Paper for the OTB-conference on Neighbourhood restructuring and resident relocation in Delft, 4-5 November 2010

The effects of forced relocations on improvements of the housing situation: a case study in four Dutch cities[1]
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Urban restructuring takes place in numerous cities in Western European countries, often in the form of the demolition of relatively cheap dwellings and replacement by new, more expensive dwellings. This phenomenon has been studied extensively. Especially the effects of urban restructuring on the restructured areas themselves have been examined. Much less is known about the residents that had to relocate because of urban restructuring measures like demolition and intensive renovation. This paper therefore focuses on the question whether and why residents improve their housing situation. Using data from four Dutch cities we first make clear how the old and new housing situation differ by focusing both on objective and evaluated changes. Then, explanations are offered for the extent to which residents do or do not experience changes, with respect to dwelling as well as neighbourhood aspects. We found that (a) displaced residents both experience objective and evaluated improvements of their housing situation; (b) that in contrast to objective improvements, evaluated improvements are hardly related to individual and household characteristics; (c) evaluated improvements can be attributed to improved characteristics of the dwelling and neighbourhood; and (d) that increased satisfaction with the dwelling and neighbourhood are strongly related.

Key words: forced relocation, disadvantaged neighbourhoods, housing conditions

Introduction

Just as many other Western cities, Dutch cities are confronted with certain neighbourhoods that face a large number and diverse array of problems such as high unemployment rates, a lack of safety, social cohesion and livability, and physical deterioration (Dekker & Van Kempen, 2004; Andersen, 2002; Wassenberg, 2004; Swaroop & Morenoff, 2006). These problems are often argued to be the result of the concentration of residents with certain background characteristics. A common solution to counteract the problems is the implementation of mixing strategies (Ministry VROM, 1997; Ministry VROM, 2000; Ministry VROM, 2007, Van Kempen & Bolt, 2009; Andersen & Van Kempen, 2003). With this type of urban restructuring parts of the one-sided, cheap, and social rented old housing stock are replaced by a more diverse new housing stock. The new housing developments

[1] This study is financed by the following parties: NICIS Institute, Corpovenista, Utrecht University, OTB, Municipality of The Hague, Municipality of Rotterdam, Municipality of Groningen, Municipality of Breda, Municipality of Ede.
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usually consist for a large part of more expensive rental and owner-occupied dwellings. The population that would be attracted by this type of housing stock would increase the diversity of a neighbourhood's population. Hence, the rationale behind mixing strategies is that severely distressed neighbourhoods will be relieved by altering their physical structure and mixing the composition of the population (VROM, 2008; Uitermark, 2003). The expectation is that a mixed population will result in all kinds of positive aspects, such as increasing safety and livability and more social contacts between different groups and a better social cohesion.

In the scientific literature there has been much attention for the effects of mixing policy (Popkin et al, 2004; Kintrea 2007; Atkinson & Kintrea, 1999; Van Beckhoven & Van Kempen, 2003). Two of the major insights stemming from research into the effect of mixing strategies are that (1) urban restructuring often improves the quality of dwellings and safety, but that (2) the so much wanted interaction between different population groups (such as more and less well-off residents, new and old inhabitants, natives and non-natives) in the neighbourhood rarely develops (Brooks et al, 2005; Kleinhans & Van der Laan Bouma-Doff, 2008; Van Beckhoven & Van Kempen, 2003; Atkinson & Kintrea, 1999).

Urban restructuring does however not only affect the areas in which the policy is implemented. Restructuring can also have a big impact on the households that have to move because their home will be demolished: they will need to find a new dwelling, adapt to their new environment, may need to pay higher rents and so forth. As such, it can be argued that displaced households have to pay the price for the development of the neighbourhoods they used to live in. On the other hand, the point can be made that displaced households are offered unique opportunities to improve their housing situation[3]: they have to move out of the least popular dwellings and neighbourhoods and are offered better places and better dwellings.

Some studies already examined whether the housing situation of displaced households improved. Certain results suggest that the housing situation of displaced households worsened (Goetz, 2002; Oakley & Burchfield, 2009). Others, however, showed that the housing situation of displaced households improved (Kleinhans, 2003; Kingsley et al, 2003; Varady & Walker, 2009). These mixed results do not ease the decisions policy makers have to make with respect to the relocation of households. When they would however know *which* factors influence the extent to which satisfaction changes, they could make a much more informed choice to relocate or refrain from this.

Displaced households are often thought to improve their housing situation when they move to neighbourhoods with certain objectively measured characteristics that are assumed to be more favourable (Bolt & Van Kempen, 2010; Kingsley et al. 2003; Goetz, 2002). Much less studies focused on the experiences of displaced residents: do displaced residents themselves also believe their move resulted in an improved housing situation? Studies that do pay attention to changes in the satisfaction with the housing situation, only rarely provide good explanations for these changes (Kleinhans, 2003; Brooks et al, 2005). This is surprising since studies on the housing satisfaction of general residents show that experienced neighbourhood characteristics are much better predictors of neighbourhood satisfaction than objective neighbourhood characteristics and background characteristics (Permentier et al, 2010).

[3] With housing situation we refer both to the situation regarding the dwelling and the neighbourhood.

Hence, although it is very relevant for policy makers to know whether and why displaced households do or do not improve their housing situation, we only have a very limited understanding of this. In this article we aim to increase this understanding by answering the following two questions: *(1) To what extent do displaced residents improve their housing situation after their forced move; and (2) Which factors are responsible for the extent to which displaced residents improve their housing situation?* To provide a complete picture, these answers will both be answered for objective as well as experienced improvements. With respect to the dwelling the objective improvements we examine are whether households succeed to move to a dwelling with more rooms or from an apartment to a single-family dwelling. The objective improvements with the neighbourhoods on which we focus are whether displaced residents move to a neighbourhood with a considerably higher income or less minorities. Experienced improvements with the dwelling and neighbourhood are considered to be present when displaced households are more satisfied with their current dwelling and neighbourhood.

The remainder of this article is outlined as follows. First, we will formulate a number of hypotheses based on previous research. Second, we describe the local contexts of the cities in which we collected our data: The Hague, Groningen, Rotterdam and Ede. Then we describe these data and the measurements and methods we use, to be followed by our empirical analysis. In our conclusions we will also give implications for urban and housing policy.

