free sector rent, because she earns too much for social housing and too little for buying a house.

4.2 Living conditions

This paragraph describes the different housing conditions of the tenants of the middle segment housing. Only the table about the construction year shows the complete housing stock, but all other tables only show the newly built middle segment housing, which has been constructed in the last ten years.

4.2.1 Year of construction

As seen in table 6, the housing associations provide 28% of the middle segment housing that is built after 1990, which is the highest building period. For the private middle segment housing the highest percentage is 48% which is been built before the 2nd world war. This could indicate a big difference between the quality of the provided housing. Old houses will need much more maintenance and can cause several nuisances for the residents.

Table 6: Building period (source: author)

		Construction period						Total
		before war	1946-1969	1970-1989	1990-2009	2010 and later		Total
Housing association middle rent	**Count**	138	94	79	140	64		515
	Percentage	27%	18%	15%	27%	12%		100%
Private middle rent	**Count**	427	91	68	100	208		894
	Percentage	48%	10%	8%	11%	23%		100%

4.2.2 Rent price

Figure 21 shows that in the housing from the housing association approximately 60% is underneath the rental price of 940,- a month, while for the private sector this is 52%. So middle segment housing in the private sector is more expensive than in the housing association sector.

Interview data

The rent price from the WiMRA database does not align with what was found during the interviews. Most of the people who took part of the interview have a rent above € 940, -, which will even increase with approximately € 40,- from June 2022. One of the houses was 60m2 with a rent of 1.035,- a month. The only person that paid below €940,- had an area of 50 m2 with a rent of € 935,-. This could probably be because of the yearly rent increase of the middle segment housing, that last year the housing was just below the € 940,- a month.

Table 7: Rent in 8 classes (source: author)

		Rent price								Total
		up to €442	€442 to €633 -	€633 to €679 -	€679 to €752	€752 to €940	€940 to €1.053	€1.053 to €1.400	€1.400 and more	Total
Housing association middle rent	**Count**	0	0	0	0	692	458	0	0	1150
	Percentage	0%	0%	0%	0%	60%	40%	0%	0%	100%
Private middle rent	**Count**	0	0	0	0	2046	1842	14	0	3902
	Percentage	0%	0%	0%	0%	52%	47%	0%	0%	100%

4.2.3 Number of rooms, area and housing type

As seen in the figure below most of the housing within this sector has between three to four rooms. And the housing types are for the housing associations mostly apartments without an elevator, the second biggest group is the apartments with elevator. So almost 50% of the housing is apartments. Housing provided by the housing associations even have some houses with higher number of rooms than 4, in contrast to private housing. (see table 8).

Table 8: number of rooms (source: author)

| | | Number of rooms | | | | | | |
		0	1	2	3	4	5	Total
Housing association middle rent	Count	0	32	104	521	255	114	1026
	Percentage	0%	3%	10%	51%	25%	11%	100%
Private middle rent	Count	0	0	58	87	41	0	186
	Percentage	0%	0%	31%	47%	22%	0%	100%

Table 9 shows that the housing from the housing associations consists of 44% of housing with an area of 60-79 m2 and 40% with an area of 80-99 m2. Compared to the private sector this is much bigger where the highest percentage, 60%, is between 40-59 m2.

Table 9: Area in m2 (source: author)

| | | Area in m2 | | | | | | |
		up to 40 m2	40-59 m2	60-79 m2	80-99 m2	100-119 m2	120 m2 and bigger	Total
Housing association middle rent	Count	0	32	509	462	34	114	1151
	Percentage	0%	3%	44%	40%	3%	10%	100%
Private middle rent	Count	513	2322	633	271	162	0	3901
	Percentage	13%	60%	16%	7%	4%	0%	100%

Table 10 shows that most of the people live in a corner house or an apartment. But the biggest group live in an apartment without elevator. This is interesting, because this shows that probably a lot of the housing belongs to a renovation project since elevators are mandatory in newly built projects.

Table 10: *Type of housing (source: author)*

		Housingtype								
		detached house	**semidetached house**	**terraced house**	**groundfloor apartment**	**apartment**	**appartement without elevator**	**apartment with elevator**	**other**	**Total**
Housing association middle rent	**Count**	57	0	27	91	67	0	886	23	1151
	Percentage	5%	0%	2%	8%	6%	0%	77%	2%	100%
Private middle rent	**Count**	18	0	45	10	79	19	3599	75	3845
	Percentage	0%	0%	1%	0%	2%	0%	94%	2%	100%

Interview data

Most of the people from the interviews have a house between 60 and 79 m2 and most of them had 2 to 3 rooms, which is comparable to the data from WiMRA. The interviews also showed that many of the people in the middle segment housing live in an apartment without elevator, which means that mostly these house are made for younger people especially if they are on the 3rd or 4th floor. The absence of an elevator causes some discomfort for the residents. They describe their houses as following:

"When I work from home my youngest son is also at home, one room of our house is a workroom because I work 2 days from the office and 2 days from home. Besides, I spend a lot of time at home with my 2 young children. We do have three bedrooms but it's all small, so other activities or hobbies can't really be done from home" and also "I really like the idea of an open kitchen, even though I was not really sure about it in the beginning, it gives me the ability to talk with people who come to visit me for example and to watch my kids while cooking" - interviewee 1 (Bakemabuurt)

"I work from home half of the week and I have 2 adolescents living at my house. I really enjoy being at home and spend much of my free time in my home and garden. The house is about 120 m2 and it is divided into two floors, which can be a as a single family home. There is plenty of room for everything in this home" – Interviewee 6 (De Filosoof)

"I live on the 4th floor and there is no elevator in this housing complex, since I am young this is not a big problem for me. But for example my parents cannot come to visit me" – interviewee 2 (Bakemabuurt)

"at the moment I am pregnant, and when the baby will come it will be hard for me to not be able to come with the stroller with the elevator to my house" – interviewee 4 (De Filosoof)

The absence of the elevator makes the houses on the upper floors not appropriate for elderly people or people with baby's.

4.2.4 Outer space

As shown in the table 11 and 12 below only 11% and 5% of the tenants has a garden, the difference between the houses provided by the housing association and the private landlords can also be recognized. But on the other hand, housing in the middle private rental has a higher percentage for houses with a balcony than the housing provided by the housing association. Which can show that housing provided by private parties is mostly apartments, while housing associations in some cases provide single family homes.

Interview data

The expectation that some people in housing association housing also have a garden was indeed correctly, in the interviews one person had a private garden. This gave her the opportunity to sit outside and be in contact with other neighbors. But still, most of the housing is an apartment with a large collective garden in the middle of the complex. Also the people who had a balcony described it as very small and in almost all cases it was a French balcony.

"It is a big green space, but I don't really know what I can do at this green space, its nice as a view from my house. People now put a bench there so we can sit there. But beside that there is for example no playground for children in the area (…) I don't have a balcony which I would really like to have, or a small garden would be even better. We only have a French balcony, which is very small so I can only open the doors and I would like to have a bigger balcony were I could also sit". - Interviewee 1 (Bakemabuurt)

"I moved here to this house in the beginning of the corona period, and I was very happy that I live on the ground floor with a garden were I can sit after a long workday. Also because I have two teenagers it was very nice to be able to still go a bit outside for them. During my free time I like to spend time in my vegetable garden which I made in my own garden (..) besides the nice garden that I have I also have a very nice view on the canal across my house (…)" - Interviewee 6 (De Filosoof)

A nice outer space is very important for all the interviewees, especially if they spend a lot of time at their house. This can vary between a collective space were neighbors can meet or do some activities, or a more private balcony/garden. Some people prefer more privacy in their outer space and some prefer to meet others. But all in all an outer space is very important for people.

Table 11: Garden smaller than 25 m2 (source: author)

| | | Garden smaller than 25 m2 | | |
		No	Yes	Total
Housing association middle rent	Count	1010	140	1150
	Percentage	88%	12%	100%
Private middle rent	Count	3858	44	3902
	Percentage	99%	1%	100%

Table 12: Balcony availability (source: author)

| | | Balcony | | |
		No	Yes	Total
Housing association middle rent	Count	415	736	1151
	Percentage	36%	64%	100%
Private middle rent	Count	1280	2622	3902
	Percentage	33%	67%	100%

4.2.5 Energy label

The energy label as shown in table 13 is higher within the private sector, for the housing associations energy label A is for 80% of the housing and for the private sector it is 96%.

Interview data

In the interviews there were different opinions about the energyefficiency of the house. Most of the interviewee's mentioned the good qualiy of the isolation and the window frames. But one person was very negative about the isolation, this person lives in a corner appartment which is renovated which can make a difference in energy loss compared to other appartments:

"The house cools down quickly in the winter, you have to heat each time to keep the house at temperature. So, I think the isolation of my house is not good and it needs improvement. (...) this house is renovated, so maybe that is playing a role in the bad quaity of the isolation" - interviewee 3 (Bakemabuurt)

While another interviewee mentioned:

"I barely make heating costs during winter" - interviewee 7 (Oosterdokseiland)

The documents about the housing provided by Stadsgenoot show that all housing has energylabel A, so the heatloss and the poor isolation quallity of interviewee 3 is outstanding. But in general all of them were satisfied with the energylabel except for one person.

Table 13: *Energy label (source: author)*

			Energylabel			
			A	B	C	Total
Housing association middle rent	Count	169	915	58	9	1151
	Percentage	15%	79%	5%	1%	100,0%
Private middle rent	Count	121	3772	9	0	3902
	Percentage	3%	97%	0%	0%	100%

4.3 Conclusion: answer research question 2

This section answers the research question based on the findings in this chapter: *What are the characteristics and living conditions of the current residents of the newly built middle rental segment?* Table 14 shows an overview of the housing characteristics of the interviewees.

Table 14: Overview of the housing characteristics of the houses of the interviewees (Source: author)

	Interview	sqm	Amount of rooms	Housing type	Rent price	Year of construction	Garden/ balcony	Floor	Energy label
Bakemabuurt (Stadgenoot)	1	67 m2	3	Apartment	€ 975,-	2019 (renovated)	French balcony	1st floor	A
	2	57m2	3	Apartment	€ 975,-	2019 (renovated)	French balcony	4th floor	A
	3	57m2	3	Apartment	€ 1035,-	2019 (renovated)	French balcony	1st floor	A
	4	74 m2	4	Apartment	€ 976,-	2019 (renovated)	French balcony	1st floor	A
Filosoof (Stadgenoot)	5	50 m2	3	Apartment	€ 955,96	2019	2 balconies 2 m2 and 4,5 m2	1st floor	A
	6	120 m2	4	Single family house	€ 1095, -	2019	Garden	Ground floor	A
Oosterdokseiland (Stadgenoot)	7	68 m2	2	Apartment	€990,-	2013	French balcony	3rd floor	A
Djakartaterras (Eigen haard)	8	74 m2	3	Apartment	€ 926,-	1984 recently renovated	Balcony	2nd floor	?

First, the data shows that the biggest group that live in middle segment rental housing are couples under 35 years without children. This group is very varied. However, in most of the cases people who live in middle segment housing do not have children. Not having children is an important characteristic of the tenants because many choices for a house are based on this. In the interviews most of the people indeed did not have children and their age was for half of the interviews under the age of 35.

Furthermore, according to WiMRA for housing from housing associations 31% of the tenants have an income below the lowest middle income limit (€ 40.024,-) and for the private parties it is 33%. These people actually should be allocated in the social housing segment, but since there is a housing shortage the middle segment housing is one of the best options for their financial situation compared to other housing segments. Besides, 27% of the people in the housing associations housing have an income higher than the maximum middle income limit (€64,409,-), for the private housing this is 35%. So, there are many people who could move (doorstromen) to other segments in the current middle segment.

Another interesting conclusion is that WiMRA shows that more than 63% of the tenants in housing from housing associations and 73% of housing from private parties are highly educated. 6 out of 8 people interviewed were highly educated, but the highly educated people are mostly singles, or have a partner that is not highly educated.

As shown in table 14, most of the people from the interviews have a house between 60 and 79 m2 and most of them had 2 to 3 rooms, which is comparable to the data from WiMRA. Housing association provide approximately ten percent more rooms than the private landlords. But there is a significant difference in the area of the houses between both segments. The areas of the housing in the private sector are much smaller than the housing from the housing associations. In the housing association segment, most housing is between 60 and 79 m2, while the private sector has most houses with an area between 40 and 59 m2.

Moreover, the energy labels in the housing from the private housing is higher than for the housing of the housing associations. In the interview some of the people showed that they are not satisfied with how the house is isolated, which can be part of the lower energy label which occurs within the housing associations housing as the WiMRA data shows.

In order to provide quality to a house it is important to have an outer space. The WiMRA data shows that both housing providers have approximately 65% of their housing with a balcony. Which can be improved. The small French balconies that people who participated in the interviews have were very small they could even not stand in this balcony, so it is also important to note that a big amount of the balconies shown in the WiMRA data can be very small in size.

5 HOUSING SATISFACTION

This section discusses the housing satisfaction based on the WiMRA data research and the interviews, housing of the housing associations and the private sector are compared only in the WiMRA data analysis. This section answers research question: *Are dwellers of the newly built middle segment rental housing satisfied with their housing?*

Table 15 shows an overview of the satisfaction of the tenants. One can conclude that the housing satisfaction of the interviewees is positive in general. In this chapter the housing satisfaction data analysis of WiMRA will be further explained by the data from the interviews, to have a better understanding of why people are satisfied or not with certain aspects of their house or neighborhood.

