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Intentions to move, residential preferences and mobility behaviour: a longitudinal perspective

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3 Intentions to move and actual moving behaviour in the Netherlands

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ABSTRACT This study examines how anticipated triggers for moving and individual, household and regional characteristics hamper or stimulate actual moving behaviour of people who intend to move. It uses a longitudinal data set from the Netherlands, in which survey data from the Housing Demand Survey 2002 are combined with register data from the Social Statistical Database. The study finds that people with a strong intention to move are almost four times as likely to move as people with a less strong intention to move. Homeowners are more likely to realise a strong intention to move than renters who want to move within the rental sector of the housing market. The probability of actually moving is particularly great for those wishing to move from owner-occupied to rented housing and those with more resources, whereas it is small for people whose search location is in the Randstad.

3.1 Introduction

Before a household moves, it has been involved in a more or less lengthy decision process. The mobility decision process starts from a trigger or motive for moving. Households may want to move in response to altered preferences due to (expected) changes in their household situation, and/or changes in their neighbourhood or in the housing market. Subject to resources and restrictions (for example, financial resources such as income), opportunities and constraints within the housing market, some households will fulfil their wish, but others will postpone or even put off the move. All in all, a discrepancy may arise between the intention to move and the actual moving behaviour.

The mobility decision process underlying potential moves is usually studied using information on either moving intentions (stated preference research) or actual moving behaviour (revealed preference research). Research concerning the question how these intentions result in actual moving behaviour is relatively scarce and often based on small-scale samples, probably because this type of data are difficult to collect. Yet, the value of research analysing combined stated and revealed preference data is obvious, because it allows for a much better assessment of the relative roles of triggers for moving on the one hand, and resources, restrictions, and housing opportunities on the other.

Indeed, the studies in which the realisation of intentions to move is analysed provide more insight into the mobility decision process. Most of these studies show how residential satisfaction, mobility intentions (a term used to indicate the various mobility inclination concepts used in previous research: thinking, considering, wishing, willing, planning, or expecting to move) and actual mobility behaviour are interrelated (Kearns & Parkes, 2003; Kley & Mulder, 2010; Landale & Guest, 1985; Lu, 1998; Speare, 1974). While Speare (1974) asserts that background characteristics, for example, housing and household characteristics, add little to the prediction of actual mobility because their effect is mediated by residential satisfaction, several studies have shown that background characteristics do have an independent effect on actual mobility. For example, Lu (1998) shows that tenure, income, and age have significant direct effects on actual moving behaviour, over and above their indirect effects channelled through mobility intentions. According to Fang (2006), the combination of limited economic ability and a lack of choices in the housing market make it hard for people to act upon their strong intention to move. However, despite the fact that there is considerable evidence that background characteristics are important to the realisation of intentions to move, little is known about the role of current characteristics in combination with expectations or preferences about these characteristics after a potential move. This is unfor-

fortunate because anticipated triggers for moving may also have an impact on the realisation of intentions to move over and above their impact on the formation of the intention itself.

Furthermore, the study of Kan (1999) reveals that it is not possible to automatically hypothesise that the same determinants that influence mobility in the general population also influence mobility among those with an intention to move. Movers in the general population also include “unexpected” movers. This may colour the findings of studies using only information on actual moves because in some cases, the impact of characteristics on actual mobility behaviour differs between those expecting to move and those expecting to stay. This implies that well-known relationships, such as between homeownership and a small probability of moving, do not necessarily apply to the subsequent moving behaviour of those intending to move.

All above-mentioned studies show a discrepancy between intentions and behaviour. However, the size of the discrepancy differs considerably between the studies. Using panel data for Philadelphia, Rossi (1955) found that of those who expected to move, about 80 per cent did so within the following year. Based on a small panel survey held among residents of the Seattle metropolitan area, Landale and Guest (1985) concluded that of those thinking about moving almost 40 per cent moved within one year, while using the national American Housing Survey, Lu (1998) showed that 44 per cent of those with a desire to move realised their desire within two years. These differences are probably partly caused by differences in the definition and measurement of mobility intentions. In line with the thought that expectations reflect a higher commitment to realise the considered behaviour than desires (see for example, Desbarats, 1983), several studies show that expectations or plans to move are more closely related to actual mobility behaviour than desires or considerations to move (Kley & Mulder, 2010; Rossi, 1955). Furthermore, the variation in the discrepancy might also be caused by the fact that the studies were carried out in different locations and were usually restricted to a few specific towns or regions. This implies that the contextual factors (which are relevant for the extent to which people are able to change residence) substantially differ between the studies. There are a few studies in which the influence of location is analysed using large-scale samples representing the population of one or two countries (Kearns & Parkes, 2003, for England; Lu, 1998, for the United States; Moore, 1986, for the United States and Canada). These studies, and also small-scale studies for the Netherlands (Konter & Van den Booren, 1988; Van Kempen et al., 1990), showed that the degree to which people realise their intention to move varies substantially by town or region. For example, Kearns and Parkes (2003) found that, after controlling for