Previous research

Housing careers

In the housing career literature regular moves are explained by the dissatisfaction of residents. Dissatisfaction is attributed to housing situations that do not meet the housing needs and aspirations (Galster & Hesser, 1981; Galster, 1987). These needs and aspirations are sometimes argued to be influenced by the life course (Clark & Huang, 2003; Rossi, 1955; Lu, 1999), but sometimes also by societal norms (Morris & Winter, 1976; Bruin & Cook, 1997; Lu, 1999). Differences in satisfaction are furthermore attributed to individual and household characteristics, tenure type, housing characteristics and neighbourhood characteristics. Finally, the satisfaction with the dwelling and satisfaction with the neighbourhood are argued to be interrelated (Lu, 1999; Varady & Carrozza, 2000). Although displaced residents may have been dissatisfied with their previous housing situation and eager to move, this is not necessarily the case. As such the improvements displaced households experience after a move may differ from the improvements regular households would experience. Next, we provide an overview of the research on the factors affecting the housing situation of regular residents and the extent to which these factors have been found to affect the housing situation of displaced residents as well.

Individual characteristics

The literature on the housing situation of regular residents has shown that households with higher incomes are better-off: those with higher incomes are of course better able to find a desirable situation, in terms of housing as well as in terms of neighbourhood than those with lower incomes (e.g., Rex and Moore, 1967; Deurloo et al., 1994; Dieleman et al, 2000; Clark et al. 2006). Furthermore, having a higher income is several times found to be related to more housing satisfaction (Lu, 1999; Galster & Hesser, 1981; Vera-Toscano & Ateca-Amestoy, 2008). Apart from residents with

higher incomes, also persons who are older, female, and native are in general more satisfied than others (Lu, 1999; Galster & Hesser, 1981; Diaz-Serrano & Stoyanova, 2006).

The scientific discussion on the influences of individual characteristics on the housing situation of displaced households is much less elaborate. Although individual characteristics have been included as control variables, in specific attention has been paid to the effects of two individual characteristics: income and minority status. Just as is the case for regular movers it has been argued that displaced households with a lower income do not succeed to improve their housing conditions as much as households with higher incomes. Varady and Walker (2000) for example suggested that displaced families on welfare lack the capacity and motivation to conduct a successful search. The results from their study showed however mixed results in this respect. Kleinhans and Van der Laan Bouma-Doff (2008) expected that the lowest income groups experience least progress after their forced relocation since they would suffer most from increased rents. Their results showed nevertheless that in the Netherlands displaced residents with rather high incomes are relatively less likely to report dwelling progress. This could be due to the housing allocation system in the Netherlands: households with higher incomes will not have access to the cheapest rental dwellings and will not receive financial assistance which the poorer families do receive.

Although previous findings in the literature on displaced households are mixed, based on the argumentation that in the case of regular moves higher-income households are better able to improve their situation resulting in more satisfaction, we expect that:

(1) Households with a low income will be less able to improve their housing situation (both objective and subjective) after a forced move.

Since displaced residents who belong to an ethnic minority have in general an even less favourable income position compared to other displaced residents, they would experience relatively stronger limitations to move to a better dwelling and neighbourhood. Other factors would further reduce the likelihood that displaced residents who belong to an ethnic minority improve their housing situation. Because ethnic minorities have in general less well-developed language skills than natives, and are less familiar with societal institutions and regulations they are expected to have more difficulties with the search process for a new dwelling after their forced move. From the side of institutions, like the municipality or the housing association, it may be that the information is inadequate or incomprehensible for certain groups. More so-called horizontal moves (moves to dwellings that are at most slightly better than the previous dwellings or to neighbourhoods with more or less the same characteristics as the previous neighbourhood) can be the result of this (Kleinhans & Van der Laan Bouma-Doff, 2008; Bolt & Van Kempen, 2010). Furthermore, ethnic minorities may move to relatively lower status neighbourhood because of negative reasons, like discrimination (Galster, 1999) or racial harassment (Krysan & Farly, 2002). In contrast, it can also be argued that ethnic minorities prefer to live in neighbourhoods that are considered to be of a lower status when many other ethnic minorities live there as well: it would be easier to build support networks in such neighbourhoods (Phillips 1998; Freeman, 2000).

With the exception of the preference argument – minorities prefer to live in low status neighbourhoods because of the presence of other minorities – all arguments

predict that ethnic minorities will be relatively less likely to move to a better housing situation. As a result:

(2) Ethnic minorities will be less able to improve their housing situation (both objective and subjective) after a forced move.

Dwelling characteristics

In addition to individual characteristics other factors are also likely to affect the extent to which residents become more satisfied with their housing situation. With respect to the satisfaction with the dwelling it can of course be expected that this depends on the characteristics of this dwelling. In the case of regular movers, a characteristic that is shown to have a considerable effect on satisfaction is the available space: the larger this is the more satisfied residents are (Lu, 1999; Diaz-Serrano & Stoyanova, 2006). Besides, it has been found that deficiencies such as rot in the frames, leaky roofs, inadequate heating facilities and a lack of sufficient light negatively affect satisfaction (Diaz-Serrano & Stoyanova, 2006; Varady & Carrozza, 2000).

Dwellings that are opted for demolition are in general of a very poor quality. As such it is very likely that displaced households will experience a considerable improvement of their housing quality and become more satisfied as a result. Surprisingly, the relation between the changed characteristics of displaced residents' dwellings and the improvements they experience has not often been examined. In one of the studies that did focus on this topic in several American cities it was indeed found that about two thirds of the displaced residents reports to be more satisfied with their new home (Varady & Walker 2000). This would be largely due to an increase in space or to a change in dwelling type; many of the displaced residents moved from an apartment to a single-family dwelling. In the Netherlands it has also been found that the quality of the new dwellings of displaced residents is more satisfactory (Kleinhans, 2003; Kleinhans & Van der Laan Bouma-Doff, 2008). The most mentioned improvements displaced households experienced according to these studies were the larger size, followed by better insulation, maintenance of the dwelling, dwelling type and technical quality.

Hence, based on specific literature on displaced households and more general literature on residential satisfaction we expect that:

(3) Displaced households will be more satisfied with their new dwelling than with their old dwelling, especially when the dwelling is larger, and better maintained.

Neighbourhood characteristics

Just as changed satisfaction with the dwelling is likely to be affected by changed characteristics of the dwelling; changed satisfaction with the neighbourhood may be affected by *changed characteristics of the neighbourhood.* In the general research on neighbourhood satisfaction the focus has very much been on the role of neighbourhood characteristics (Permentier et al. 2010). Satisfaction varies first of all with the physical appearance of neighbourhoods (Parkes et al., 2002). Also the availability of facilities such as good schools and public services have been found to be related to satisfaction (Basolo & Strong, 2002; Parkets et al., 2002). Besides, a high prevalence of problems in the estate, such as dirt in the streets, drug related problems, vandalism, criminality, traffic problems, and others, correlate with negative attitudes and less satisfaction (Harris, 1999; Lu, 1999). Safety is another important issue: feelings of unsafety can generate strong feelings of dissatisfaction and even a strong desire to move (Atkinson and Kintrea, 2001; Mohan & Twigg, 2007).