Table 15: Satisfaction occurrence of several aspects discussed per interview (Source: author)

Project	Interview	Housing characteristics		Affordability		Maintenance		Neighborhood		Satisfaction	Positive	Negative
		+	-	+	-	+	-	+	-			
Bakemabuurt (Stadgenoot)	1	3	2	1	0	1	0	2	1	+	Neighborhood, good connection, maintenance when house got burned, open kitchen.	Too small, the rent price, small balcony, no playground for kids
	2	5	0	1	0	1	0	2	1	+	Having a house, enough space, living in Amsterdam, good quality of the house	No lift, finding a parking spot, small balcony
	3	3	2	0	1	0	1	1	2	+-	Living in Amsterdam, enough daylight, large windows	No contact with neighbors, no variety in population, cluttered neighborhood, small spaces, bad isolation, leakage, waiting too long for maintenance
	4	4	1	0	1	1	0	1	2	+	Having a house, extra room, daylight, balcony, green area,	No lift for baby car, criminality in neighborhood
Filosoof (Stadgenoot)	5	5	0	1	0	1	0	3	0	+	Isolation, enough space, extra sleeping room, good quality materials	When its windy outside nuisance
	6	5	0	1	0	1	0	3	0	+	Enough space and rooms, nice view, garden	Service costs unclear, rent is too expensive
Oosterdokseiland (Stadgenoot)	7	4	1	1	0	1	0	3	0	+	Location in central district, enough space, enough rooms	Not enough daylight
Djakartaterras (Eigen haard)	8	5	0	1	0	1	0	2	1	+	Enough space, decent quality of the house, finding a house	Hard to find parking spot, rent price too expensive
Henkla (MVGM) Private housing	9	4	1	1	0	1	0	3	0	+	Enough space, view, daylight, good contact with neighbors, enough parking	Shape of the house makes placing furniture hard.
De pijp Private housing	10	3	2	1	0	0	1	3	0	+	Neighborhood, enough space for me	A lot of things need reparation and homeowner does not repair anything, old house, no balcony

As shown in table 16, most of the people in the middle rent housing provided by housing associations are satisfied with their house. This is in contrary to what was expected when starting this research. But, there is still a small group who is not satisfied, so it is good to have some better insights with the interviews to have a better understanding of possible factors and housing characteristics that can be improved or changed. Also, knowing what people are satisfied about will make it possible to propose future changes in the end of this report, which will be clarified with the interviews also. This way the different parties such as the housing associations and the private parties can take these points into account and continue applying them in future middle rental housing.

Table 16: Housing satisfaction (WiMRA spss analysis) (source: author)

| | | Housingsatisfaction | | | | | | | | | | |
		1 -very unsatisfied	2	3	4	5	6	7	8	9	10 - very satisfied	Total
Housing association middle rent	Count	16	0	47	0	27	129	317	448	152	16	1152
	Percentage	1%	0%	4%	0%	2%	11%	28%	39%	13%	1%	100%
Private middle rent	Count	0	25	0	131	98	365	1078	1421	529	254	3901
	Percentage	0%	1%	0%	3%	3%	9%	28%	36%	14%	7%	100%

Interview data

In general, the participants are very happy with their house, they are happy to be able to live in that specific house and think it really fits their living conditions. Many of them mentioned that the house fits their current living situation which is different for each person. For example:

One of the interviewees is 29 years old and recently came back to live in Amsterdam, as he lived the longest period of his life in Amsterdam but during his study he lived in Rotterdam. At the moment he lives in the center of Amsterdam and does not feel the need to do a lot in the current area, so the fact that everything is on walking distance is perfect for him.

Another person found the neighborhood very important, since she missed a lot of connection with the neighborhood and the neighbors. She stated:

"The neighborhood is very unpleasant, and it is very messy. There is also a lot of criminality in the neighborhood. i do live in a very nice part of the flat good contact with the neighbors. The neighborhood is very one-sided, and I would have liked to see more variety in the population. I would prefer to live in the city center of Amsterdam." - interviewee 4 (Bakemabuurt)

The following figures and sections, show specific parts about the satisfaction of the tenants.

4.1 Satisfaction with the area of the house

First the satisfaction about the area of the house is shown in table 17. More than 50% of the residents of the housing association housing are satisfied with the area of their house, while the next highest percentage thinks it is too small but it is fitting for them. On the other hand, for the private sector the housing is much smaller but still the main group is satisfied with the area of their house, the satisfaction of this group is lower than of the housing associations.

Figure 30 shows the area satisfaction for each household type. The figure shows that people who find their house too small from the housing association dwellings, all of them have children. While, the people who live in the private housing who find their house too small do not have children and live on their own. This can be linked to the difference in area between the housing association housing and the private housing as shown in the previous chapter. From the people who find their house small but fitting 63% are a couple without children in the housing association housing and for the private housing the biggest groups is again younger than 35 and lives alone. For the category that shows that people find their house fitting (not too small or too big) the biggest group in the housing association housing,

33%, is a family with kids. While for the private housing again this group is younger than the age of 35 and single and the second group is a couple without children. Furthermore, the people who found their house too big but fitting within the housing association housing were mostly a couple without kids older than 35 and the group who followed was singles older than 35. For the private housing again the biggest group was singles younger than 35 (35%) and the group who followed is couples with children (37%). And people who found their houses too big where only found in the private housing and where singles older than 35.

Table 17: satisfaction with the area of the house (source: author)

		Housing area satisfaction					
		too small	small but fiting	fitting	big but fitting	too big	Total
Housing association middle rent	Count	69	173	768	141	0	1151
	Percentage	6%	15%	67%	12%	0%	100%
Private middle rent	Count	732	1642	1371	120	37	3902
	Percentage	19%	42%	35%	3%	1%	100%

Table 18: Household type compared to housing area satisfaction (source: author)

			Householdtype distinguished by age							
			singles up to age 35	singles older than 35	couple without kids up to 35	couple without kids older than 35	singleparent family	couple with kids	other	Total
Too small	Housing association middle rent	Count	0	0	0	0	19	50	0	69
		Percentage	0%	0%	0%	0%	28%	72%	0%	100%
	Private middle rent	Count	293	66	273	27	35	38	0	732
		Percentage	40%	9%	37%	4%	5%	5%	0%	100%
Small but fitting	Housing association middle rent	Count	0	16	109	22	0	27	0	174
		Percentage	0%	9%	63%	13%	0%	16%	0%	100%
	Private middle rent	Count	788	252	517	62	22	0	0	1641
		Percentage	48%	15%	32%	4%	1%	0%	0%	100%
Fitting	Housing association middle rent	Count	124	91	70	136	91	255	0	767
		Percentage	16%	12%	9%	18%	12%	33%	0%	100%
	Private middle rent	Count	552	202	364	91	84	59	19	1371
		Percentage	40%	15%	27%	7%	6%	4%	1%	100%
Big but fitting	Housing association middle rent	Count	36	45	0	61	0	0		142
		Percentage	25%	32%	0%	43%	0%	0%		100%
	Private middle rent	Count	63	13	0	0	0	45		121
		Percentage	52%	11%	0%	0%	0%	37%		100%
Too big	Private middle rent	Count	0	37		0	0	0		37
		Percentage	0%	100%		0%	0%	0%		100%

The interviews connect well with the findings from the WiMRA data, most people are satisfied with the area of their house even though they thought it was small. They were satisfied. But for their future, when their kids get older for example they would prefer a bigger house. As one of the interviewees said:

"People with older kids don't need big areas as much as they want more spaces that you can close off from each other. In my previous house we had an incredibly large living room but it was not convenient at all. In this new house, for example, you have connecting doors which I find very practical. I can close them when I need to separate rooms from each other" – Interviewee 6 (De Filosoof)

But still some people described the rooms in their house as very small and that they could not put all the needed furniture in the rooms.

"We have 3 sleeping rooms but every room is so small, we cannot even put a wardrobe in our sleeping room" – interviewee 1 (Bakemabuurt)

Singles did not have many problems with the small size of their house and some of them were even satisfied with 50 m2.

"My house is 50 m2 and I don't feel like I need more space than this, it's enough for me alone. I also work from home, so I have a workroom. But besides that, I don't have a hobby room and I don't do any other activity from home. Besides my work and during sleeping time I don't spend a lot of time at home and a lot of times I am outside the house." Interviewee 5 (De Filosoof)

4.2 Maintenance satisfaction

The next table, table 19, shows the satisfaction of the residents about the maintenance of their house. It is clear that most of them gave a score higher than 6 for the middle segment housing provided by the housing association. So, most of them are satisfied, but approximately 20% gave a score of 5 or lower, which indicates that they are not satisfied. For the middle segment private housing the satisfaction of the maintenance is slightly higher than for the housing association segment. But overall, most of the residents are satisfied with the maintenance.

Most of the people did not have any contact until now with the housing association about any defects or complaints in the house.

"The house is of very good quality, and until now everything works perfectly well, I did not contact Stadgenoot until now. They provided us with a very qualitative kitchen also with a dishwasher, but since I live alone, I don't really use it intensively" – Interviewee 2 (Bakemabuurt)

"A few years ago, our house got burned and Stadgenoot was very helpful during that time, they helped us with our house. So, we are very happy with the maintenance they provided us with during that time" – Interviewee 1 (Bakemabuurt)

But some of them had some problems with for example isolation and they don't feel heard by the housing association.

"many times I tried to contact Stadgenoot for my isolation problems but every time they did not want to help me, and told me that I had to fix it by myself. I also contacted them for problems with leakage on my wall, which they also did nothing about." – Interviewee 4 (Bakemabuurt)

Table 19: *state of maintenance (WiMRA analysis) (source: author)*

		Maintenance										
		1 - very bad	2	3	4	5	6	7	8	9	10 - very good	Total
Housing association middle rent	Count	16	0	0	47	57	131	174	233	364	130	1152
	Percentage	1%	0%	0%	4%	5%	11%	15%	20%	32%	11%	100%
Private middle rent	Count	0	0	0	71	63	99	582	1266	957	806	3844
	Percentage	0%	0%	0%	2%	2%	3%	15%	33%	25%	21%	100%

4.3 Affordability satisfaction

The affordability of the house is also an important factor for the housing satisfaction. In this analysis it is defined that a score more than 3 is classified as dissatisfied and a score lower than 3 is classified as satisfied. Figure 32 shows that 45% of the tenants from housing corporations are extremely not satisfied with the affordability of the rent (score 5). And 26% gives a score of 4, which means that in total approximately 75% of the housing association tenants are not satisfied with the affordability of their house. It is too expensive from their point of view. From the point of view of the private housing tenants this percentage is even higher 81% (score 4 and 5). Both groups are not satisfied with the rent at the moment, and think it is too expensive.

Table 20: *Affordability of the house (Source: author)*

		Affordability					
		1 - very positive	2	3	4	5 - very negative	Total
Housing association middle rent	Count	8	20	304	192	251	775
	Percentage	1%	3%	39%	25%	32%	100%
Private middle rent	Count	52	142	745	930	917	2786
	Percentage	2%	5%	27%	33%	33%	100%

The following figures, show a variety of characteristics related to the rent price to have a better understanding of how the rent price is defined. Figure 15 shows that the housing prices show almost no variety when it is related to the area of the housing. The price difference between a house of 40 m2 is approximately 100 euros cheaper than a house with an area of 80 m2. The amount of rooms also show almost no variety in the price when it is a house with more or less rooms, it is all around the same price. Furthermore, figure 17 and 18 show that outer spaces such as balconies and gardens play a significance role in defining the rent price.
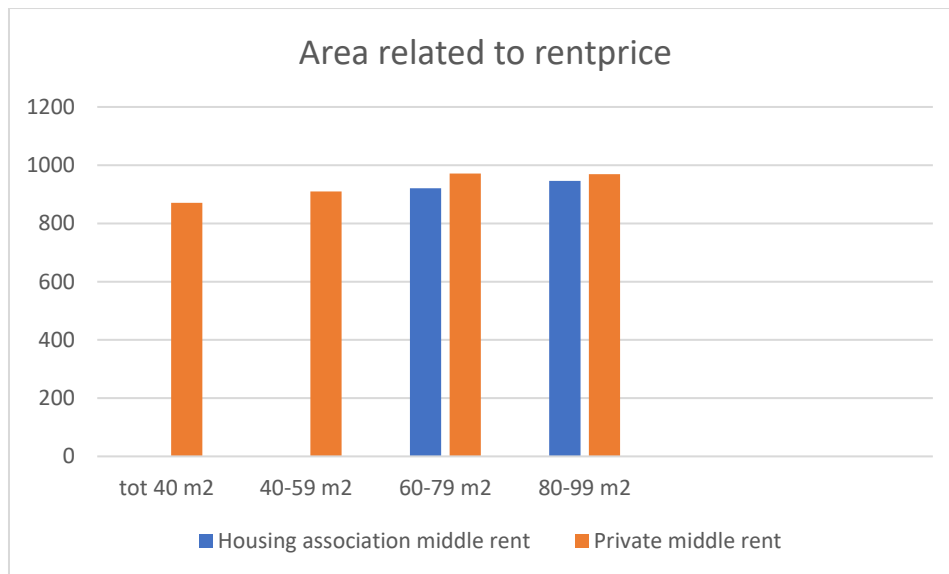
Figure 15: *Area related to rent price (Source: author)*
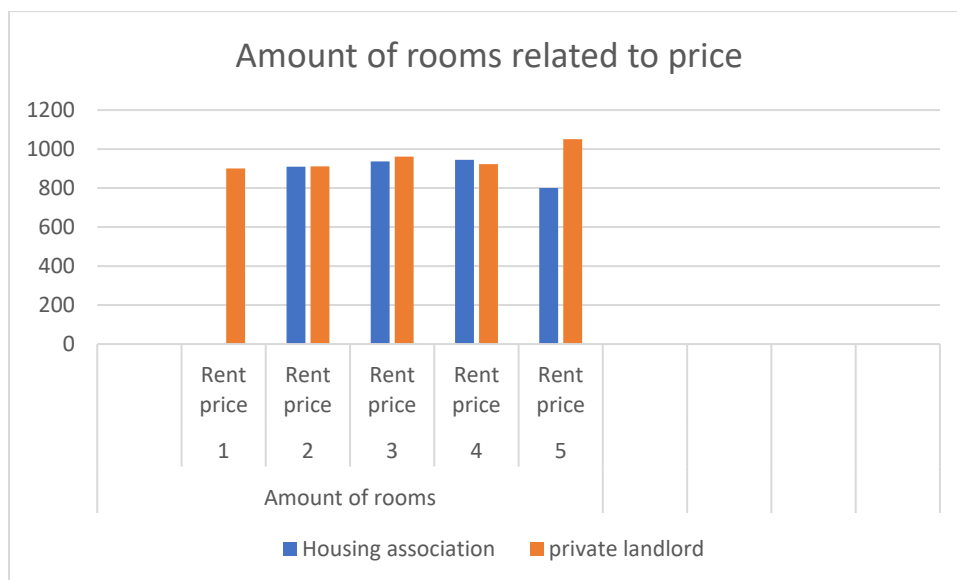
Figure 16: *Amount of rooms related to rent price (Source: author)*
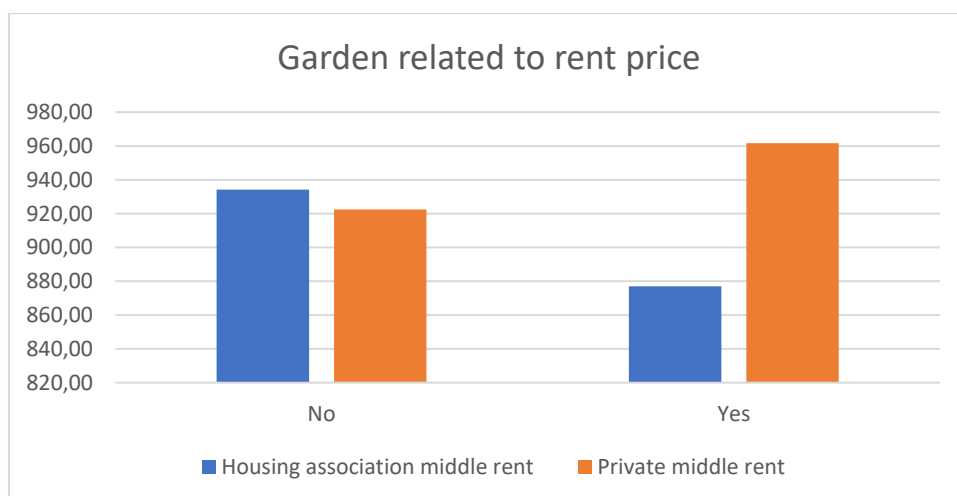
Figure 17: *Garden related to rent price (Source: author)*
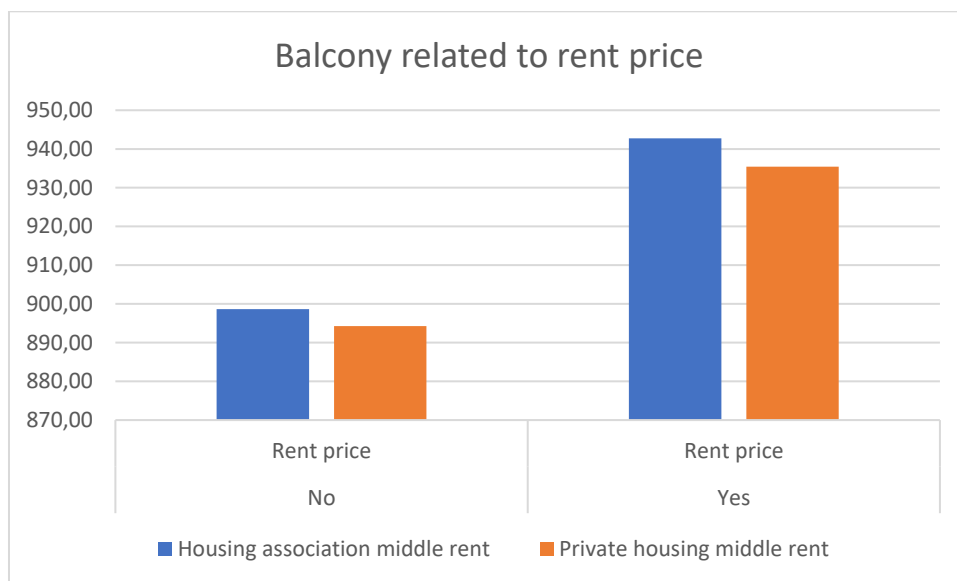
Figure 18: *Balcony related to rent price (Source: author)*