mobility intentions, those living in London inner city and deprived estates were significantly less likely to move than those living in other areas in England. As far as is known, all these studies refer to the current place of residence and not to the search location. Yet, it is reasonable to assume that the search location is more important to the realisation of intentions to move than the current place of residence.

This paper, addresses the following question: *To what extent do anticipated triggers for moving, the strength of the intention to move, resources and restrictions, and the search location play a role in the realisation of an intention to move?*

To answer this question, the study employs logistic regression models of the actual moving behaviour of those with moving intentions, using a unique longitudinal data set for the Netherlands, which contains information about the moving intentions of people and the subsequent moving behaviour. The information about moving intentions was derived from the Housing Demand Survey (HDS) 2002 and the information about subsequent moving behaviour of HDS respondents was derived from the Spatial and Social Mobility satellite 1999–2005 of the Social Statistical Database (SSD) of Statistics Netherlands.

3.2 Theory and background

The majority of people consider moving to a new home as a stressful event (Raviv et al., 1990). Since moving also takes time, money, and effort, people will only intend to move if there is a clear reason for moving. An important reason why people intend to move is related to (expected) life events within one of the various life course trajectories (Mulder & Hooimeijer, 1999). Life events, such as cohabiting and having children, frequently alter preferences and needs with respect to housing, thereby triggering decisions to move. Furthermore, there is extensive empirical evidence that many people intend to move due to a mismatch between the current and preferred housing situation (see for example, Landale & Guest, 1985; Lu, 1998; Moore, 1986), which results in residential stress (Brown & Moore, 1970; Wolpert, 1965), or in dissatisfaction with the current housing situation (Speare, 1974). Households may also want to move in response to booms and busts in the housing market (Henley, 1998), or other housing market changes such as decreasing interest rates (Clark & Onaka, 1983). It should be noted that some households have to move because of factors that are beyond their control (e.g., eviction or demolition). This paper focuses on the link between intentions to move voluntarily and actual moving behaviour.

The existence of a trigger or motive for moving is not a sufficient condition for a move to take place (Mulder & Hooimeijer, 1999). It is possible that during

the search process a household cannot find a suitable or affordable dwelling. In that case, an alternative for moving is to stay in the current dwelling (Brown & Moore, 1970), possibly combined with making adjustments to the home in order to meet the new requirements (Deane, 1990). The realisation of intentions to move depends on the interaction between the triggers or motives for moving, housing preferences, the individual resources and restrictions on the one hand and the opportunities and constraints in the housing market on the other (Hooimeijer & Oskamp, 1996).

3.2.1 The influence of anticipated triggers for moving and strength of the intention to move

Whether someone will act upon stated intentions to move depends on the perceived necessity of the intended move, among other things. Those with a greater perceived necessity to change residence are more likely to translate their intention into action than those with a smaller perceived necessity to move. An indicator of the perceived necessity of an intended move (or urgency, in terms of Goetgeluk, 1997) is the underlying trigger for moving. Triggers for moving provide information about the consequences of not realising an intended move. The more far-reaching these consequences are (in the perception of the individual), the greater the perceived necessity of the intended move will be.

People may intend to move because of changes in the household, employment, or educational career. Such moves have been denoted as induced moves (Clark & Onaka, 1983). Not moving may imply having to postpone the life course change. Intended moves that are triggered by changes in the life course are hence associated with a high degree of necessity. This holds especially for intended moves prompted by the wish to form a union or to break up a union, because the wish to cohabit or separate cannot be fulfilled without a move of at least one partner (Goetgeluk, 1997). Therefore, it is likely that singles intending to form a multi-person household and people who expect to become single move more frequently than people who do not expect a change in their household situation. Besides expected changes, the expected household situation may also affect the realisation of intentions to move owing to differences in resources and restrictions between singles and families (see next section).