Special attention has been paid to the effects of the composition of the neighbourhood population on satisfaction. Residents are generally more satisfied with their neighbourhood when the population is similar to their own characteristics (Clark, 1991; 1992; Bobo and Zubrinsky, 1996; Feijten and Van Ham, 2009). Especially research in the United States has indicated that whites tend to have a preference for white neighbourhoods and do not want to live in areas with a large number of blacks (Clark, 1992). Bolt et al. (2008), as well as Van Ham and Feijten (2008) have found that native Dutch and Western immigrants are much more likely than non-Western groups to move out of concentration neighbourhoods of minority ethnic groups and to opt for areas with relatively fewer minority ethnic households. There are also other kinds of results, however. Harris (2001) has found out that the ethnic composition of the neighbourhood is not a very important factor in itself after controlling for socioeconomic status, neighbourhood deterioration and the quality of schools (see also Van Bergeijk et al., 2008).

In contrast to the satisfaction of regular residents, the satisfaction of displaced residents has often been measured in an indirect way. It is assumed that displaced residents are more satisfied when they live in neighbourhoods with certain objectively measured characteristics. Previous studies indeed show that displaced households move to neighbourhoods with characteristics that are assumed to be more favourable. The new neighbourhoods of displaced households are for example characterized by higher average house values, fewer social-rented dwellings, fewer households belonging to ethnic minority groups and a higher average income and less poverty (Bolt & Van Kempen, 2010; Kingsley, Johnson & Petit, 2003; Goetz et al, 2002). The few studies that did measure the changed satisfaction with the neighbourhood directly provide however a more mixed picture: whereas Brazley and Gilderbloom (2007) and Goetz (2002) conclude that displaced residents rarely report improved living conditions, Brooks et al. (2005) and Varady and Walker (2000) report an increased satisfaction after the forced move. The causes of the increased satisfaction have not been examined in depth by the latter studies. Both studies do however link increased satisfaction to an increased sense of safety.

One assumption that can be made is that displaced residents will be more satisfied when they move over a short distance. Previous research has shown that neighbourhoods that receive relatively many displaced households are indeed often close to the renewed neighbourhoods (Bolt & Van Kempen, 2010; Posthumus et al, 2010; Oakley & Burchfield, 2009). Displaced households would prefer to stay nearby their old neighbourhood in order to maintain their social contacts and support network. Hence, it is assumed that the presence of positive contacts with neighbours results in satisfaction. Nevertheless, the role of social interactions has generally been neglected in studies on residential satisfaction. The studies of Vera-Toscana and Ateca-Amestoy (2008) and Permentier et al. (2010) are exceptions to this, but they do not find any effect of informal social contacts with neighbours on respectively housing satisfaction and neighbourhood satisfaction.

Summarized, displaced households are argued to be more satisfied with their new neighbourhood when the characteristics of this neighbourhood are considered to be more favourable than those from their former neighbourhood. We expect that:

(4) Displaced households will be more satisfied when their new neighbourhood has a more expensive housing stock, less unsafety, a higher socioeconomic status, fewer ethnic minority households, is close to their old neighbourhood, its neighbours act with each other in a more pleasant fashion, has better facilities, is better maintained, and has a more pleasant atmosphere .

Many studies on residential satisfaction of regular residents stress the interrelationship of dwelling and neighbourhood satisfaction (Galster & Hesser, 1981). Clark et al. (2006) found that moving residents more often aim to improve their situation with respect to their dwelling and less often aim to improve their situation with respect to their neighbourhood. Nevertheless, improvement of the dwelling often goes hand in hand with improvement of the neighbourhood. Some interesting results in this respect have been found. Lu (1999) for instance showed that the satisfaction with the neighbourhood is an important determinant of housing satisfaction. Varady and Carrozza (2000) furthermore concluded that the satisfaction with the house rose together with increased levels of perceived safety.

The relation between dwelling and neighbourhood satisfaction has rarely been examined for displaced residents in specific. An exception is the study of Kleinhans and Van der Laan Bouma-Doff (2008) in which it has indeed been found that the perception of neighbourhood improvement is strongly related to self-reported dwelling progress: the way displaced residents perceive their neighbourhood is part of the overall evaluation of the new housing situation.

Based on these findings we expect that:

(5) Increased satisfaction with the neighbourhood will be related to increased satisfaction with the dwelling.

Local contexts

The data we use to test the expectations outlined before stem from a research project in five Dutch cities. We will focus on four of these cities: The Hague, Groningen, Rotterdam and Ede. Breda is not included in our analysis since some essential data concerning neighbourhood characteristics are not available for this city. Before we describe how we collected the data in these cities, we will provide more background information. In Table 1 some of their core characteristics are presented. Rotterdam and The Hague are respectively the Netherlands' second and third largest cities. Groningen and Ede are much smaller than these two cities (with respect to their number of residents, dwellings and neighbourhoods). In the two large cities we also clearly see the largest proportions of ethnic minorities. The largest shares of social-rented dwellings are however found in Rotterdam and Groningen. Furthermore, the share of single-family dwellings is much larger in Ede than in the other cities. The different size of the cities at hand makes it very interesting to include them in our analysis. As such we can examine whether the improvements displaced residents experience differ between large and midsized cities.

Table 1: Core characteristics of the cities of The Hague, Groningen, Rotterdam and Ede

	The Hague	**Groningen**	**Rotterdam**	**Ede**
Residents	473,940	181,610	584,060	107,500
% ethnic minorities[4]	33	9	36	7
Dwellings	231,995	82,850	288,350	40,290
% owner-occupied dwellings	45.3	41.1	28	70
% social-rented dwellings	33.6	43.3	51	20
% single-family dwellings	20.4	39.1	23.0	75.8
Neighbourhoods	115	70	89	67
Source: CBS Statline (Data 2007)				

[4] When we refer to ethnic minorities in The Netherlands, we use the following definition: an individual belongs to an ethnic minority group when at least one of his or her parents is born in a non-western country.