Interview data

The WiMRA data findings can definitely be aligned with the interviews, but the interviews show more about it. Most of the interviewees found that the house was expensive, but they were aware of the current situation of the housing market which made them not want to complain about the price. They were just happy to find a house to live in and especially in Amsterdam.

"When I look at other housing prices in Amsterdam I definitely think the price is affordable, since there are other people who pay around 2000 Euro's for their house (…) We almost pay one third of our salary to the rent and this is without the water and electricity costs, but still we are happy to have a house" – interviewee 4 (Bakemabuurt)

"There are not a lot of options, because I cannot have a social housing and I will not get a mortgage due to the strict mortgage rules. but I am happy to have a house (…) on the other hand, if I could get a mortgage for the same price, I pray for rent I could also buy a nice house and at least build up something. but this is not possible." – interviewee 7 (Oosterdokeiland)

Many times, during the interviews people mentioned that the rental price is too expensive, which does not always indicate an expensive skewed housing situation. But it shows that people are struggling to pay for their house. During one of the interviews, the interviewee got an email about the yearly rent increase, and this was her reaction:

"The rent increase per month in my case is 27.90 euros and I think that is a considerable amount what I am going to pay more each month; still more than 300 euros on an annual basis. " - Interviewee 6

"My rent is 1035 a month and my house is approximately 60 m2" – interviewee 7 (Oosterdokeiland)

"My rent is 990 Euro's a month and my house is 68 m2" – interviewee 3 (Bakemabuurt)

4.4 Conclusion: Answer research question 3 and 4

In this chapter several points about the housing satisfaction are discussed, which has answered the following research question: *Are dwellers of the newly built middle segment rental housing satisfied with their housing?*

When looking at the results from the WiMRA analysis about the housing satisfaction in general of the tenants, one can conclude that overall, the tenants of the housing association and tenants of the private landlords are satisfied with their current house. The interviews also showed that tenants are satisfied with their house. In general people were happy that they could find a house, because they knew the housing market at the moment and how hard it is to find a house. So they took the current circumstances of the market into consideration.

Also, the data about the satisfaction with the area of the house shows that most of the tenants are satisfied. Even if they think it is too small or too big for them. When connecting the household types to the area satisfaction a remarkable difference between housing from housing associations and housing from private owners occurs. The variety in household types has already been noted in the previous chapter, but this analysis shows that the biggest group within the private housing which is the singles younger than 35 is randomly placed within the different housing. It seems that there is not much effort put into the matching of the household types with the right housing. Most household types are definitely singles younger than 35, which needs to be taken into consideration when constructing the housing. Furthermore, the interviewees mentioned that when their house was had the current surface area it was good for their current living situation and not when changes would occur in their household type. For example, when they would have a partner or when their kids would grow older, they would prefer a bigger house or a different housing type. Many of them mentioned that the rooms are very small and that you cannot even put your wardrobe for example.

Moreover, when looking at the maintenance of the house also most of the people are satisfied, approximately 20% from both groups are not satisfied. Which the interviews give some more insights in. However, the dissatisfaction of the tenants is clearly about the affordability of the house. For tenants from the housing association as well as for tenants from the private sector the house is in many cases not affordable, for both groups the dissatisfaction is 75% (housing associations middle segment housing) and 81% (Private middle segment housing). When linking the housing prices to several housing characteristics, one can conclude that the area and the amount of rooms do not play a role in defining the rent price. On the other hand, the outer space play a significant role for the rent price.

Furthermore, this chapter also answers research question 4: *Which characteristics should be changed in order to increase the housing satisfaction?* based on the different points discussed in the previous two chapters. One of the main points which caused insecurity for the tenants was the increasing rent price and the high price of the service costs. Which means that this is an important factor for the housing satisfaction. So, this means that there should be a clear upper limit for the rent of the middle segment housing. Beside instead of treating all the middle-income households the same, there should be a variety in the rent price based on their income. Since it seems that there is an average price for all the housing, especially for the housing from the housing association.

Furthermore, about the design of the houses the outer spaces are very important for people, so every house should at least have a balcony and enough daylight. When designing a house one should not only think about the number of rooms but also about the usability of the room, so mostly very small rooms are not very flexible and make people struggle to furnish this rooms. More flexibility in the house could be a solution as for example using more moving doors which people can decide to open and close by themselves. Since even people who cook a lot were happy with an open kitchen, because of the increase in space this makes them feel.

It is important to note that there is no uniform market for middle rental housing. The target group for these houses are very diverse. From young people with a starter's income via young families on their way to buy a house, to empty nesters, expats and knowledge workers. All these groups have very different housing preferences. Almost all houses of the interviewees had the same design/housing type, so a wider variety of different designs will fit the wide variety of the target groups better and increase their housing satisfaction. To conclude, for every target group there should be a fitting house regarding the design and the price.

6 ACTIONS OF STAKEHOLDERS

This chapter describes first the current actions the different stakeholders take within the middle segment. After that the focus will be on the specific problems discussed in the previous chapters and based on that a couple of actions will be proposed.

Matching supply and demand is primarily the responsibility of municipalities. Together with other relevant actors, the municipality determines which segments are in demand and how the supply can be realised. A city remains dynamic and attractive with a housing stock that meets the current and future needs of its residents. Households can then move to a home that suits them, and new residents have easy access to the city. This requires both a vision of the municipality on future demographic developments and good cooperation between housing providers. in this chapter the research about the actors is done to provide insights in their approaches to be able to advise them with the relevant actions. This section answers research question: *What actions can relevant actors take for improving the housing satisfaction within the middle rental segment?*

Municipalities, market players/investors and housing associations play a decisive role in the realization of rental housing in the middle segment of the housing market. However, they have a poor understanding of each other's (im)possibilities and roles, which moreover changed with the introduction of the revised Housing Act in 2015. In the triangle in figure 19, the thickness of the arrows indicates the intensity of the mutual relationships: in (long-standing) contacts, in insight into motives and familiarity with win agreements and policy texts. The triangle is unbalanced. The figure shows that especially strengthening of relations between municipalities and market parties and between corporations and market parties is necessary t stimulate the supply of middle rent (Platform31, 2020).
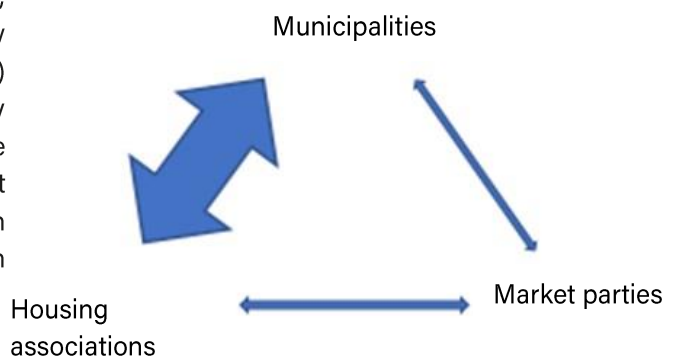
Figure 19: relationship trianlge (thickness of the arrow shows intensity of relation) (Platform31, 2020)

6.1 Current situation and actions

6.1.2 Zoning plan

In the zoning plan, the municipality establishes the building surfaces for dwellings (VNG & Ministerie van BZK, 2017). The municipality may also set percentage requirements for certain housing categories in the zoning plan.

Since 1 July 2017, it has also been possible to appoint the category of deregulated middle rent housing in the zoning plan. The number and placement of these different categories can only take place based on the exploitation plan or in an anterior agreement. Therefore, the zoning plan cannot indicate exactly which (parts of) building sections will contain social or medium-rent housing. If the municipality designates the

category of deregulated medium-rent accommodation in a zoning plan, a municipal regulation must also be drawn up: the Medium-Rent Regulation. In the bye-law, the municipality must in any event lay down the following:

- The maximum initial rent for medium sized rental properties.

This enables the municipality to take account of the market prices for rental properties in the region. This maximum initial rent is indexed annually, for instance on the basis of the consumer price index (CPI) of the CBS (VNG & Ministerie van BZK, 2017).

- The period that the residences will (in any case) remain as medium-tenancy residences. This is at least ten years. The landlord is not allowed to convert the residence into a private residence during this period. This way, municipalities can structurally expand the middle rental segment (VNG & Ministerie van BZK, 2017).

The zoning plan and the related regulation for medium-sized rental properties only relate to newly built homes (and the conservation period in the regulation for medium-sized rental properties) (VNG & Ministerie van binnenlandse zaken, 2017). Unlike the housing categories 'social rental housing' or 'social owner-occupied housing', it is not compulsory to define the target group for the category 'deregulated housing for medium rental' in a bye-law (VNG & Ministerie van BZK, 2017).

If the municipality wishes to define a target group, it can do so in the explanatory notes to the zoning plan or the explanatory notes to the Medium Rented Housing Ordinance. This way, market parties know what market parties must take into account when building and using the homes (VNG & Ministerie van BZK, 2017). By means of a housing ordinance, the municipality can then lay down the actual allocation of rental accommodation.

6.1.3 Controlling the size of the dwelling

In addition to the options under private law, the municipality has public law options for controlling the size of dwellings. In the zoning plan, the municipality can specify the minimum surface area of houses - irrespective of the housing category - in the planning area. It is only desirable to stipulate such rules for a relatively small (sub)plan area, otherwise the flexibility of the zoning plan will be lost. In order to maintain flexibility in the zoning plan, the municipality may choose to determine the size in the exploitation plan (VNG & Ministerie van BZK, 2017). There are two ways to legally ensure that middle-rent housing has a certain minimum quality:

1. The 2012 Building Decree (Bouwbesluit) has minimum quality requirements which newly built homes, including mid-rent homes, must fulfil.

2. A dwelling may only be liberalised if it has a minimum number of WWS points, namely 145 (level 2017). (VNG & Ministerie van BZK, 2017).

6.1.4 Housing ordinance (Huisvestingsverordening)

In addition to making private law agreements (see sections 1 and 4), municipalities also have public law instruments at their disposal to allocate middle-rent houses to specific target groups. This way, it can be guaranteed that the middle-rent houses are made available to house seekers who are designated for this segment. The Housing Act offers possibilities for this through the housing ordinance (huisvestingsordening) (VNG & Ministerie van BZK, 2017). In the housing ordinance, municipalities can designate categories of housing for which a housing permit is required (Article 7). The municipality itself determines which categories it will use; this may, for instance, concern houses up to a certain rent or only newly built houses. The municipality can also choose to draw up regulations for specific districts, neighborhoods, streets or complexes in the municipality (VNG & Ministerie van BZK, 2017). In this way,

the municipality has the possibility to steer only where it is really needed. Besides designating the dwellings, it must also be specified to which group of house seekers these dwellings must be allocated with priority. These criteria describe which conditions a resident must meet, such as a maximum income or the number of people in the household. The municipality may use a rental income table, which will be included in the bye-laws (verordening) (VNG & Ministerie van BZK, 2017). The bye-laws may not set any minimum requirement for the resident's income. The municipality may also draw up its own criteria for house hunters and may choose to name different groups (VNG & Ministerie van BZK, 2017).

6.1.5 Issuance of plots by the municipality

If there is a demand in a particular municipality for more medium sized rental housing, new building sites owned by the municipality can be explored (VNG & Ministerie van BZK, 2017). The municipality can either sell this land or lease it out (erfpacht). Not only can the municipality make its own land available, but as the selling party it can also make private-law agreements with the buyer about the use of the plot (VNG & Ministerie van BZK, 2017).

In addition, the municipality can go through the required procedures more easily, for example, because a possible change in the zoning plan may entail less risk of damage to the plan. Two matters are important when the municipality makes land available. Firstly, the destination of the land has an effect on the price to be asked (see section 1.3). Secondly, the municipality must take into account the state aid rules of the European Commission (see section 1.4).