If people primarily intend to move because of education or work, it is most likely that this intention stems from a (foreseen) long commuting distance between residence and work or education in combination with a desire to reduce that distance (Van Wissen & Bonnerman, 1991). Not moving may imply not being able to accept a certain job or to enrol in education, or having to accept an undesirably long commuting distance instead. Intended moves for educational or

occupational reasons are hence probably associated with a high degree of necessity (Goetgeluk, 1997). Therefore, it is likely that those who intend to move because of work or education move more frequently than those who want to move for other reasons.

Intentions to move may also be prompted by a desire to alter the type and quantity of housing consumption (Clark & Onaka, 1983). An important aspect of the current housing situation is the amount of space relative to the number of household members. Too little space is an important reason for moving (Clark & Onaka, 1983; Rossi, 1955). Not realising an intended move from a crowded home implies the household has to cope with a suboptimal housing situation. Living in a crowded housing situation is likely to lead to a greater necessity of moving. Therefore, it is expected that those living in crowded housing will be more likely to realise an intention to move than those living in less crowded or spacious housing.

Furthermore, moves may be triggered by a preferred change in housing tenure. The wish to move into homeownership is often prompted by housing reasons (Mulder & Hooimeijer, 1999). According to Goetgeluk (1997), moves for such reasons are less necessary. Unlike the wish to move into homeownership, the wish to move out of homeownership is probably associated with a great necessity of moving. This preferred tenure change is often not prompted by housing reasons, but by a decrease in financial resources, for example, after union dissolution, widowhood, or unemployment (Ermisch & Di Salvo, 1996; Feijten, 2005). Therefore, it is likely that those who want to move from owning to renting will realise their intention to move more frequently than others. Furthermore, it is expected that the realisation of intentions to move will be affected by the current and preferred housing tenure in the sense of resources and restrictions (see next section).

Besides anticipated triggers for moving, it is expected that there will be a direct impact of the strength of an intention to move on the extent to which people translate intentions into action. The stronger the intention to engage in behaviour, the more likely should be its performance (Ajzen, 1991), as the strength of the intention to move has an impact not only on the intensity with which a household will search for available vacancies, but also on the probability of acceptance of an offered vacancy (Hooimeijer & Oskamp, 1996). It is therefore expected that people with a strong intention to move will move more frequently than those with a less strong intention to move.

3.2.2 *The influence of resources and restrictions*

The more income a person has, the more dwellings are within the financial reach of an intended mover (Mulder & Hooimeijer, 1999; Priemus, 1984). It is expected that affluent people are more likely to realise their intention to move than those with a lower income. Indeed, some studies found that those with higher incomes have a greater probability of translating moving intentions into action (Duncan & Newman, 1976, for people who want to move for work reasons; Moore, 1986). However, other studies hardly found an income effect (Goetgeluk, 1997; Kan, 1999). Possibly, those with higher incomes are not so much less constrained in their choice of housing options, because they often only consider options at the upper end of the market. An alternative explanation is that the income effect is mediated by intentions to move. It has frequently been argued that people take hampering and facilitating factors – such as income – into account when they formulate an intention to move (Desbarats, 1983; Gardner et al., 1985). Assuming that people try to avoid having an intention to do something that is not likely to happen, and that they have a correct perception about the opportunities to change residence given their financial resources, a positive income effect might be absent.

Education is a form of human capital and income potential that can help people make their intentions materialise. A high level of education matters not only to the income at a given moment, but also to career prospects (Mulder & Hooimeijer, 1999). It is therefore expected that highly educated intended movers will realise their intentions more frequently than the less well educated. For the same reasons, the labour market position can also play a role in the realisation of the intention to move. The range of available housing options is smaller for those unemployed; it is, for example, difficult – if not impossible – to get a mortgage. Thus, it is likely that employed individuals with an intention to move will move more frequently than non-employed individuals who intend to move.

Homeownership is known to form a restriction on moving: homeowners move less frequently than renters (Clark & Dieleman, 1996; Helderma et al., 2004). Several explanations have been put forward for this difference between homeowners and renters. Some of these explanations are mainly relevant to the formation of moving intentions: owner-occupied homes are usually of higher quality than homes in the rental sector (Helderma et al., 2004; Speare et al., 1975) and are more frequently regarded as “longstay housing” by their inhabitants (Feijten & Mulder, 2002). Other explanations are particularly relevant to the realisation of intentions: homeowners are confronted with higher transaction costs than renters. These costs include financial and non-financial costs: homeowners have to pay the services of an estate agent and they have to put