In the Netherlands the allocation of public housing can be organized differently across cities. In the selected cities the allocation is organized however in a similar fashion; namely according to choice-based letting. This holds that households who are looking for a dwelling have to react on dwellings themselves. On which dwellings households are allowed to react depends on their income, household size and age. The available dwellings are published on a weekly basis in a newspaper and on the internet. In principle the household with the longest waiting time will get a dwelling. Displaced households will however receive a priority status meaning that when they react on a dwelling they will get this dwelling before other households with a longer waiting time. The only restriction is that the dwelling should be comparable to their previous dwelling in terms of type, size and price. It should however be noted that comparability is a rather flexible concept. In practice it often turns out that only single-family dwellings in the social rented sector are not within reach for displaced residents. Ede is an exception in this respect. In this city, residents that have lived over 7 years in the dwelling that will be demolished also get a priority status for low-rise dwellings in certain neighbourhoods. Residents that lived for over 12 years in their previous dwelling even get a priority status for all low-rise dwellings in Ede.

Data, measurements, methods

In this study we use two types of data. To start with, we use existing data from the national statistics office (CBS) and several local monitors regarding neighbourhood characteristics to estimate the differences between the old and new neighbourhood of displaced households. Most of the variables are however based on data we collected ourselves with a survey among displaced households. In the city of Groningen we focus respectively on the experiences of a selection of the 1,367 displaced households who moved between 2003 and 2009. In Ede we look at the experiences of the 507 households displaced between 2003 and 2008. Since many more households have been displaced in Rotterdam and The Hague we decided to focus on households that were displaced more recently. In Rotterdam we approached a sample of the 2,818 households that were displaced between 2007 and 2009 and in The Hague part of the 1,867 households displaced between 2006 and 2009.

In Ede, all displaced households were approached to complete the survey. In Groningen a random sample of 700 households was drawn. In Rotterdam a sample of 600 households was drawn. Since The Hague requested for a more detailed study a larger sample was drawn, namely of 1,300 households[5]. Our strategy was to first approach respondents with a postal questionnaire. When the response on this questionnaire was unsatisfactory, research assistants have interviewed the respondents face to face. This has been the case in The Hague, Ede and Rotterdam. This approach resulted in a total of 738 correctly completed surveys and a response rate of 24.9 percent. To be more precise, in The Hague we collected 303 surveys (21% response), in Groningen 156 surveys (23% response), in Rotterdam 155 surveys (27% response) and in Ede 124 surveys (29% response). Considering these response rates, we need to be careful in interpreting our results. The rather low response-rates are likely to be due to the fact that the targeted respondents are often low-educated and non-native.

[5] Some of the selected households did not live at the addresses we selected. The following numbers of households have been reached in the cities: The Hague – 1273, Groningen – 687, Rotterdam – 583, Ede – 425.

The variables we computed from these data can be divided in dependent variables and independent variables regarding individual characteristics, changes with the neighbourhood, and changes of neighbourhood characteristics. The measurements of these variables are discussed next. A description of these variables is provided in Table 2.

The *dependent variables* can be divided in variables that indicate objective improvements and subjective improvements of the housing situation. Many different objective improvements with respect to the dwelling and neighbourhood could be used as dependent variables in our analysis. To keep the article comprehensive we decided to focus on two core improvements with respect to the dwelling and two core improvements with respect to the neighbourhood. The selected objective improvements with respect to the dwelling are measured by dummy's indicating whether residents moved from an apartment to a single-family dwelling[6] (1) or not (0), and whether residents moved to a dwelling with more rooms (1) or not (0). Measures of objective improvements with respect to the neighbourhood are dummy's indicating whether displaced households moved to a neighbourhood with at least one standard deviation higher average income (1) or not (0), and whether they moved to a neighbourhood with at least one standard deviation less non-western minorities (1) or not (0). The standard deviations are derived from the descriptives of the variables indicating the differences between the current and previous situation. The subjective improvements – the changed satisfaction with the dwelling and neighbourhood – are measured by subtracting the grade (1-10) displaced households gave to their new (i.e. present) dwelling and neighbourhood from the grade they gave to their old (i.e. previous) dwelling and neighbourhood.

The *individual characteristics* – age, gender, minority status, household situation, level of education, and income – are measured directly by questions in the questionnaire.

To measure *how the current dwelling differs from the old dwelling* the following variables have been computed: changed number of rooms, changed level of maintenance, change of housing type (move from an apartment to a single-family dwelling), and changed tenure status. To measure the changed number of rooms we subtracted the number of rooms in the old dwelling from the number of rooms in the new dwelling. With respect to the maintenance we directly asked whether the quality of maintenance increased (1) or not (0) and included this variable as a dummy. Furthermore, we created a dummy indicating whether a displaced households did (1) or did not (0) move from an apartment to a single-family dwelling[7]. We also computed a dummy to indicate whether a displaced household moved to an owner-occupied dwelling (1) or not (0).

Changes between the old and new neighbourhood have been measured by objective as well as by subjective measures. The *objectively measured neighbourhood characteristics* of which we computed change scores are: the average house value, the share of owner-occupied dwellings, the share of social rented dwellings, the proportion of minorities, average income, and the relative number of welfare recipients. The change variables are computed by subtracting the neighbourhood

[6] Please note that this variable is used both as a dependent and independent variable in different analyses. When the variable is used as a dependent variable those households that already lived in a single-family dwelling are excluded.

[7] Since only very few residents moved to an owner-occupied dwelling (7.55%) we do not include this variable as an explanatory variable.

characteristics of the old neighbourhood from the neighbourhood characteristics of the new neighbourhood[8].

We measured some neighbourhood characteristics in a *subjective* way by asking how displaced households believe the safety, contacts, facilities, atmosphere and maintenance in their neighbourhood changed. Respondents were asked to state whether these characteristics worsened, remained the same, or improved after their move. From these answers we computed two dummy variables: the first indicating whether the situation improved (score of 1) or not (score of 0), and the second indicating whether the situation worsened (1) or not (0).

The collected data have been used for several tests. In order to test whether displaced residents improve their housing situation (i.e. live more often in single-family dwellings, dwellings with more rooms, neighbourhoods with a higher average income, less minorities and became more satisfied with their neighbourhood and dwelling) we compare whether the previous situation of displaced residents differs significantly from their current situation using paired t-tests. To explain why displaced residents improve their housing situation, different regression analyses are conducted. In the first model, the different objective and subjective improvements are predicted by just individual characteristics. Logistic regression analyses are used to predict the improvements with respect to the objective measures of improvement and multiple regression analyses are used to predict the improvements with respect to the subjective measures of improvement. With respect to the changed satisfaction with the dwelling and neighbourhood two additional analyses are presented. In the second analysis, we respectively add changed neighbourhood and dwelling characteristics to explain changed satisfaction with the neighbourhood and dwelling. In the third analysis, we also control whether a changed level of satisfaction with the dwelling or neighbourhood can respectively explain a changed level of satisfaction with the neighbourhood and dwelling.