6.1.6 Sale

If the municipality sells land, the municipality and the buyer can make private agreements in the issue agreement about the number of medium-sized rental houses, the minimum surface area of the houses and the initial rent (VNG & Ministerie van BZK, 2017). Agreements on the annual rent increase or average rent for the first few years could also be laid down (VNG & Ministerie van BZK, 2017).

6.1.7 Investors

According to the Stec Group (2019), the three main bottlenecks that investors experience in order to invest in Middle rental dwellings are: lack of market-based land prices (owner-occupied properties yield more land value), insufficiently concrete municipal housing policy and municipalities' lack of motivation regarding cooperation with investors. Therefore, there are not enough locations available. The lack of mutual cooperation between municipalities and investors therefore plays an important role in the shortage of mid-rent housing. As much as 90% of the investors indicate that they would like to make better agreements with municipalities. Especially about numbers of homes, land prices and repayment terms of the homes. This is a big step, because only 13% of the investors show that they now have regular contact with municipalities during acquisitions. Housing associations are also seen as strategic partners. 70% of investors appear to want more cooperation with housing associations. With this, investors are clearly betting on better cooperation with other partners than just developers and brokers (Platform 31, 2020).

6.1.8 Rent control

Middle rent is not only a temporary solution for many tenants, but also for municipalities (NUL20, 2021). What will happen to the rents if after 15, 20 or 25 years (depending on the agreements) the investors get their hands free to raise the rents or sell the property? It is therefore important that agreements are reached on rent control (NUL20, 2021). It is important that the municipality can also keep the rents in the free sector manageable. By being more active in this segment, housing associations can also ensure that permanent middle-rent accommodation can be realized, as investors are not motivated to do so (NUL20, 2021).

6.2 Actions to be taken

6.2.1 Housing production

First of all there is a shortage in the production of middle rental segment housing in Amsterdam, which means that the municipality should put all the effort in increasing this number. Since the housing associations are not a main stakeholder in the production of middle rental housing since 2015 this can be changed. Providing middle rental housing should be one of the main tasks of housing associations after providing social housing. This is a hard task because when one housing segment gets more priority the other segment will be disadvantaged. A better collaboration between the investors and the housing associations can solve this problem. The increase in housing production is an important factor for the housing satisfaction since it will create more possibilities for varieties within the middle rent segment. Also the waiting time for a middle rent housing will decrease which will also make people more satisfied with their house. The Ministry of BZK (2022) states that building sufficient affordable housing is an important contribution to improving the affordability of housing costs. To conclude, it will make it easier for people to find a house.

6.2.2 Keeping housing within the middle segment

Furthermore, producing housing in the middle segment is one thing, but keeping middle segment housing in this segment is another thing. Many of the interviewees expressed the vagueness about their rent price increase, which could mean that their rent in a couple of years could be above the middle rent housing limit. So, clarity in the rent price increases and the middle rent upper limit, will make the tenant feel secured about his or her future. As discussed in the beginning of this chapter the housing ordinance can be a useful tool for this aspect. In order to keep housing in the middle rent segment the municipality must define in the housing ordinance that there should also be permanent middle rent housing. According to the Ministry of BZK (2022) there are less housing available lower than 1000 euro a month, so there is a need to make middle rent housing lower than this price available. Ministry of BZK (2022) states that this can be done by introducing legislation and its use by municipalities for the protection of tenants and buyers and by making the tenants heard. Tenants who encounter problems in the rental or purchase process must have a hotline. These hotlines must be accessible and reliable. Complaints must be taken seriously. This will protect the tenants and will help with keeping the middle segment housing within the middle segment.

6.2.3 Flexibility

Next, building more housing only will not solve the problem, because the quality is also important. The housing satisfaction seems to be very good within the newly built middle segment housing for the housing realized by housing associations as well as for housing realized by private parties. but when looking at detailed aspects it seems that there can be improvements. For example, there seems to be a shortage in the flexibility and variety of the housing within the middle segment housing. This could mainly been concluded based on the results of the interviews, it showed that many different target groups live in the same design and area. Since the target group within this segment is very varied flexibility and variety are a necessity.
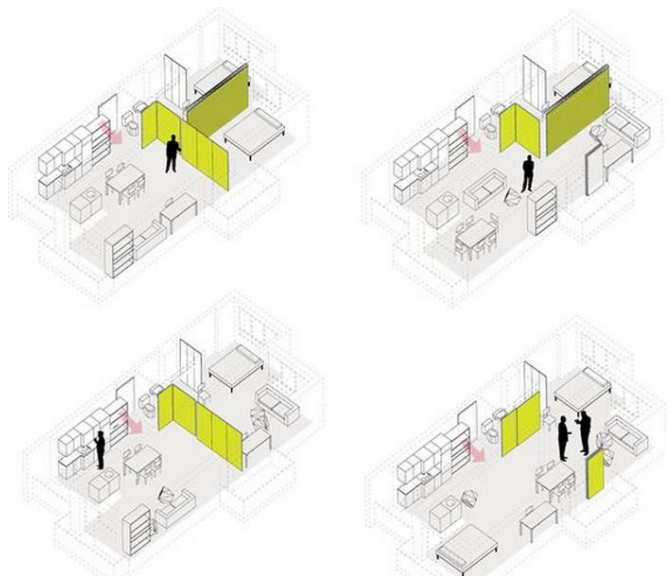
Figure 20: flexibility in housing units, inspired on ancient Japanese housing (rethinking the future, n.d.)

Besides the wide variety of the target group the biggest group of tenants can be described as starters, which means that a lot of changes can happen in their lives. For example, they can get children which makes them need a bigger house. Undoubtedly, increasing flexibility and adaptability is the best way to increase the lifespan of the building (Rethinking the future, n.d.).

An example for flexible housing units is shown in figure 20, which shows how one housing unit can be used and divided in different ways, based on its user. This example is based on the ancient Japanese housing which barely had any fixed walls, and could be filled in by the preferences of the end user. Another example for a flexible house is located in Spain, designed by PKMN architectures, (figure 21). This apartment has moveable modular walls which the dwellers can use as a storage. Figure 21 shows the main living space. Flexible walls can be a good start for giving the tenants the possibility to define their own spaces as they want to use them and based on their way of living and household composition. In the examples only examples of

Figure 21: flexibility in housing units, moving walls (Dezeen, 2021)

walls are shown but it is important to note that the flexibility in the floorplan can be done in different ways. Flexibility can for example also be applied on a bigger scale to change the size of the units for example. This action is mostly targeting developers and designers, they must understand the importance of flexibility in the design of a middle rental house and its advantages.

6.2.4 Allocating tenants based on their characteristics

Based on the WiMRA data and the interviews one can conclude that the housing associations already take responsibility for matching the tenants with a house that fits them. But when looking at the private housing, one can conclude that this is not the case at all and that there still needs to be more improvement in the allocation of the target groups. A specific housing ordinance from the municipality can help. In order to be able to do this the private parties need to create more housing with bigger areas, since most of their housing is between 40-59 m2. The municipality can steer on the size of the houses with the housing ordinance also, by specifying for example how much percentage of houses of each area should be provided.

The WiMRA analysis showed that many people within the private middle rent housing did not think the size of their housing is fitting, a large group found their house is too small or too big. So a solution for this can be with better allocation of the tenants. With the housing ordinance the municipality can create allocation rules for the private parties, to make the tenants fit better within their rented house. With this allocation rules the private parties can give priority to the allocated target groups, otherwise other target groups still have the opportunity to apply for the house. This way the freedom of choosing a house will not be taken away completely and at the same time people will be allocated in a more fitting house, which means an increasing housing satisfaction. This allocation system can be similar to the way that is done by housing associations, but in a less stricter way. Which means that if there is no fitting tenant still other tenants who have a lower matching level with the house can apply for that house.

6.2.5 Outer space

Figure 22: *project in Utrecht de Nieuwe Defensie (de nieuwe defensie, 2022)*

Creating enough outer space is a very important aspect for the housing satisfaction of the tenants. This has also a wide variety as well as the design of the houses, some people prefer a more private garden or balcony and others prefer a collective garden were they could meet other neighbors. The interviews showed that the younger people preferred a private balcony more than a collective meeting area. As shown in figure 22, this project in Utrecht provides a big collective garden were neighbors can meet each other and do activities while the gardens on the ground floor also are in the same space. And it also has balconies that do not look at the collective garden, with more privacy. So, this variety provides options for the different target groups. This action is first of all an action for the municipality, since the outer space should be defined in the housing ordinance. After that the housing association and the developers must understand the importance of the outer space and that it is an addition for the quality of the house.

6.2.6 Rent price

In order to increase the housing satisfaction one of the main things the actors should focus on is the rent price, rent prices are mostly not affordable for the current tenants. And as the interview results show, there is not a lot of variety on the rent price based on the situation of the tenants (income, age, household type etc.). It seems that there is an average rent price that is defined, which the housing associations use for all housing within the middle rental housing segment. In other words, the rent price does not depend on the housing quality and characteristics. While at the same time the rent price is increasing every year with approximately 30 euro's. In order to have more housing satisfaction it is important that everyone will be able to afford the rent price, so there should be also housing available with a lower price than 950 euro. The housing associations must regulate the rent prices based on the quality of the houses and not only based on an average.

Another possibility to help people pay for their rent price is by rent increase regulations. When the annual rent adjustment is announced, tenants are asked to provide timely information about their household composition and income (Sutorius & Dingemans, n.d.). Households that still belong to the middle-income group will receive a lower rent increase. Households that now have a higher income will receive a higher rent increase, which will gradually reduce the rent reduction.

Another solution could be to change the liberalization limit to a transitional regime where there is no hard limit where you immediately end up in the middle rent segment if you earn more than the defined amount. This transitional regime means that, for example, a rent allowance is still given which decreases with

higher income, as described above. In the document of the Ministry of BZK (2022) proposed to delete the maximum rent price limit. They state: We will delete the maximum rent limit: by canceling this maximum rent limit (of € 763.47) as a condition for the rent allowance, more tenants can receive rent allowance. For example, tenants with a (too) high rent with a low income or in the event of (temporary) drops in income can make use of the housing benefit to bridge the period until finding a new job or a cheaper home. We thus contribute to the affordability of housing costs for tenants who, temporarily or out of necessity, live too expensive for their income.

This is in line with the action proposed in this thesis which is the income-dependent rent increase and rent price protection with the point system to regulate the housing in this segment. This will particularly help people with a lower middle income. The Ministry of BZK (2022) also proposed the same, they want to regulate the initial rents by extending the WWS point system. Which is a good way to combine it with the proposed rent price regulations.

There should also be more clarity from the housing associations towards the tenants about the highest rent limit of the middle rental housing and about the other costs such as the service costs. This will make the tenants feel more secure and know what to expect in a couple of years. In the document of the Ministry of BZK (2022) proposed a method to create more clarity about the service costs. Their action is to not subsidize service costs anymore. With the removal of the service costs from the rent allowance, the calculated rent is from now on equal to the basic rent that is also used in, for example, appropriate allocation by housing associations. As a result, there is no longer any ambiguity about the rent owed and there are no more borderline cases that, due to the difference between the basic rent and the calculation rent, fall just outside the rent allowance and still owe more (net) rent than expected. No longer including the service costs in the rent allowance calculation is a simplification.

6.2.7 Owner occupied housing

Many respondents of the interviews mentioned that they would like to own a house, and the fact that they do not build anything for their future made them less satisfied with their current housing situation. Buying a house seems impossible with the current housing market and because of the strict mortgage rules. So providing owner occupied housing within the price range of middle segment housing would give the possibility for also this target group to own a house. Or giving the people with a middle income the possibility to get a mortgage loan, because with a mortgage loan of 1000 Euro's a month they could also buy a decent house (which is in many case the price of their rent). Since making the prices of the houses cheaper is almost impossible in the current housing market, making getting a mortgage accessible for people with a middle income also possible is the best option. This can be possible with a change in the strict mortgage law, which makes this an action for the government and the municipality.

Another action can be the purchase protection (opkoopbescherming), as proposed in the document of the Ministry of BZK (2022), the introduction of purchase protection whereby municipalities can designate areas in which cheap and middle priced owner-occupied homes can no longer simply be bought for rentals.

6.3 Conclusion: research question 5

this chapter answers research question: *What actions can relevant actors take for improving the housing satisfaction within the middle rental segment?*

This chapter proposes eight actions towards the three main stakeholders: the municipality, the housing associations and the developers. The eight proposed actions are:

1. The first action is to increase the housing production for the coming years, because there is a huge shortage.

2. In order to make this shortage decrease the middle rental housing should stay within this segment, so making them permanently middle rental housing will help. Which is the second action keeping housing within the middle segment housing.
3. The third action is creating flexibility in the floorplan of the houses to fit the wide variety of the tenants. This flexibility can be done by for example modular housing.
4. Furthermore, the action for more outer space within the designs, also a variety for these spaces is needed. For example, a collective garden for all the housing in the complex or gardens and balconies that provide more privacy.
5. The next action is the allocation of tenants based on their characteristics especially for the private parties. Important for this action is to have a good understanding of the tenants and their characteristics and with the help of the municipalities housing ordinance this can be improved.
6. And private landlords should also put more effort in matching the right housing to the different target groups.
7. Action seven is about the rent price, in order to make the housing affordable the point system is proposed as in the social housing system. This will make the price of the rent fairer and measurable. Also the change of the liberalisation limit into a transitional regime could be a solution for the lower income households because then they will still have the right for subsidies. And no subsidies for the service costs will create more clarity about the rent price.
8. The next action is to also provide owner occupied housing for the middle segment.

7 SYNTHESIS

The results of the previous chapters can be linked to answer the main research question: *How can the housing satisfaction in the newly built middle rental housing segment in Amsterdam be improved compared to the current situation?* This research question will be answered based on the literature research, the WiMRA data analysis results and the interview results. First, the current supply and demand is presented, after that the characteristics of the tenants and their housing are explained, then the housing satisfaction is discussed and in the end a set of actions is proposed to the stakeholders.

7.1 Current supply and demand

For a long time the housing production of middle segment housing was lagging behind, but in 2021 approximately 2700 housing started their construction. In total the middle rental housing increased by 4500 housing units between 2019 and 2021. This is still not the needed amount of housing but it shows that there is improvement towards the 6000 middle rental housing that is needed to be constructed every year. The demand for middle rent housing exceeded the supply by around 45000 housing units.

In the current middle rental housing stock the biggest group of tenants rents their house from housing associations while the private parties have more housing within this segment. Furthermore, there is almost no possibility for middle income households to buy a house because of the expensive housing prices and the strict mortgage rules. Middle income households have an average of 31% which they pay monthly for their house which is a lot less for people who bought a house. So rent in the middle housing segment is not affordable for a lot of people with a middle income.

7.2 Characteristics and living conditions

In this chapter the focus was on the newly built middle rental segment in Amsterdam. The most important result will be discussed in this section.

First of all, the wide variety of middle income households within this segment should be noted. At the same time, most of the tenants are younger than 35 and do not have children. Which could be seen in the WiMRA data analysis as well as the interviews. Furthermore, WiMRA shows that 32% of the current tenants have an income below the lowest middle income limit, which is again an indication for the housing shortage. At the same time there is approximately 30% of tenants who have an income above the highest income limit. Which means that better allocation of the tenants is needed. Furthermore, more than 63% of the tenants have a high education (HBO/University) but they lived in most cases alone.

The houses of the tenants were in most cases between 60 and 79 m2 and mostly had 2 or 3 rooms. But there is a difference between the housing from the housing associations and the housing from the private parties. The housing from the private parties is much smaller than the other houses, mostly between 40 an 59m2. The Energy label for both the housing associations and the private parties was mostly label A, but the private parties scored better. Besides, the interviews showed that around 35% of the houses in the current housing stock do not have a balcony or garden. And the interviews showed that people who have a balcony have a very small one, which is mostly a French balcony.

7.3 Housing satisfaction

The WiMRA analysis and the interviews both show that the tenants are satisfied in general. And that this is mostly because of the housing shortage and that people are satisfied that they could have a house at least. Furthermore, most of the people are satisfied with the area of their house. But that the matching of the tenant with a specific housing could be improved especially for the private housing. Besides, many of the interviewees mentioned their expected change in the preferences for the next couple of years. In which they wanted another housing type based also on the change of their household, for example bigger or with more rooms but still in the middle segment. Moreover, most people in the housing association housing were satisfied with the current maintenance, since the quality of the houses is good they did not want any maintenance. But when maintenance was needed it seemed not always to be done by the housing associations. The biggest variable for dissatisfaction was the affordability, as expected the houses are too expensive and many people within the middle segment rental housing find it hard to pay the monthly rent. Besides, this rent increases every year with approximately 40 Euro's.

This leads to the characteristics that should be changed in the housing to increase the housing satisfaction of the tenants. One of the main problems was the rent price which was still increasing, beside the vagueness of the service costs that the tenants have to pay. This should be communicated clearer with the tenants and the rent price should be based on the income level.

The designs of the houses should be more varied in design, also having an outer space is an important aspect. Flexibility in the design of the houses is still missing, since most of the different household types that were interviewed with the same area had the same design for their house and found the rooms too small for example. All in all, the variety of the target group and their different preferences should be taken into account.

7.4 Actions of stakeholders

Based on the findings of the WiMRA and interview research there are 7 actions that are proposed to the municipality, the housing associations and the market parties. This also answers the main research question: *How can the housing satisfaction in the newly built middle rental housing segment in Amsterdam be improved compared to the current situation?*

These actions are:

8. The first action is to increase the housing construction for the coming years, to decrease the current shortage
9. In order to make this shortage decrease the middle rental housing should stay within this segment, so making them permanently middle rental housing will help. Which is the second action keeping housing within the middle segment housing.
10. The third action is creating flexibility in the floorplan of the houses to fit the wide variety of the tenants. This flexibility can be done by for example modular housing.
11. Furthermore, the action for more outer space within the designs, also a variety for these spaces is needed. For example, a collective garden for all the housing in the complex or gardens and balconies that provide more privacy.
12. The next action is the allocation of tenants based on their characteristics especially for the private parties. Important for this action is to have a good understanding of the tenants and their characteristics and with the help of the municipalities housing ordinance this can be improved.
13. Action seven is about the rent price, in order to make the housing affordable the point system is proposed as in the social housing system. This will make the price of the rent fairer and measurable. Also the change of the liberalisation limit into a transitional regime could be a solution for the lower income households because then they will still have the right for subsidies.

14. The next action is to also provide owner occupied housing for the middle segment.

Table 21: actions and the different parties (Source: author)

Actions	Municipality	Housing associations	Market parties
Increase the construction	*Making the production attractive for market parties*	*Making middle segment housing one of the main tasks*	
Keeping middle rental housing in this segment	*Legislations to protect the tenants*	*Collaboration with private parties will increase productivity*	
Flexibility and variety	*Defining this in the housing ordinance*	*Creating flexible and adaptable designs which will fit the wide variety*	*Flexibility and variety in designs which could be done*
Outer space	*Defining this in the housing ordinance*	*Creating varieties of balconies, gardens and collective gardens and terraces*	*Creating varieties of balconies, gardens and collective gardens and terraces*
Allocation of tenants	*Detailed housing ordinance (huisvestingverordening) which the two parties can use for their housing*	*Based on the housing ordinance and an honest matching regulation.*	*Priority systems for matching tenants with housing.*
Rent price	*Entering point system, regulating the rent prices and instead of having a liberalisation limit having a transitional regime.*	*Keeping maximum rent prices for the middle rent housing and for defining the rent price the income should be taken into account.*	*Keeping maximum rent prices for the middle rent housing and for defining the rent price the income should be taken into account.*
Owner-occupied housing	*Purchase protection (opkoopbescherming) Providing mortgage for middle income households*		

8 DISCUSSION

Before moving on to the conclusions, the results of the WiMRA data analysis and the interviews are evaluated and mirrored by the literature. Also, the limitations and probable future research are discussed in this chapter.

8.1 Comment on the results

The aim of this research was to identify the current supply and demand within the middle rental segment and whether or not the current tenants are satisfied within their housing. The WiMRA data focused on the newly built middle rental housing from the housing associations and the private parties. And this was different in the interviews, since the interviews only focused on the housing from the housing associations. This resulted in some differences.

The literature research which the research started which was a good foundation to have background information about the current middle rental market. It showed that within the middle rental segment mostly houses are rented from the housing associations while the private parties have more houses. This was an interesting conclusion because a lot of the further research will be based on the differences between the two parties.

After that, the WiMRA research showed many differences between the housing from the housing associations and the housing from the private parties. Since this seemed to not been researched in previous studies, this was an interesting approach. As expected the market parties had more houses but smaller than the housing associations. Also some differences about the quality of the house were noted, but still the housing satisfaction was good in general. But by getting into details with the interviewees and in the WiMRA data this satisfaction seemed to have also some negative results for specific aspects.

By combining the WiMRA data with the interviews the data could be augmented and understanded better. In previous research the data has been researched for the whole housing market or for the complete middle segment for example, but the specific newly built middle segment rental housing is an addition for the housing satisfaction research in Amsterdam.

8.2 Limitations

The biggest limitation was the short period of time in which this research should be executed. First of all the WiMRA data could be researched more specific and made more connections between different variables could be made if there was enough time. Since this data should first be categorized within the categories that are defined for this research such as the housing segment categories and the construction year. This categorization already took a lot of time of the research.

Secondly, the interviews were only done for the housing from the housing associations because there was not enough time to also approach private tenants. First of all, the internship was at the Amsterdamse Federatie van Woningcorporaties which made it easy to approach other housing associations and to be connected with the tenants. But for the private housing getting in touch with the tenants seemed to be hard. When I tried to find some middle rent projects of a private party on the internet I found that most of their houses was just above the middle rent limit. This can be because the yearly rent increase resulted

in the new price rents, which is again due to a lack of regulation on the free market. All in all, finding private middle rent housing on the internet was a hard task. I also decided later in my research that I wanted to approach the housing from the private parties since this was not part of my research in the beginning.

The last limitation was about the low responses I got for the interview invitations I had sent out. In the first week I just got five persons who applied for the interview, which was not as expected. I wanted to have at least 20 interviews. But soon this seemed to ambitious and I lowered my expectations towards eight participants for my interviews. In the end I had 8 participants with the letter I had sent. And two others I found within my own network. One of the interviewees was from a private party but came from a very old house, which could not be included in this research. Although the results of this interview were very interesting.

Furthermore, a limitation for the proposed actions can ben that further regulation are putting more pressure on investment opportunities and willingness in the construction of rental housing. If, as a result of the regulation, investors are no longer willing to invest in (the construction of) medium-sized rental homes, there will be little supply of middle rental homes in the long term, as a result of which many middle income households will still not be able to find a suitable house.

8.3 Implications

Matching the housing with the right tenant is a very important factor for the housing satisfaction of the tenants which adds great value to housing. Since the middle segment is relatively new a lot of research needs to be done, which this research is also part of. This research gave insight in the housing satisfaction of specifically the tenants within this segment and by applying the proposed actions this satisfaction can be increased and this housing segment can be made more attractive. People with a middle income seem to be lost in the current housing stock because they do not fit in the other two main housing stocks, so the middle segment should be fitting for them.

The results showed that not all parties do the best possible to provide housing for the middle income households who need it the most, so improvement is needed. This thesis provided insight in the problems within this segment and were the changes and improvements can be done for the involved parties.

8.4 Further research

This research focused only on the newly built middle rental segment and within the WiMRA research the focus was on housing association housing as well as private housing, which gave interesting results. For the interviews the focus was only on the housing association housing which did not make all the WiMRA results especially of the private parties augmented with the interviews. So, doing further research about the tenants of the middle rental segment of the private parties could be a good addition to this research. Furthermore, the WiMRA research showed that a lot of the private middle rent housing is built before the defined newly built housing (the last ten years) in this research. So, doing research about the complete middle rental housing stock can give very different and interesting results. Also further research about the collaboration between the housing associations, the municipality can add value to this housing segment and the other segments.

9 CONCLUSION

This research aimed to identify how to improve the housing satisfaction of tenants of the middle rental segment housing. Since the middle income households do not have a lot of options in the Dutch housing market and the housing shortage is only increasing, this middle segment is their only option so it needs to be as fitting as possible for the wide variety of tenants within this segment. Since the housing associations and the private parties both provide middle rental housing, the differences between both housing characteristics and tenants need to be identified.

First of all, the literature research showed that here is still a lack of constructing enough middle rental housing and still a lot more housing should be produced in the coming years, approximately 6000 housing every year. After that, a mixed method approach investigated the housing characteristics, the tenant characteristics and the housing satisfaction of the tenants of both parties. First the WiMRA analysis was done, which is about the complete middle rental newly built housing in Amsterdam. After that, 8 interviews were done which are about the middle rental newly built housing of the housing associations only. Most interviews were done in collaboration with Stadgenoot and the other one was from Eigen Haard. The results of the WiMRA and the interviews showed mostly similar results and the interviews gave a clearer picture and understanding about different results. Sometimes some interviews showed completely different results, which is even not in line with all the other interviews, but still its information was a good addition for the research and for the housing associations. The WiMRA research showed differences between the housing from the housing associations and the housing of private parties. Housing associations have not been involved in producing middle rental housing in the last 7 years because it was not their main task anymore since 2015. Which means that most housing is provided by private parties, which can also been seen in the WiMRA results. But this also means that the developers and the market parties have a lot of freedom in developing the middle rental housing since there are also not a lot of restrictions in the current terms and conditions.

Overall, most of the tenants were satisfied with their current house and they were aware of the current housing market and the possibilities for housing. The rent of the housing was the aspect which most of the tenants were not satisfied about, since it is not affordable for everyone. Also the insecurity about the future rent price played a role in this dissatisfaction. The monotonous designs of the middle rental housing became clearer during the interviews. Not a lot of distinction was made based on the target group of the tenant. This can be solved with flexibility of the housing units and creating more varieties of the units. This variety should also be applied in the outer space that people have in their houses and as a collective space in their housing complex.

A limitation of this research is the limited amount of interviews that has been conducted, and the missing interviews of the private housing. This made it hard to compare all the results from the WiMRA data with the interviews. Nevertheless, the information found in the conducted interviews showed a lot of useful information for the housing associations and how they probably can change some of their approaches. Future research can focus more on the private housing of the middle rental segment, because that will show many useful comparisons with this research.

From this research some practical implications arose for the practitioners. The actions proposed in the end were based on all the research that was done with the WiMRA data and the interviews. These proposals are: Increase the housing construction, Keeping middle rental housing in this segment, Flexibility and variety in the housing units, Outer space for more middle rental housing, Allocation of tenants in a more measurable way, and regulation of the rent price to give the tenant more safety.

8 REFLECTION

In this final chapter, I am looking back at my graduation thesis process, and whether I answered the research question with the applied approach.

First I want to start with reflecting on the moment that this topic got my attention in the beginning of my masters in 2020. I heard a lot about the current housing shortage and about the increasing housing prices. Besides that, the corona crisis just started and the housing market seemed to be not that flexible towards the changing housing preferences that could arise when the way people live changes. I wanted to know more about the housing satisfaction of people and how this is influenced by the way they life and spend their day. What makes them look for specific housing characteristics more than others and that linked to the way they live. As I began to dive more into the different housing segments I came across the middle segment housing and found out that it was a relatively new segment in which the current tenants are still not clearly define. Also, their housing satisfaction was also still not clear. So, soon I formulated my main research question: *How can the housing satisfaction in the newly built middle rental segment in Amsterdam be improved compared to the current situation?*

Concretising the broadly defined research question and problem statement took until the p2 presentation. It took me quite some time to understand the exact problems within this segment and how this segment actually operates. To understand this I read many literature and talked a lot with my supervisors. I can say that I found it a difficult task to concretise my problem and research question because it remained very broad for a long time. When I was thinking about it, it seemed to be very clear and defined, but when putting it on paper that was not the casse. It seemed that I was too ambitious and wanted to do a lot of things for my thesis when looking back, such as the WiMRA data research combined with the interviews. But the several feedback I got from my supervisors gave me a lot of insight in how to concretise my research, which I found very helpful and effective. Sometimes I felt like not making progress but in the end I finished the P2 successfully.

After the P2 I started my internship at the Amsterdamse Federatie van woningcorporaties. I had several meetings with my supervisor Steven Kromhout during my internship, which provided me with many useful information. I found out from the beginning of my internship that the housing segment I was researching is a very popular topic and a lot of research seems to be applied about it from different organisations. This was also confirmed when the Ministry of BZK released a document about measures and actions they plan to take for the middle housing segment. There was a lot of interest in what this research would result from the other colleagues and the housing associations. From the beginning of the internship I started my WiMRA analysis, which I found a bit difficult to organize in the beginning because of the amount of data that was available in this data document. I made for example a mistake which made me analyse the complete middle rental segment housing in Amsterdam and not the newly built middle segment housing, which showed of course not the needed results. After a while I understanded the document better and the analysis that is needed for my research and started focusing. This document gave me several insights that were very interesting for making my interview because some things in the WiMRA data seemed to show some interesting results which the interviews will make clearer. The interviews were very interesting because many of my expectations were right and some of them also not. The internship was very helpful for being guided through the WiMRA database and for approaching the interviewees. I have to say that during the time of my internship I had some problems with my planning as my supervisor Joris expected, because my research contained needed much work.