[8] Since the shares of ethnic minorities are so different in the cities (Groningen – 9%, The Hague – 32%, Rotterdam – 36%, Ede – 7%) a similar increase or decrease in this share may have very different effects on satisfaction in the cities. This is the only variable where such big discrepancies exist. In the case of the share of minorities we therefore decided it is more appropriate to use a location coefficient instead of absolute numbers to calculate the difference in the share of minorities in the previous and current neighbourhood. This means that we divided the percentage of minorities in the previous and current neighbourhood by the average percentage of minorities in the cities. After computing this relative measure we subtracted the location coefficients in the current situation from the location coefficients in the previous situation.

Table 2: Descriptions variables	Min.	Max.	Mean	SD
Dependent variables				
Change average grade dwelling	-8	9	1.42	2.23
Move from apartment to single-family dwelling			18.72%	0.39
Move to dwelling with more rooms			34.33%	0.48
Change average grade neighbourhood	-9	9	1.04	2.58
Move to neighbourhood with 1 STD higher average income			20.40%	0.40
Move to neighbourhood with 1 STD lower average proportion of minorities			20.77%	0.41
Individual characteristics				
Age	16	97	49.90	16.19
Percentage female			57.00%	0.50
Percentage belonging to an ethnic minority			29.30%	0.46
Percentage households with child(ren)			24.80%	0.43
Percentage singles			58.27%	0.49
Percentage low educated (no education, primary school, lower level high-school)			43.63%	0.50
Household income*1000	€0,4	€4,5	€1,42	0.67
Dwelling characteristics				
Changed number of rooms	-3	3	0.13	1.07
Percentage experienced improved maintenance			66.81%	0.47
Percentage households moving from an apartment to single-family dwelling			15.45%	0.36
Years lived in demolished dwelling	0.5	20	10.58	6.66
Objective neighbourhood characteristics				
Change average house value	-358	367	22.84	54.22
Change average share of owner-occupied dwellings	-77	88	9.38	20.35
Change average share of social rented dwellings	-92.5	94.4	-10.33	26.37
Change average proportion minorities	-83	61	-7.74	20.24
Change average income	-15.3	22.9	1.19	2.77
Change welfare recipients per 1000 residents	-228	205	-29.78	71.07
Distance to previous neighbourhood (km)	0	14.37	1.70	1.89
Subjective neighbourhood characteristics				
Percentage experiencing increased safety in one's neighbourhood			43.84%	0.50
Percentage experiencing decreased safety in one's neighbourhood			9.17%	0.29
Percentage experiencing improved contact between neighbours in the neighbourhood			29.29%	0.46
Percentage experiencing worsened contact between neighbours in the neighbourhood			15.04%	0.36
Percentage experiencing improved facilities in the neighbourhood			40.26%	0.49
Percentage experiencing worsened facilities in the neighbourhood			15.04%	0.36
Percentage experiencing improved atmosphere in the neighbourhood			44.92%	0.50
Percentage experiencing worsened atmosphere in the neighbourhood			17.60%	0.38
Percentage experiencing improved maintenance of the neighbourhood			53.53%	0.50
Percentage experiencing worsened maintenance of the neighbourhood			7.63%	0.27

Results

Improvements with respect to the dwelling

In this result section we will first discuss the (factors explaining) improvements of the dwelling and then pay attention to the (factors explaining) improvements of the neighbourhood. Whether residents move to a better dwelling can be determined by looking at objective improvements as well as experienced improvements. In this article we use both indicators of objective and subjective improvements. The objective measures are whether displaced households move from apartments to single-family dwellings and whether they move to dwellings with more rooms. These improvements are indeed present. Significantly more households live in single-family dwellings after their move; 23.2% of the households compared to 17.5% before their move ($t= -2.87$, $df=810$, $p<.01$). Displaced households also move to dwellings with on average more rooms. They move from dwellings with on average 3.24 rooms to dwellings with on average 3.38 rooms ($t= 2.97$, $df=732$, $p<.01$). The subjective measure of improvement – the change in the grade residents give to their dwelling – also shows a positive outcome. The average grade displaced residents give to their new dwelling is with a 7.57 on a 10-point scale higher than the average grade for the 6.16 they give on average to their old dwelling. This difference is statistically significant ($t= -16.87$, $df=708$, $p<.01$). These results indicate that displaced households indeed improve their situation regarding their dwelling. This can not be much of a surprise since demolished dwellings are often of a very low quality.

It is less obvious under which conditions residents experience most improvements. Therefore we try to further explain the three improvements at hand: moves to dwellings with more rooms (Table 3a), moves to single-family dwellings (Table 3a) and increased satisfaction with the dwelling (Table 3b). According to our *first and second expectation* especially income and minority status affect the chance to improve ones housing situation. Regarding our first (objective) indicator of improvement, a move to a dwelling with more rooms, we indeed find effects of income and minority status (Column 1, Table 3a). The effect of income is as expected: residents with a higher income are more likely to move to a dwelling with more rooms. In contrast to what we expected, non western minorities are also more likely to move to a dwelling with more rooms. This may be due to the fact that nonwestern minorities have relatively more children. Since larger households often get a priority status for dwellings with more rooms, this may explain why nonwestern minorities are more likely to move to a dwelling with more rooms. Some other individual characteristics also affect the chance to move to dwellings with more rooms. To start with, we find that being younger positively affects the chance to move to a dwelling with more rooms. This may be because younger households are more likely to face family-expansion and as such a need for more rooms. Furthermore, having lived for a longer period of time in your previous dwelling increases the chance to move to a dwelling with more rooms. Since households that lived longer in their previous dwelling have longer waiting times they may have better chances to move to larger dwellings. Last, we also find that being displaced in Groningen compared to being displaced in Ede increases the chance the move to a dwelling with more rooms.

With respect to the second (objective) indicator of improvement, a move from an apartment to a single-family dwelling, no effects of income and minority status have been found (Column 2, Table 3a). We do however find that residents from Groningen, The Hague and Rotterdam are less likely to make such a move than

resident from Ede. This is likely to be due to the fact that in Ede a much larger share of the housing stock consists of single-family dwellings: 75.8% compared to a maximum of 39.1% in the other cities. Furthermore, older residents and singles are less likely to move to a single-family dwelling. Singles will often not get priority for dwellings with many rooms and as such will often be restricted to choose from apartments. Furthermore, they may not want to move to a single-family dwelling since they do not need so much space. This can also be the reason that older residents are less likely to move to a single-family dwelling; they may also not need the space when their children are already grown up.

The third indicator of improvement – increased satisfaction with the dwelling – is not affected by any of the individual characteristics (Model 1, Table 3b). This is surprising since many studies have found individual characteristics to affect satisfaction (Dekker et al, 2007). This raises the question whether in this study individual characteristics have no effect on satisfaction at all, or whether they just have no effect on changed levels of satisfaction. Therefore we decided to also conduct analyses in which the current satisfaction with the dwelling is the dependent variable instead of the changed satisfaction with the dwelling (Table 3c). From the first model in which current satisfaction with the dwelling is explained (Model 1, Table 3c) we can conclude that this satisfaction is – in contrast to the changed satisfaction – indeed affected by individual characteristics: women, residents that lived longer in their former dwelling, who are native or western minorities, or who have a higher income are all more satisfied with their current dwelling. Also when more explanatory variables are added, as is presented in the second and third model of Table 3c, most individual characteristics still affect the current level of satisfaction with the dwelling.

Summarized, income and minority status do not often have the expected effects on our three measures of improvement. Only the chance to move to a dwelling with more rooms is larger when residents have a higher income. As such, we find limited support for our first expectation and no support for the second expectation.

Apart from individual characteristics, we expect that the changed satisfaction with the dwelling is also related to other factors. We predict (*third expectation)* that increased satisfaction is related to the following changes: an increased size of the dwelling, improved maintenance, and a move from an apartment to a single-family dwelling. As expected, Model 2 of Table 3b shows that an increased number of rooms results in a larger increase of the satisfaction with the dwelling. We also find a positive effect of improved maintenance on the changed satisfaction with the dwelling. In contrast, the move from an apartment to a single-family dwelling does not affect the changed satisfaction with the dwelling. Hence, two of the three expected effects mentioned in the third expectation are indeed present.

Last, we expect that changed satisfaction with the dwelling is related to changed satisfaction with the neighbourhood *(fifth expectation)*. To test this relation, the variable indicating changed satisfaction with the neighbourhood is added in Model 3 of Table 3b. When displaced households become more satisfied with their neighbourhood they are indeed also likely to become more satisfied with their dwelling.

Table 3a: Objective improvements of the dwelling explained by individual characteristics using logistic regression analyses		
	Model 1 Dwelling with more rooms B (Nagelkerke R2=0.17)	Model 1 Move to a single-family dwelling B (Nagelkerke R2=0.31)
The Hague	0.26	-2.33**
Groningen	0.85**	-1.02*
Rotterdam	0.60	-1.18*
Female	0.05	-0.08
Age	-0.02**	-0.04**
Children present	0.34	0.64
Single	0.49	-1.05**
Years lived in demolished dwelling	-0.04*	0.04
Low educated	-0.05	0.12
Welfare recipient	0.24	0.39
Ethnic minority	0.62**	-0.29
Net income	0.53**	0.15

Table 3b: Increased satisfaction with the dwelling explained by different factors using multiple regression analyses			
	Model 1 B (Adj.R2=0.00)	Model 2 B (Adj. R2=0.17)	Model 3 B (Adj. R2 =0.29)
The Hague	0.47	0.38	0.51*
Groningen	0.32	0.16	0.33
Rotterdam	0.27	0.36	0.44
Female	-0.13	-0.05	-0.08
Age	-0.01	-0.01	-0.01
Children present	0.22	-0.00	0.14
Single	0.22	0.04	-0.01
Years lived in demolished dwelling	0.00	0.01	0.02
Low educated	0.34	0.20	0.20
Welfare recipient	-0.07	-0.24	-0.05
Ethnic minority	0.12	0.14	0.24
Net income	0.16	-0.20	-0.14
Changed number of rooms		0.37**	0.35**
Move to single-family dwelling		-0.06	-0.23
Improved maintenance		1.63**	1.40**
Changed satisfaction with the neighbourhood			0.28**

Table 3c: Current satisfaction with the dwelling explained by different factors using multiple regression analyses			
	Model 1 B (Adj. R2= 0.06)	Model 2 B (Adj. R2 = 0.18)	Model 3 B (Adj. R2 = 0.22)
The Hague	0.03	-0.12	-0.09
Groningen	0.11	0.06	0.12
Rotterdam	-0.09	-0.03	-0.01
Female	0.35**	0.43**	0.44**
Age	0.00	-0.01	-0.00
Children present	0.08	0.03	0.06
Single	0.13	0.05	0.03
Years lived in demolished dwelling	0.03*	0.04**	0.04**
Low educated	0.19	0.16	0.14
Welfare recipient	0.13	0.02	0.13
Ethnic minority	-0.30*	-0.21	-0.19
Net income	0.49**	0.32**	0.34*
Changed number of rooms		0.10	0.08
Move to single-family dwelling		-0.28	-0.35*
Improved maintenance		1.05**	0.97**
Changed satisfaction with the neighbourhood			0.11**

Improvements with respect to the neighbourhood

Do displaced residents also improve their neighbourhood situation? Again, we both look at the objective and subjective improvements displaced residents experience. As objective measures of improvement we use variables indicating whether displaced residents moved to a neighbourhood with a higher average income and less nonwestern minorities. These improvements are indeed present: displaced residents move from neighbourhoods with an average income of 15,329 euro to neighbourhoods with an average income of 16,521 euro ($t=11.20$, $df=676$, $p<.01$) and from neighbourhoods with on average 34.97% percent non-western minorities to neighbourhoods with on average 27.22% percent non-western minorities ($t=-9.97$, $df=678$, $p<.01$). In the following analyses we only consider displaced households to move to better neighbourhoods when they respectively move to a neighbourhood with a standard deviation higher average income or standard deviation lower proportion ethnic minorities. Subjective improvement is measured by the difference between the grades residents give to their previous and current neighbourhood. The previous neighbourhood is on average graded with a 6.21. The average grade for the current neighbourhood is with a 7.25 significantly higher ($t=-10.68$, $df=707$, $p<.01$). Both with respect to the objective and subjective measures of improvement we thus find that displaced households indeed improve their situation.

To explain these three improvements, we first include individual characteristics in our regression analyses. According to our *first and second expectation* specifically ethnic minorities and poorer households would experience less improvements. Regarding our first objective improvement – a move to a neighbourhood with a higher average income – we find no effects of minority status and income (Column 1, Table 4a). We do find that residents from The Hague are relatively more likely to move to neighbourhoods with a higher average income than residents from Ede. Furthermore singles are less likely to move to such neighbourhoods.

Regarding the second improvement, a move to a neighbourhood with a smaller proportion minorities, we do find an effect of minority status but no effect of income. The likelihood to move to a neighbourhood with less minorities is smaller when someone belongs to a minority himself (Column 2, Table 4a). Furthermore, the city in which one lived affects the chance to move to a neighbourhood with less minorities. Compared to residents from Ede, residents from The Hague are more likely and respondents from Groningen are less likely to move to a neighbourhood with less minorities.