When looking at wether my approach worked to answer my research questions, I can say that it did answer the research questions. But still I feel like it could have done with more depth if I had more time. For example I would do more analysis in WiMRA to connect more variables with each other. And also to do more interviews, which could provide more patterns that can be recognized. I think the mixed method was the best way to do this research and that they both gave me the needed insights to have the best results for my research. If one part of my research was missing I would feel that it was not complete. So, I think I answered my main research question with the applied mixed method, but that it can still be more in depth.

Looking back on the entire process, I can say that I learned a lot about this topic and that I also enjoyed doing my research. Still my planning was not always efficiently done I tried to stay on track as much as possible. But by better planning this could be done better. The interviews were completed as planned but this should have done earlier, since there was not a lot of time lift to analyse everything which was very hard in the end. Also, the ethical forms I had to fill in before doing the interviews were very unclear to me and it needed a lot of work, which demotivated me for a while. Another thing that was difficult was that all literature was in Dutch and that this thesis should be written in English, which made some of the definitions hard to translate as they are best known in Dutch. But in the end I am content with the result of my thesis. And most important with the results of my research, which I think gave different insights within this housing segment. And I also think it will be a good starting point for future research in this housing segment.

In the end I also want to reflect back on the course research methods 2 which we had done in combination with the graduation lab. The course Research methods 2 is divided in two parts. The first part is a general research method defining course which in the second half will be more specific based on your research. The first half of this course was very helpful to define the problem and the research method applied for the research. Seeing the work of other students also gave some insight on how to approach the research from different points of view, which was a good source for inspiration. Afterwards, the second part of this course was more specific and was about applied statistical methods. This gave insight in how to apply statistical research methods in this research. The different statistical methods were introduced and the options for choosing a specific method was explained. Based on this insights the choice for the cross tables that will be used for this research has been made. By using the cross tables relations between the different variables can be recognized and explained. The use of these cross tables was explained which will be very useful when doing the research about the characteristics and when combining the characteristics with the housing satisfaction and the findings in the qualitative research (the interviews).

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Appendix 1: Letter to the tenants

Aan de bewoners van dit adres

Datum: 30 maart 2022

Betreft: Uitnodiging onderzoek woontevredenheid

Beste mevrouw / meneer,

De Amsterdamse woningcorporaties zijn benieuwd naar de tevredenheid van bewoners van midden huurwoningen: woningen met een huur van €763 tot €1069 per maand. Daarom is de Amsterdamse Federatie van Woningcorporaties (AFWC) een onderzoek hierover gestart, in samenwerking met woningcorporatie Stadgenoot. Het doel van dit onderzoek is ervoor te zorgen dat midden huurwoningen beter aansluiten bij de woonwensen van de bewoners.

Mijn naam is Hagar Attia. Als stagiair bij de AFWC voer ik dit onderzoek uit, in het kader van mijn afstudeerscriptie voor de master 'Management in the built environment' aan de TU Delft. Voor dit onderzoek zou ik graag bewoners van midden huurwoningen willen interviewen over hun woonwensen en tevredenheid met hun huidige woning. Dit interview is eenmalig en duurt ongeveer 30 min. Het interview kan telefonisch of online (via Zoom of Teams) gedaan worden. In totaal zullen er 20 interviews gehouden worden, in de periode van 18 april tot 8 mei. **Onder de deelnemers wordt een cadeaubon verloot van 50 euro**. Om deel te nemen aan het onderzoek kunt u de QR code onderaan deze brief scannen en vervolgens uw gegevens achterlaten. Anders kunt u ook de link gebruiken. Als u geselecteerd bent zal ik telefonisch contact met u opnemen om een datum te bepalen voor het interview. Na het interview zal ik uw antwoorden anoniem verwerken.

De resultaten van het onderzoek zullen worden gerapporteerd in mijn afstudeerscriptie en gepresenteerd aan Amsterdamse woningcorporaties. Als u verder nog vragen heeft kunt u een email sturen naar attia@afwc.nl.

Met vriendelijke groet,
Hagar Attia

QR code voor het aanmelden voor een interview:

Link: https://www.survio.com/survey/d/S9Y8K4M7F6V8W2J5Y

Appendix 2: Informed consent form/interview question

INTERVIEW PROTOCOL

Opgesteld door: Hagar Attia

Algemene informatie

Geinterviewde: [bewoner]
Interviewer: Hagar Attia
Functie: Master student 'Management in the Built Environment', TU Delft

Datum: April 2022

Beste deelnemer,

Middensegment woningen zijn nog vrij nieuw in Nederland en de tevredenheid en de woonwensen van de huidige bewoners zijn nog niet voldoende in beeld. De huidige bewoners van dit segment zijn erg afwisselend, wat het inschatten van de tevredenheid ook moeilijker maakt. De woningtevredenheid heeft met verschillende factoren te maken, bijvoorbeeld de achtergrond van de bewoner, het aantal personen in het huishouden, de tijd die iemand doorbrengt in zijn woning, hobby's etc. Het is daarom ook belangrijk om een goed beeld te hebben bij de bewoners binnen dit segment. Doormiddel van dit interview kan dit beter in beeld worden gebracht en kunnen bepaalde aspecten die zorgen voor de tevredenheid naar voren komen.
Aan de hand van dit onderzoek wordt er gestreefd naar een betere aansluiting van de eigenschappen van de bewoners bij de woning.

Dit interview zal worden uitgevoerd door Hagar Attia voor haar afstudeeronderzoek voor de master 'Management in the Build Environment'. Deze scriptie wordt uitgevoerd onder toezicht van Gerard van Bortel en Joris Hoekstra, beiden docenten aan de faculteit Bouwkunde aan de TU Delft. Het interview zal ongeveer 30 minuten duren en met toestemming van de geïnterviewde zal het interview opgenomen worden, voor latere transcriptie. Houd er rekening mee dat u tijdens het interview opnieuw gevraagd zal worden voor uw toestemming en of u akkoord gaat met het opnemen van het interview.

U kunt op elk gewenst moment aangeven dat u niet wilt deelnemen. Een toelichting is niet vereist. Bovendien bent u vrij om elke gestelde vraag niet te beantwoorden.

Wanneer u akkoord gaat met deelname aan het interview, verzoek ik u deze brief in te vullen en te ondertekenen. Uw gegevens worden altijd vertrouwelijk behandeld.

Neem bij vragen en/of opmerkingen gerust contact op met:

Hagar Attia
Attia@afwc.nl
0636590441

Met vriendelijke groeten,
Hagar Attia

INTERVIEW VRAGEN

Achtergrond van de bewoner:

onderzoeksvraag 2: What are the characteristics and living conditions of the current residents of the newly built middle rental segment?

1. Kunt u kort iets over u zelf vertellen? (leeftijd, baan, opleiding, gezinssituatie)

2. Waar heeft u hiervoor gewoond?

3. Waarom woont u in een midden huurwoning? En niet in een sociale huurwoning, koop etc?

4. Kunt u een beeld schetsen van hoe u dag is ingedeeld gedurende een doordeweekse dag?

5. Op welke manier gebruikt u uw woning? Werkt u in uw woning/heeft u veel bezoek/ hobby? Hoeveel tijd besteed u in uw woning?

6. Hoe ervaart u de buren en de buurt?

Tevredenheid:

Onderzoeksvraag 3: Are dwellers of the newly built middle segment rental housing satisfied with their housing?

7. Hoe tevreden bent u tevreden over uw woning? En kunt u dat toelichten?
   Vragen over: kenmerken van de woning, de buurt, onderhoud, grootte, buren, buitenruimte

8. Waar bent u het meest tevreden over in uw woning?

9. Waar bent u het meest ontevreden over in uw woning?

onderzoeksvraag 4: Which housing characteristics are demanded to improve the housing satisfaction?

10. Als u een aanpassing zou kunnen kiezen wat zou dat dan zijn om ontevredenheid te verminderen?

Wooncarriere:

In wat voor soort woning wilt u wonen over 5 jaar? En waar staat die woning?

TOESTEMMINGS FORMULIER

In te vullen door geïnterviewde **[Naam]** en interviewer **Hagar Attia**.

Ik, verklaar dat ik vooraf ben geïnformeerd over het doel en de methode van het onderzoek.

Alle vragen die ik over het onderzoek had werden duidelijk en naar tevredenheid beantwoord.

Alle interviewvragen die ik niet wilde beantwoorden, heb ik vermeld en die vragen zullen uit het interview worden verwijderd. Ik ben me bewust van het recht dat ik hiervoor geen motivering nodig heb.

Ik ben me ervan bewust dat audiomateriaal uitsluitend voor dit onderzoek zal worden verzameld, getranscribeerd en gebruikt.

Ik ben mij bewust van het recht om op elk moment deelname in te trekken of niet alle vragen te beantwoorden, zonder het vermelden van de reden.

Ik ben mij ervan bewust dat alle informatie die uit dit interview gebruikt zal worden, anoniem wordt verwerkt.

Dit formulier is door mij gelezen en ik ga akkoord met deelname aan dit interview voor het onderzoek.

 Ik wil graag een kopie van de transcriptie [JA] [NEE]

Ik wil graag een kopie van de transcriptie samenvatting [JA] [NEE]

Ik wil graag een kopie van de scriptie [JA] [NEE]

Plaats: Amsterdam
Datum:
Naam deelnemer:
Handtekening deelnemer:

'Ik heb de deelnemer geïnformeerd over het onderzoek en verklaar dat ik bereid ben alle vragen over het onderzoek te beantwoorden'

Plaats: Amsterdam
Datum:
Naam interviewer: Hagar Attia
Handtekening interviewer:

Eigendomsegment * 2.8 Is er in uw huishouden een auto aanwezig? Crosstabulation

			2.8 Is er in uw huishouden een auto aanwezig?				
			ja, 1 auto	ja, 2 of meer auto's	nee, maak wel gebruik van een deelauto	nee, en maak geen gebruik van een deelauto	Total
Eigendomsegment	corporatie sociale huur	Count	3016	383	341	6695	10435
		% within Eigendomsegment	28,9%	3,7%	3,3%	64,2%	100,0%
	corporatie middenhuur	Count	617	0	135	399	1151
		% within Eigendomsegment	53,6%	0,0%	11,7%	34,7%	100,0%
	corporatie vrije sector huur	Count	186	0	27	113	326
		% within Eigendomsegment	57,1%	0,0%	8,3%	34,7%	100,0%
	particulier sociale huur	Count	596	23	359	5164	6142
		% within Eigendomsegment	9,7%	0,4%	5,8%	84,1%	100,0%
	particulier middenhuur	Count	1211	28	392	2271	3902
		% within Eigendomsegment	31,0%	0,7%	10,0%	58,2%	100,0%
	particulier vrije sector huur	Count	3766	472	813	2737	7788
		% within Eigendomsegment	48,4%	6,1%	10,4%	35,1%	100,0%
	koop	Count	5795	1219	384	1329	8727
		% within Eigendomsegment	66,4%	14,0%	4,4%	15,2%	100,0%
Total		Count	15187	2125	2451	18708	38471
		% within Eigendomsegment	39,5%	5,5%	6,4%	48,6%	100,0%

Eigendomsegment * leeftijd respondent in vier klassen Crosstabulation

			leeftijd respondent in vier klassen				
			tot 35 jaar	35 tot 55 jaar	55 tot 75 jaar	75 jaar en ouder	Total
Eigendomsegment	corporatie sociale huur	Count	4727	2803	2462	828	10820
		% within Eigendomsegment	43,7%	25,9%	22,8%	7,7%	100,0%
	corporatie middenhuur	Count	388	490	238	35	1151
		% within Eigendomsegment	33,7%	42,6%	20,7%	3,0%	100,0%
	corporatie vrije sector huur	Count	219	61	45	0	325
		% within Eigendomsegment	67,4%	18,8%	13,8%	0,0%	100,0%
	particulier sociale huur	Count	5847	257	75	14	6193
		% within Eigendomsegment	94,4%	4,1%	1,2%	0,2%	100,0%
	particulier middenhuur	Count	2888	630	368	15	3901
		% within Eigendomsegment	74,0%	16,1%	9,4%	0,4%	100,0%
	particulier vrije sector huur	Count	4531	2499	624	162	7816
		% within Eigendomsegment	58,0%	32,0%	8,0%	2,1%	100,0%
	koop	Count	1503	5230	1878	125	8736
		% within Eigendomsegment	17,2%	59,9%	21,5%	1,4%	100,0%
Total		Count	20103	11970	5690	1179	38942
		% within Eigendomsegment	51,6%	30,7%	14,6%	3,0%	100,0%

Eigendomsegment * opleidingsniveau respondent in drie categorieen Crosstabulation

			opleidingsniveau respondent in drie categorieen				
			laag opgeleid	middelbaar opgeleid	hoogopgeleid	onbekend	Total
Eigendomsegment	corporatie sociale huur	Count	2781	3805	3580	654	10820
		% within Eigendomsegment	25,7%	35,2%	33,1%	6,0%	100,0%
	corporatie middenhuur	Count	212	205	724	9	1150
		% within Eigendomsegment	18,4%	17,8%	63,0%	0,8%	100,0%
	corporatie vrije sector huur	Count	0	62	264	0	326
		% within Eigendomsegment	0,0%	19,0%	81,0%	0,0%	100,0%
	particulier sociale huur	Count	211	2743	3001	238	6193
		% within Eigendomsegment	3,4%	44,3%	48,5%	3,8%	100,0%
	particulier middenhuur	Count	196	758	2862	86	3902
		% within Eigendomsegment	5,0%	19,4%	73,3%	2,2%	100,0%
	particulier vrije sector huur	Count	290	1345	5963	217	7815
		% within Eigendomsegment	3,7%	17,2%	76,3%	2,8%	100,0%
	koop	Count	378	1998	6293	67	8736
		% within Eigendomsegment	4,3%	22,9%	72,0%	0,8%	100,0%
Total		Count	4068	10916	22687	1271	38942
		% within Eigendomsegment	10,4%	28,0%	58,3%	3,3%	100,0%