The third indicator of improvement, the experienced improvement of the neighbourhood, is only affected by one individual characteristic – being a social welfare recipient. Residents on social welfare are less likely to experience improved satisfaction (Model 1, Table 4b). As was the case for the dwelling, we wonder whether individual characteristics do not influence satisfaction with the neighbourhood at all or just do not influence changed satisfaction. Therefore an additional analysis is conducted in which the current satisfaction with the neighbourhood is predicted instead of the changed satisfaction with the neighbourhood (Table 4c). The results from this analysis do show effects of income and minority status (Model 1, Table 4c). Ethnic minorities are less likely to be satisfied and residents with a higher income are more likely to be satisfied. When more variables are included (as is the case in Model 2 and 3 of Table 4c) only the effect of minority status remains. This indicates that residents with higher incomes are more satisfied with their current neighbourhood because they live in neighbourhoods with more favourable neighbourhood characteristics.

All in all, little evidence has been found that our first two expectations are correct: that displaced residents who belong to an ethnic minority and have a lower income are less likely to move to better neighbourhoods. Only in the case of the chance to move to a neighbourhood with less ethnic minorities we find a negative effect of belonging to an ethnic minority yourself.

Apart from individual characteristics, we argued that changed satisfaction would also be influenced by other factors. We stated in our *fourth expectation* that displaced households will experience a larger increase of their satisfaction when their new neighbourhood is close to their old neighbourhood, has a more expensive housing stock, larger share owner-occupied dwellings, smaller proportion social-rented dwelling, higher socioeconomic status, less ethnic minorities, less unsafety and when neighbours have better contacts with each other. These characteristics have sometimes been measured in an objective fashion and other times in a subjective way. First, only the objectively measured change variables are added to the base model in which just individual explanatory variables were added (Model 2, Table 4b). From this second model we see that only one of the variables indicating a changed neighbourhood situation have the expected effect on changed satisfaction. Residents that move to neighbourhoods with a larger share welfare recipients are as expected less likely to become more satisfied. In contrast to what we expected, residents that move to neighbourhoods further away from their previous neighbourhood experience a relatively large increase of their satisfaction.

The next step is to also include the subjective neighbourhood variables indicating changes regarding safety, social contact, facilities, atmosphere and maintenance (Model 3, Table 4b). The effect of changed safety is as expected: satisfaction increases when the safety improves and satisfaction decreases when the safety worsens. We also find an effect on changed satisfaction of changes with respect to the way residents interact with each other. When residents in the new

neighbourhood interact in a worse fashion with each other, satisfaction is negatively affected. Satisfaction is however not so much stimulated by improved interactions between neighbours. The finding that changed satisfaction is positively affected by an improved atmosphere in the neighbourhood and negatively affected by a worsened atmosphere in the neighbourhood is also in line with our expectations. Furthermore, we can also conclude that changed maintenance in the neighbourhood has the expected effect on changed satisfaction. In contrast, changed satisfaction with the neighbourhood in general does not depend on changed satisfaction with the available facilities in the neighbourhood.

Regarding the effects of changed neighbourhood characteristics on changed satisfaction clear difference are present between the effects of objective and subjective changes of the neighbourhood: whereas objective changes have almost no effects, the subjective changes have considerable impact. Therefore, mixed support exists for our fourth hypothesis.

In Model 3 of Table 4b also another subjective variable is included: the experienced increase in satisfaction with the dwelling. We stated in our *fifth expectation* that increased satisfaction with the neighbourhood is related to increased satisfaction with the dwelling. The results indeed show that this effect is present.

Table 4a: Objective improvements of the neighbourhood explained by individual characteristics using logistic regression analyses

	Model 1 Current neighbourhood STD Higher income B (Nagelkerke R2 =0.07)	Model 1 Current neighbourhood STD Lower nonwestern minorities B (Nagelkerke R2 =0.23)
The Hague	0.69*	0.77*
Groningen	0.24	-3.78**
Rotterdam	0.19	-0.30
Female	0.01	-0.11
Age	-0.01	-0.01
Children present	-0.27	-0.18
Single	-0.56*	-0.44
Years lived in demolished dwelling	0.03	0.01
Low educated	-0.11	-0.09
Welfare recipient	-0.08	0.20
Ethnic minority	-0.51	-0.55*
Net income	0.27	0.09

Table 4b: Changed satisfaction with the neighbourhood explained by different factors using multiple regression analyses			
	Model 1 B (Adj.R2=0.01)	Model 2 B (Adj. R2=0.09)	Model 3 B (Adj. R2=0.49)
The Hague	-0.24	-0.80*	-0.76*
Groningen	-0.32	-0.70	-0.81*
Rotterdam	-0.20	-0.83	-0.55
Female	-0.01	-0.08	-0.04
Age	-0.02	-0.01	-0.01
Children present	-0.22	-0.16	-0.07
Single	0.37	0.49	0.18
Years lived in demolished dwelling	0.00	-0.03	-0.01
Low educated	-0.03	-0.04	-0.22
Welfare recipient	-0.57*	-0.53	-0.45*
Ethnic minority	-0.28	-0.32	-0.25
Net income	0.09	0.11	-0.08
Distance (km)		0.15*	0.14**
Difference in average house value		0.00	-0.00
Difference in average income		0.04	0.11
Difference in ethnic minorities (LC)		0.11	0.14
Difference in social rented dwellings		-0.01	0.00
Difference in owner-occupied dwellings		-0.01	-0.01
Difference in welfare dependence		-0.01**	-0.00
Improved safety			0.54*
Worsened safety			-1.30**
Neighbours handle with each other in a better fashion			0.05
Neighbours handle with each other in a worse fashion			-0.89**
Improved facilities in the neighbourhood			0.05
Worsened facilities in the neighbourhood			-0.28
Improved atmosphere in the neighbourhood			0.89**
Worsened atmosphere in the neighbourhood			-0.80*
Improved maintenance of the neighbourhood			0.56**
Worsened maintenance of the neighbourhood			-0.41
Changed satisfaction dwelling			0.21**
*p<.05, **p<.01			