Eigendomsegment * Huishoudenstypen met onderscheid leeftijdsgroepen Crosstabulation

			Huishoudenstypen met onderscheid leeftijdsgroepen							
			alleenwonend tot 35 jaar	alleenwonend 35 jaar en ouder	stel zonder kind tot 35 jaar	stel zonder kind 35 jaar en ouder	eenoudergezin	stel met kinderen	overig	Total
Eigendomsegment	corporatie sociale huur	Count	4110	2929	330	861	958	1363	269	10820
		% within Eigendomsegment	38,0%	27,1%	3,0%	8,0%	8,9%	12,6%	2,5%	100,0%
	corporatie middenhuur	Count	160	152	178	219	110	331	0	1150
		% within Eigendomsegment	13,9%	13,2%	15,5%	19,0%	9,6%	28,8%	0,0%	100,0%
	corporatie vrije sector huur	Count	118	47	62	7	32	59	0	325
		% within Eigendomsegment	36,3%	14,5%	19,1%	2,2%	9,8%	18,2%	0,0%	100,0%
	particulier sociale huur	Count	5539	259	247	58	0	28	61	6192
		% within Eigendomsegment	89,5%	4,2%	4,0%	0,9%	0,0%	0,5%	1,0%	100,0%
	particulier middenhuur	Count	1696	569	1155	180	141	141	19	3901
		% within Eigendomsegment	43,5%	14,6%	29,6%	4,6%	3,6%	3,6%	0,5%	100,0%
	particulier vrije sector huur	Count	1150	1038	2838	899	227	1578	85	7815
		% within Eigendomsegment	14,7%	13,3%	36,3%	11,5%	2,9%	20,2%	1,1%	100,0%
	koop	Count	566	1225	693	1691	337	4224	0	8736
		% within Eigendomsegment	6,5%	14,0%	7,9%	19,4%	3,9%	48,4%	0,0%	100,0%
Total		Count	13339	6219	5503	3915	1805	7724	434	38939
		% within Eigendomsegment	34,3%	16,0%	14,1%	10,1%	4,6%	19,8%	1,1%	100,0%

Eigendomsegment * 1.4 Wat was uw vorige woonsituatie? Crosstabulation

			op kamers/studentenwoning	woongroep/woningdelen	inwonend bij ouders/familie	zelfstandige huurwoning van particuliere verhuurder	zelfstandige huurwoning van woningcorporatie	koopwoning	anders, namelijk	Total
Eigendomsegment	corporatie sociale huur	Count	1775	524	2106	747	4172	317	1096	10737
		% within Eigendomsegment	16,5%	4,9%	19,6%	7,0%	38,9%	3,0%	10,2%	100,0%
	corporatie middenhuur	Count	89	61	110	228	542	70	51	1151
		% within Eigendomsegment	7,7%	5,3%	9,6%	19,8%	47,1%	6,1%	4,4%	100,0%
	corporatie vrije sector huur	Count	41	32	23	94	58	39	38	325
		% within Eigendomsegment	12,6%	9,8%	7,1%	28,9%	17,8%	12,0%	11,7%	100,0%
	particulier sociale huur	Count	2003	571	2152	578	400	86	352	6142
		% within Eigendomsegment	32,6%	9,3%	35,0%	9,4%	6,5%	1,4%	5,7%	100,0%
	particulier middenhuur	Count	683	501	1007	806	462	246	143	3848
		% within Eigendomsegment	17,7%	13,0%	26,2%	20,9%	12,0%	6,4%	3,7%	100,0%
	particulier vrije sector huur	Count	950	576	678	2851	962	1469	267	7753
		% within Eigendomsegment	12,3%	7,4%	8,7%	36,8%	12,4%	18,9%	3,4%	100,0%
	koop	Count	146	165	544	1594	1658	4426	104	8637
		% within Eigendomsegment	1,7%	1,9%	6,3%	18,5%	19,2%	51,2%	1,2%	100,0%
Total		Count	5687	2430	6620	6898	8254	6653	2051	38593
		% within Eigendomsegment	14,7%	6,3%	17,2%	17,9%	21,4%	17,2%	5,3%	100,0%

Eigendomsegment * bouwperiode in klassen Crosstabulation

			bouwperiode in klassen					Total
			vooroorlogs	1946-1969	1970-1989	1990-2009	2010 en later	
Eigendomsegment	corporatie sociale huur	Count	2170	1274	1601	785	378	6208
		% within E	35,00%	20,50%	25,80%	12,60%	6,10%	100,00%
	corporatie middenhuur	Count	138	94	79	140	64	515
		% within E	26,80%	18,30%	15,30%	27,20%	12,40%	100,00%
	corporatie vrije sector huur	Count	95	6	23	47	16	187
		% within E	50,80%	3,20%	12,30%	25,10%	8,60%	100,00%
	particulier sociale huur	Count	999	172	90	79	235	1575
		% within E	63,40%	10,90%	5,70%	5,00%	14,90%	100,00%
	particulier middenhuur	Count	427	91	68	100	208	894
		% within E	47,80%	10,20%	7,60%	11,20%	23,30%	100,00%
	particulier vrije sector huur	Count	933	111	113	356	372	1885
		% within E	49,50%	5,90%	6,00%	18,90%	19,70%	100,00%
	koop	Count	3305	1006	1150	2252	708	8421
		% within E	39,20%	11,90%	13,70%	26,70%	8,40%	100,00%
Total		Count	8067	2754	3124	3759	1981	19685
		% within E	41,00%	14,00%	15,90%	19,10%	10,10%	100,00%

Eigendomsegment * kale huur in acht klassen Crosstabulation

			kale huur in acht klassen								Total
			tot €442 - kwaliteitskortingsgrens	€442 tot €633 - eerste aftoppingsgrens	€633 tot €679 - tweede aftoppingsgrens	€679 tot €752 - liberalisatiegrens	€752 tot €940 - middeldure huur 1	€940 tot €1.053 - middeldure huur 2	€1.053 tot €1.400 - dure huur 1	€1.400 en meer - dure huur 2	
Eigendomsegment	corporatie sociale huur	Count	2570	3599	1389	3262	0	0	0	0	10820
		% within Eigendomsegment	23,8%	33,3%	12,8%	30,1%	0,0%	0,0%	0,0%	0,0%	100,0%
	corporatie middenhuur	Count	0	0	0	0	692	458	0	0	1150
		% within Eigendomsegment	0,0%	0,0%	0,0%	0,0%	60,2%	39,8%	0,0%	0,0%	100,0%
	corporatie vrije sector huur	Count	0	0	0	0	0	0	233	93	326
		% within Eigendomsegment	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	71,5%	28,5%	100,0%
	particulier sociale huur	Count	1741	2660	413	1378	0	0	0	0	6192
		% within Eigendomsegment	28,1%	43,0%	6,7%	22,3%	0,0%	0,0%	0,0%	0,0%	100,0%
	particulier middenhuur	Count	0	0	0	0	2046	1842	14	0	3902
		% within Eigendomsegment	0,0%	0,0%	0,0%	0,0%	52,4%	47,2%	0,4%	0,0%	100,0%
	particulier vrije sector huur	Count	0	0	0	0	0	0	4337	3478	7815
		% within Eigendomsegment	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	55,5%	44,5%	100,0%
	koop	Count	10	40	0	0	0	0	7	24	81
		% within Eigendomsegment	12,3%	49,4%	0,0%	0,0%	0,0%	0,0%	8,6%	29,6%	100,0%
Total		Count	4321	6299	1802	4640	2738	2300	4591	3595	30286
		% within Eigendomsegment	14,3%	20,8%	5,9%	15,3%	9,0%	7,6%	15,2%	11,9%	100,0%

Eigendomsegment * aantal kamers obv registraties corporaties Crosstabulation

			aantal kamers obv registraties corporaties						Total
			0	1	2	3	4	5	Total
Eigendomsegment	corporatie sociale huur	Count	0	2986	1387	2802	1041	927	9143
		% within Eigendomsegment	0,0%	32,7%	15,2%	30,6%	11,4%	10,1%	100,0%
	corporatie middenhuur	Count	0	32	104	521	255	114	1026
		% within Eigendomsegment	0,0%	3,1%	10,1%	50,8%	24,9%	11,1%	100,0%
	corporatie vrije sector huur	Count	59	0	55	94	15	103	326
		% within Eigendomsegment	18,1%	0,0%	16,9%	28,8%	4,6%	31,6%	100,0%
	particulier sociale huur	Count	0	739	0	28	0	0	767
		% within Eigendomsegment	0,0%	96,3%	0,0%	3,7%	0,0%	0,0%	100,0%
	particulier middenhuur	Count	0	0	58	87	41	0	186
		% within Eigendomsegment	0,0%	0,0%	31,2%	46,8%	22,0%	0,0%	100,0%
	particulier vrije sector huur	Count	0	0	0	12	77	6	95
		% within Eigendomsegment	0,0%	0,0%	0,0%	12,6%	81,1%	6,3%	100,0%
Total		Count	59	3757	1604	3544	1429	1150	11543
		% within Eigendomsegment	0,5%	32,5%	13,9%	30,7%	12,4%	10,0%	100,0%

Eigendomsegment * oppervlakte in klassen Crosstabulation

			oppervlakte in klassen						Total
			tot 40 m2	40-59 m2	60-79 m2	80-99 m2	100-119 m2	120 m2 en groter	Total
Eigendomsegment	corporatie sociale huur	Count	3247	1992	2555	1988	666	371	10819
		% within Eigendomsegment	30,0%	18,4%	23,6%	18,4%	6,2%	3,4%	100,0%
	corporatie middenhuur	Count	0	32	509	462	34	114	1151
		% within Eigendomsegment	0,0%	2,8%	44,2%	40,1%	3,0%	9,9%	100,0%
	corporatie vrije sector huur	Count	38	0	55	59	114	59	325
		% within Eigendomsegment	11,7%	0,0%	16,9%	18,2%	35,1%	18,2%	100,0%
	particulier sociale huur	Count	5484	448	204	45	11	0	6192
		% within Eigendomsegment	88,6%	7,2%	3,3%	0,7%	0,2%	0,0%	100,0%
	particulier middenhuur	Count	513	2322	633	271	162	0	3901
		% within Eigendomsegment	13,2%	59,5%	16,2%	6,9%	4,2%	0,0%	100,0%
	particulier vrije sector huur	Count	170	1238	2486	2640	817	466	7817
		% within Eigendomsegment	2,2%	15,8%	31,8%	33,8%	10,5%	6,0%	100,0%
	koop	Count	174	327	1162	1259	1986	3828	8736
		% within Eigendomsegment	2,0%	3,7%	13,3%	14,4%	22,7%	43,8%	100,0%
Total		Count	9626	6359	7604	6724	3790	4838	38941
		% within Eigendomsegment	24,7%	16,3%	19,5%	17,3%	9,7%	12,4%	100,0%

			vrijstaande woning	twee-onder-een-kapwoning	rijtjeshuis of hoekwoning	benedenwoning	bovenwoning	appartement zonder lift	appartement met lift	anders, namelijk	Total
Eigendomsegment	corporatie sociale huur	Count	1624	1496	16741	20987	33664	42694	29389	8084	154679
		% within Eigendomsegment	1,0%	1,0%	10,8%	13,6%	21,8%	27,6%	19,0%	5,2%	100,0%
		% of Total	0,4%	0,4%	4,2%	5,2%	8,4%	10,7%	7,3%	2,0%	38,7%
	corporatie middenhuur	Count	157	197	2474	1301	991	3069	2612	260	11061
		% within Eigendomsegment	1,4%	1,8%	22,4%	11,8%	9,0%	27,7%	23,6%	2,4%	100,0%
		% of Total	0,0%	0,0%	0,6%	0,3%	0,2%	0,8%	0,7%	0,1%	2,8%
	corporatie vrije sector huur	Count	17	0	190	497	539	1251	1131	121	3746
		% within Eigendomsegment	0,5%	0,0%	5,1%	13,3%	14,4%	33,4%	30,2%	3,2%	100,0%
		% of Total	0,0%	0,0%	0,0%	0,1%	0,1%	0,3%	0,3%	0,0%	0,9%
	particulier sociale huur	Count	311	0	1466	2754	10815	11461	6974	4431	38212
		% within Eigendomsegment	0,8%	0,0%	3,8%	7,2%	28,3%	30,0%	18,3%	11,6%	100,0%
		% of Total	0,1%	0,0%	0,4%	0,7%	2,7%	2,9%	1,7%	1,1%	9,6%
	particulier middenhuur	Count	79	14	1348	1782	3312	5712	6850	717	19814
		% within Eigendomsegment	0,4%	0,1%	6,8%	9,0%	16,7%	28,8%	34,6%	3,6%	100,0%
		% of Total	0,0%	0,0%	0,3%	0,4%	0,8%	1,4%	1,7%	0,2%	5,0%
	particulier vrije sector huur	Count	431	267	2546	3788	7095	17176	16029	271	47603
		% within Eigendomsegment	0,9%	0,6%	5,3%	8,0%	14,9%	36,1%	33,7%	0,6%	100,0%
		% of Total	0,1%	0,1%	0,6%	0,9%	1,8%	4,3%	4,0%	0,1%	11,9%
	koop	Count	2273	2455	27675	13160	11057	33855	32354	2001	124830
		% within Eigendomsegment	1,8%	2,0%	22,2%	10,5%	8,9%	27,1%	25,9%	1,6%	100,0%
		% of Total	0,6%	0,6%	6,9%	3,3%	2,8%	8,5%	8,1%	0,5%	31,2%
Total		Count	4892	4429	52440	44269	67473	115218	95339	15885	399945
		% within Eigendomsegment	1,2%	1,1%	13,1%	11,1%	16,9%	28,8%	23,8%	4,0%	100,0%
		% of Total	1,2%	1,1%	13,1%	11,1%	16,9%	28,8%	23,8%	4,0%	100,0%

Eigendomsegment * 2.6 tuin kleiner dan 25m2 Crosstabulation

			2.6 tuin kleiner dan 25m2		Total
			No	Yes	
Eigendomsegment	corporatie sociale huur	Count	9998	814	10812
		% within Eigendomsegment	92,5%	7,5%	100,0%
	corporatie middenhuur	Count	1010	140	1150
		% within Eigendomsegment	87,8%	12,2%	100,0%
	corporatie vrije sector huur	Count	326	0	326
		% within Eigendomsegment	100,0%	0,0%	100,0%
	particulier sociale huur	Count	5979	194	6173
		% within Eigendomsegment	96,9%	3,1%	100,0%
	particulier middenhuur	Count	3858	44	3902
		% within Eigendomsegment	98,9%	1,1%	100,0%
	particulier vrije sector huur	Count	7531	285	7816
		% within Eigendomsegment	96,4%	3,6%	100,0%
	koop	Count	7888	847	8735
		% within Eigendomsegment	90,3%	9,7%	100,0%
Total		Count	36590	2324	38914
		% within Eigendomsegment	94,0%	6,0%	100,0%

Eigendomsegment * 2.6 balkon Crosstabulation

			2.6 balkon		
			No	Yes	Total
Eigendomsegment	corporatie sociale huur	Count	5007	5805	10812
		% within Eigendomsegment	46,3%	53,7%	100,0%
	corporatie middenhuur	Count	415	736	1151
		% within Eigendomsegment	36,1%	63,9%	100,0%
	corporatie vrije sector huur	Count	87	239	326
		% within Eigendomsegment	26,7%	73,3%	100,0%
	particulier sociale huur	Count	5691	482	6173
		% within Eigendomsegment	92,2%	7,8%	100,0%
	particulier middenhuur	Count	1280	2622	3902
		% within Eigendomsegment	32,8%	67,2%	100,0%
	particulier vrije sector huur	Count	1709	6107	7816
		% within Eigendomsegment	21,9%	78,1%	100,0%
	koop	Count	4260	4476	8736
		% within Eigendomsegment	48,8%	51,2%	100,0%
Total		Count	18449	20467	38916
		% within Eigendomsegment	47,4%	52,6%	100,0%

Eigendomsegment * energieklasse pand Crosstabulation

			energieklasse pand				
			A	B	C		Total
Eigendomsegment	corporatie sociale huur	Count	843	8735	495	747	10820
		% within Eigendomsegment	7,8%	80,7%	4,6%	6,9%	100,0%
	corporatie middenhuur	Count	169	915	58	9	1151
		% within Eigendomsegment	14,7%	79,5%	5,0%	0,8%	100,0%
	corporatie vrije sector huur	Count	67	234	24	0	325
		% within Eigendomsegment	20,6%	72,0%	7,4%	0,0%	100,0%
	particulier sociale huur	Count	1260	4908	24	0	6192
		% within Eigendomsegment	20,3%	79,3%	0,4%	0,0%	100,0%
	particulier middenhuur	Count	121	3772	9	0	3902
		% within Eigendomsegment	3,1%	96,7%	0,2%	0,0%	100,0%
	particulier vrije sector huur	Count	582	6695	501	37	7815
		% within Eigendomsegment	7,4%	85,7%	6,4%	0,5%	100,0%
	koop	Count	1975	6704	56	0	8735
		% within Eigendomsegment	22,6%	76,7%	0,6%	0,0%	100,0%
Total		Count	5017	31963	1167	793	38940
		% within Eigendomsegment	12,9%	82,1%	3,0%	2,0%	100,0%

Eigendomsegment * 2.9 Hoe tevreden bent u over uw woning? (totaaloordeel) Crosstabulation

			1 - zeer ontevreden	2	3	4	5	6	7	8	9	10 - zeer tevreden	Total
Eigendomsegment	corporatie sociale huur	Count	160	95	146	201	427	709	1416	1840	691	446	6131
		% within Eigendomsegment	2,6%	1,5%	2,4%	3,3%	7,0%	11,6%	23,1%	30,0%	11,3%	7,3%	100,0%
		% of Total	0,8%	0,5%	0,7%	1,0%	2,2%	3,6%	7,2%	9,4%	3,5%	2,3%	31,3%
	corporatie middenhuur	Count	4	4	9	4	21	40	140	187	79	26	514
		% within Eigendomsegment	0,8%	0,8%	1,8%	0,8%	4,1%	7,8%	27,2%	36,4%	15,4%	5,1%	100,0%
		% of Total	0,0%	0,0%	0,0%	0,0%	0,1%	0,2%	0,7%	1,0%	0,4%	0,1%	2,6%
	corporatie vrije sector huur	Count	1	0	1	3	7	10	43	80	29	12	186
		% within Eigendomsegment	0,5%	0,0%	0,5%	1,6%	3,8%	5,4%	23,1%	43,0%	15,6%	6,5%	100,0%
		% of Total	0,0%	0,0%	0,0%	0,0%	0,0%	0,1%	0,2%	0,4%	0,1%	0,1%	1,0%
	particulier sociale huur	Count	21	20	40	56	86	199	427	497	154	63	1563
		% within Eigendomsegment	1,3%	1,3%	2,6%	3,6%	5,5%	12,7%	27,3%	31,8%	9,9%	4,0%	100,0%
		% of Total	0,1%	0,1%	0,2%	0,3%	0,4%	1,0%	2,2%	2,5%	0,8%	0,3%	8,0%
	particulier middenhuur	Count	5	9	13	27	36	74	223	304	142	57	890
		% within Eigendomsegment	0,6%	1,0%	1,5%	3,0%	4,0%	8,3%	25,1%	34,2%	16,0%	6,4%	100,0%
		% of Total	0,0%	0,0%	0,1%	0,1%	0,2%	0,4%	1,1%	1,6%	0,7%	0,3%	4,5%
	particulier vrije sector huur	Count	8	9	24	32	65	153	473	676	310	132	1882
		% within Eigendomsegment	0,4%	0,5%	1,3%	1,7%	3,5%	8,1%	25,1%	35,9%	16,5%	7,0%	100,0%
		% of Total	0,0%	0,0%	0,1%	0,2%	0,3%	0,8%	2,4%	3,5%	1,6%	0,7%	9,6%
	koop	Count	15	13	20	33	88	251	1219	3350	2328	1079	8396
		% within Eigendomsegment	0,2%	0,2%	0,2%	0,4%	1,0%	3,0%	14,5%	39,9%	27,7%	12,9%	100,0%
		% of Total	0,1%	0,1%	0,1%	0,2%	0,4%	1,3%	6,2%	17,1%	11,9%	5,5%	42,9%
Total		Count	214	150	253	356	730	1436	3941	6934	3733	1815	19562
		% within Eigendomsegment	1,1%	0,8%	1,3%	1,8%	3,7%	7,3%	20,1%	35,4%	19,1%	9,3%	100,0%
		% of Total	1,1%	0,8%	1,3%	1,8%	3,7%	7,3%	20,1%	35,4%	19,1%	9,3%	100,0%

Eigendomsegment * 2.7 Wat vindt u van de grootte van uw woning? Crosstabulation

			te klein	klein maar passend	passend: niet (te) groot en niet (te) klein	groot maar passend	te groot	Total
Eigendomsegment	corporatie sociale huur	Count	30833	40238	72141	11090	2715	157017
		% within Eigendomsegment	19,6%	25,6%	45,9%	7,1%	1,7%	100,0%
		% of Total	7,6%	10,0%	17,9%	2,7%	0,7%	38,9%
	corporatie middenhuur	Count	1396	1999	5631	1606	410	11042
		% within Eigendomsegment	12,6%	18,1%	51,0%	14,5%	3,7%	100,0%
		% of Total	0,3%	0,5%	1,4%	0,4%	0,1%	2,7%
	corporatie vrije sector huur	Count	121	634	2180	733	113	3781
		% within Eigendomsegment	3,2%	16,8%	57,7%	19,4%	3,0%	100,0%
		% of Total	0,0%	0,2%	0,5%	0,2%	0,0%	0,9%
	particulier sociale huur	Count	7370	14680	14090	2235	338	38713
		% within Eigendomsegment	19,0%	37,9%	36,4%	5,8%	0,9%	100,0%
		% of Total	1,8%	3,6%	3,5%	0,6%	0,1%	9,6%
	particulier middenhuur	Count	3143	6426	7956	1737	642	19904
		% within Eigendomsegment	15,8%	32,3%	40,0%	8,7%	3,2%	100,0%
		% of Total	0,8%	1,6%	2,0%	0,4%	0,2%	4,9%
	particulier vrije sector huur	Count	4727	13771	23355	5195	750	47798
		% within Eigendomsegment	9,9%	28,8%	48,9%	10,9%	1,6%	100,0%
		% of Total	1,2%	3,4%	5,8%	1,3%	0,2%	11,8%
	koop	Count	9336	29264	63271	21684	2126	125681
		% within Eigendomsegment	7,4%	23,3%	50,3%	17,3%	1,7%	100,0%
		% of Total	2,3%	7,2%	15,7%	5,4%	0,5%	31,1%
Total		Count	56926	107012	188624	44280	7094	403936
		% within Eigendomsegment	14,1%	26,5%	46,7%	11,0%	1,8%	100,0%
		% of Total	14,1%	26,5%	46,7%	11,0%	1,8%	100,0%

Eigendomsegment * 2.10 Hoe beoordeelt u de staat van onderhoud van uw woning? Crosstabulation

			1 - zeer slecht	2	3	4	5	6	7	8	9	10 - zeer goed	Total
							2.10 Hoe beoordeelt u de staat van onderhoud van uw woning?						
Eigendomsegment	corporatie sociale huur	Count	7022	4625	6326	9279	17341	26070	33739	32559	11590	7728	156279
		% within Eigendomsegment	4,5%	3,0%	4,0%	5,9%	11,1%	16,7%	21,6%	20,8%	7,4%	4,9%	100,0%
		% of Total	1,7%	1,1%	1,6%	2,3%	4,3%	6,5%	8,4%	8,1%	2,9%	1,9%	38,8%
	corporatie middenhuur	Count	196	188	424	778	1023	1771	2483	2700	1044	526	11133
		% within Eigendomsegment	1,8%	1,7%	3,8%	7,0%	9,2%	15,9%	22,3%	24,3%	9,4%	4,7%	100,0%
		% of Total	0,0%	0,0%	0,1%	0,2%	0,3%	0,4%	0,6%	0,7%	0,3%	0,1%	2,8%
	corporatie vrije sector huur	Count	16	81	78	117	257	447	1118	1128	430	129	3801
		% within Eigendomsegment	0,4%	2,1%	2,1%	3,1%	6,8%	11,8%	29,4%	29,7%	11,3%	3,4%	100,0%
		% of Total	0,0%	0,0%	0,0%	0,0%	0,1%	0,1%	0,3%	0,3%	0,1%	0,0%	0,9%
	particulier sociale huur	Count	1606	1257	2049	3070	4193	6414	7770	6824	3424	1665	38272
		% within Eigendomsegment	4,2%	3,3%	5,4%	8,0%	11,0%	16,8%	20,3%	17,8%	8,9%	4,4%	100,0%
		% of Total	0,4%	0,3%	0,5%	0,8%	1,0%	1,6%	1,9%	1,7%	0,9%	0,4%	9,5%
	particulier middenhuur	Count	444	423	743	1498	1442	2704	3710	4891	2252	1736	19843
		% within Eigendomsegment	2,2%	2,1%	3,7%	7,5%	7,3%	13,6%	18,7%	24,6%	11,3%	8,7%	100,0%
		% of Total	0,1%	0,1%	0,2%	0,4%	0,4%	0,7%	0,9%	1,2%	0,6%	0,4%	4,9%
	particulier vrije sector huur	Count	507	403	1186	1688	2778	4925	10181	12530	8870	4641	47709
		% within Eigendomsegment	1,1%	0,8%	2,5%	3,5%	5,8%	10,3%	21,3%	26,3%	18,6%	9,7%	100,0%
		% of Total	0,1%	0,1%	0,3%	0,4%	0,7%	1,2%	2,5%	3,1%	2,2%	1,2%	11,9%
	koop	Count	279	374	645	1037	2814	8420	25509	45264	27411	13598	125351
		% within Eigendomsegment	0,2%	0,3%	0,5%	0,8%	2,2%	6,7%	20,4%	36,1%	21,9%	10,8%	100,0%
		% of Total	0,1%	0,1%	0,2%	0,3%	0,7%	2,1%	6,3%	11,2%	6,8%	3,4%	31,2%
Total		Count	10070	7351	11451	17467	29848	50751	84510	105896	55021	30023	402388
		% within Eigendomsegment	2,5%	1,8%	2,8%	4,3%	7,4%	12,6%	21,0%	26,3%	13,7%	7,5%	100,0%
		% of Total	2,5%	1,8%	2,8%	4,3%	7,4%	12,6%	21,0%	26,3%	13,7%	7,5%	100,0%

Eigendomsegment * 6.16 betaalbaarheid van de woningen Crosstabulation

			1 - heel positief	2	3	4	5 - heel negatief	Total
				6.16 betaalbaarheid van de woningen				
Eigendomsegment	corporatie sociale huur	Count	5949	8029	23058	23008	29918	89962
		% within Eigendomsegment	6,6%	8,9%	25,6%	25,6%	33,3%	100,0%
		% of Total	2,2%	3,0%	8,7%	8,7%	11,3%	34,0%
	corporatie middenhuur	Count	266	272	1626	1904	3306	7374
		% within Eigendomsegment	3,6%	3,7%	22,1%	25,8%	44,8%	100,0%
		% of Total	0,1%	0,1%	0,6%	0,7%	1,2%	2,8%
	corporatie vrije sector huur	Count	0	169	507	833	1114	2623
		% within Eigendomsegment	0,0%	6,4%	19,3%	31,8%	42,5%	100,0%
		% of Total	0,0%	0,1%	0,2%	0,3%	0,4%	1,0%
	particulier sociale huur	Count	776	1293	3905	7292	14193	27459
		% within Eigendomsegment	2,8%	4,7%	14,2%	26,6%	51,7%	100,0%
		% of Total	0,3%	0,5%	1,5%	2,8%	5,4%	10,4%
	particulier middenhuur	Count	83	446	2016	4456	6898	13899
		% within Eigendomsegment	0,6%	3,2%	14,5%	32,1%	49,6%	100,0%
		% of Total	0,0%	0,2%	0,8%	1,7%	2,6%	5,3%
	particulier vrije sector huur	Count	933	1627	5825	12365	13138	33888
		% within Eigendomsegment	2,8%	4,8%	17,2%	36,5%	38,8%	100,0%
		% of Total	0,4%	0,6%	2,2%	4,7%	5,0%	12,8%
	koop	Count	1701	5188	19912	34267	28220	89288
		% within Eigendomsegment	1,9%	5,8%	22,3%	38,4%	31,6%	100,0%
		% of Total	0,6%	2,0%	7,5%	13,0%	10,7%	33,8%
Total		Count	9708	17024	56849	84125	96787	264493
		% within Eigendomsegment	3,7%	6,4%	21,5%	31,8%	36,6%	100,0%
		% of Total	3,7%	6,4%	21,5%	31,8%	36,6%	100,0%

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