Table 4c Current satisfaction with the neighbourhood explained by different factors using multiple regression analyses			
	Model 1 B (Adj. R2 =0.02)	Model 2 B (Adj. R2 = 0.06)	Model 3 B (Adj. R2=0.40)
The Hague	0.13	0.40	0.35
Groningen	0.12	0.39	0.16
Rotterdam	0.00	0.32	0.36
Female	0.13	0.07	0.06
Age	0.00	0.00	0.00
Children present	0.07	-0.03	0.04
Single	0.21	0.25	-0.04
Years lived in demolished dwelling	0.01	-0.00	0.01
Low educated	-0.01	0.13	0.01
Welfare recipient	-0.15	-0.06	0.04
Ethnic minority	-0.38*	-0.42*	-0.41**
Net income	0.34*	0.33*	0.17
Distance (km)		0.03	0.02
Difference in average house value		0.00	-0.00
Difference in average income		0.01	0.05
Difference in ethnic minorities (LC)		-0.17	-0.11
Difference in social rented dwellings		-0.01	-0.01
Difference in owner-occupied dwellings		-0.01	-0.01
Difference in welfare dependence		-0.00	0.00
Improved safety			0.26
Worsened safety			-1.28**
Neighbours handle with each other in a better fashion			0.03
Neighbours handle with each other in a worse fashion			-0.29
Improved facilities in the neighbourhood			-0.07
Worsened facilities in the neighbourhood			0.00
Improved atmosphere in the neighbourhood			0.27
Worsened atmosphere in the neighbourhood			-1.02
Improved maintenance of the neighbourhood			0.50**
Worsened maintenance of the neighbourhood			-0.38
Changed satisfaction dwelling			0.14**
*p<.05, **p<.01			

Conclusion and discussion

Displacement is usually seen as a negative by-product of urban restructuring, but it can also be seen as a unique opportunity for households at the bottom of the housing ladder to make a step forward in their housing career. Which of these argumentations is correct and why? Our results support the view that displaced households climb the housing ladder. Using different indicators of improvement – objective, subjective, of the dwelling, and of the neighbourhood – we each time find that the housing situation of displaced households improved.

To which factors can we attribute these improvements? We expected that individual characteristics and improvements of the dwelling and neighbourhood would all contribute to this explanation. Especially with respect to the effects of individual characteristics surprising results have been found. First of all, it is surprising that so little effects of having a low income and ethnic minority status have been found on the improvements residents experience. A lower income only negatively affects the chance to move to a dwelling with more rooms and belonging to

an ethnic minority just negatively affects the chance to move to neighbourhoods with a smaller proportion minorities. This last finding may however be rather disturbing to policy makers. Although this is not always mentioned explicitly, mixing policies often aim to mix residents also with respect to their ethnicity.

Second, individual characteristics have almost no influence on the subjective indicators of improvement – the changed satisfaction with the dwelling and the neighbourhood. In contrast, individual characteristics do affect the current satisfaction with the dwelling and neighbourhood. Hence, it is not so much that individual characteristics do not explain satisfaction, but that they do not explain changed levels of satisfaction. Irrespective of their background characteristics all groups of residents experience a similar degree of improvement. At first sight this seems to indicate that the Dutch allocation system offers equal opportunities to displaced residents with different background characteristics to improve their housing conditions. It can however also be argued that in a truly equal allocation system all displaced residents – irrespective of their characteristics and whether they were or were not satisfied before – will be as successful in moving to a satisfactory new housing situation. This is clearly not the case. The current allocation system does not solve the existing inequalities in the satisfaction of displaced residents with different characteristics but recreates these differences. Despite this critical remark, it should not be forgotten that within the current allocation system all residents do become more satisfied with their housing situation.

Third, we find no effects of individual characteristics on the changed satisfaction of displaced residents. This is surprising since individual characteristics do affect the objective improvements displaced residents experience and these objective improvements again affect the subjective improvements residents experience. A possible explanation for such findings may be found in the different expectations and preferences persons with different backgrounds have. Let us clarify this with an example. Older residents turn out to be less likely to move to a dwelling with more rooms. Residents who are less likely to move to a dwelling with more rooms are less likely to become more satisfied. However, older people are not less likely to become more satisfied. Older residents may less often move to a dwelling with more rooms and experience no negative effect on their satisfaction because they do not like to move to a dwelling with more rooms: they have no need for more rooms since their children will often already live on their own. As such a move to a dwelling with more rooms may not contribute to the satisfaction of older residents. This example shows how important and interesting it is to pay more attention to preferences in future research.

Apart from individual characteristics we also expected that increased satisfaction would be related to the objective changes of the housing situation. In the case of the dwelling we indeed find that objective improvements have a considerable impact on increased satisfaction. The relations between improvements of the neighbourhood and increased satisfaction are however not as straightforward. With exception from the experienced improvement of facilities, all subjective indicators of an improved neighbourhood situation indeed relate to increased satisfaction. In contrast, objective indicators of an improved neighbourhood situation often have no effects. Exceptions are the effects of distance and share of welfare recipients: residents are more satisfied when they move to neighbourhoods further away and neighbourhoods with a smaller share of welfare recipients. The effect of moving to a neighbourhood with relatively less welfare recipients does however disappear when we control for subjective improvements and increased satisfaction with the dwelling.

This is mainly due to the inclusion of the variable indicating changes in the experienced safety in the neighbourhood. This implicates that residents who move to neighbourhoods with less welfare recipients are not so much more satisfied because of this, but because in such neighbourhoods the experienced safety is larger as well. This finding is in line with previous studies which also stressed the importance of safety (Atkinson and Kintrea, 2001; Mohan & Twigg, 2007; Brooks et al., 2005; Varady & Walker, 2000).

Last, we did also find that satisfaction with the dwelling and neighbourhood are strongly related. This suggests that the satisfaction of residents with their dwelling and neighbourhood do not only depend on the characteristics of the dwelling and neighbourhood, but on a more general feel one has about the housing situation.

The results we found in this study do not only add to the existing scientific literature by providing a completer overview of the ways in which displacement results in an improved housing situation, but also provide useful insights for the policy field. To start with, we found that although residents with different background characteristics all experience improvements, the differences that existed between different residents did not disappear after their forced move. As such, it would be worthwhile for policy makers to develop measures to decrease these differences. Furthermore, we clearly see that displaced households become more satisfied with their dwelling when it has certain characteristics. By enabling residents to move such dwellings after their move satisfaction can be enhanced. It is not as clear cut to what kind of neighbourhoods displaced residents should move to increase their satisfaction with the neighbourhood. We do however find that experienced safety is an important factor in explaining satisfaction with the neighbourhood. As such it may be worth the effort for policy makers to pay special attention to the stimulation of feelings of safety in neighbourhoods.

Although this study is one of the first to focus on the factors that influence the improvements displaced residents experience, several attention points for policy makers can already be formulated. Since displacement is such a delicate issue, it seems very useful for future research to further examine how the housing situation of displaced residents can be improved.

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