effort into selling the home (Helderman et al., 2004). This would imply that homeowners are less likely to realise a moving intention than renters. Indeed, previous research shows that homeowners are less likely to realise an intention to move than renters (Kearns & Parkes, 2003; Lu, 1998). For the tempo at which a person acquires a new home it is also important whether someone wants to move to a rental home or to an owner-occupied home. The transaction costs involved in buying a home can act as a barrier to residential mobility. For the Netherlands, these costs are estimated at 10 per cent of the value of the home (Helderman et al., 2004). These costs may hamper the realisation of intentions to move into homeownership. Furthermore, the availability of opportunities differs between the rental sector and the owner-occupied sector. The affordability of dwellings is a problem in the owner-occupied sector, while the social rental sector (which, in the Netherlands, comprises three-quarters of the rental sector) struggles with long waiting lists (REA, 2006). In addition, people who want to move to a rental dwelling in the social sector have less freedom of choice: they are subject to limitations to the type of homes and locations they are allowed to move into. It is expected that current tenure plays a role in the tempo at which a person acquires a new home in combination with tenure preferences. Although it is difficult to predict which category will encounter the greatest difficulty in finding a new home, it is expected that those who want to move from owning to renting to move more frequently than others because such intended moves are associated with a higher necessity of moving (see previous section).

The household situation is another important source of restrictions (Mulder & Hooimeijer, 1999). On the one hand, the realisation of intentions to move can be more difficult for (intended) singles because of differences in income. In general, singles will have lower incomes than couples and families because they cannot pool their incomes. On the other hand, the choice to relocate may be easier for singles because they do not have to take into account anyone else's daily activity spaces and preferences (Mulder, 1993; Mulder & Hooimeijer, 1999). It is thought that the positive effect of being single is more important than the negative effect; therefore, it is expected that, if differences in income are accounted for, singles have less difficulty to realise an intention to move than households consisting of more than one person.

3.2.3 The influence of local housing market opportunities

Whether someone is able to realise an intention to move not only depends on his or her own resources, but also on the locally available housing market opportunities. These opportunities are determined by the arrival rate of housing vacancies (Hooimeijer & Oskamp, 1996) and by eligibility criteria and price, for

social housing and private market housing, respectively (Mulder & Hooimeijer, 1999). The availability of housing opportunities differs considerably between regions (Clark & Dieleman, 1996; Dieleman, 2001). Compared with the Randstad (the more urbanised western region that serves as the main economic motor of the Netherlands), the peripheral regions are characterised by relatively low pressure on the housing market. This is reflected by the fact that housing prices are generally lower in the periphery than in the Randstad; the availability and affordability of owner-occupied dwellings is particularly problematic in the Randstad (Renes et al., 2006). Furthermore, the waiting lists for a social rental home are generally longer in the Randstad, especially in large cities such as Amsterdam and Utrecht (REA, 2006). It is likely that intended movers whose search location is in the peripheral region will move more frequently than those who search for a home in the Randstad.

Another characteristic of regional housing markets that might influence the realisation of moving intentions is the degree of urbanisation. Compared with rural areas, the turnover rate of dwellings and the prices of owner-occupied dwellings are higher in urban areas (Helderman & Mulder, 2007). Turnover rates and prices may be expected to have a strong influence on mobility and housing choice (Dieleman, 2001). High turnover rates will increase the number of available housing opportunities, but high housing prices might be an obstacle for moving. Therefore, the expected impact of degree of urbanisation of the search location on the realisation of intentions to move is not straightforward. A summary of the hypotheses is provided in Table 3.1.

Table 3.1 Summary of hypothesised effects of independent variables on the probability of realising an intention to move

Characteristics	Expected effect
Expectation to form a union	+
Expectation to break up a union	+
Intention to move for work or education	+
Wish to move out of homeownership	+
Crowded home	+
Strong intention to move	+
High income	+
High level of education	+
Not employed	-
A stable multi-person household	-
Desired place of residence is urbanised	+/-
Search location Randstad	-

3.2.4 The influence of other individual characteristics

There are a number of other individual circumstances that are known to play a role in the probability of moving, and should therefore be accounted for. Previous studies for the United States showed that young people are more likely to translate moving intentions into action than older people (Crowder, 2001; Kan, 1999; Lu, 1998). These studies also found evidence of ethnic differences in the extent to which people realise their intentions to move. It is therefore expected that older people and non-Western immigrant groups will realise their intention to move to a lesser degree than younger people and natives. The study also controls for gender.

3.3 Data and methods

3.3.1 Data

The study uses a unique source of data: a combination of the Housing Demand Survey (HDS) 2002 and the longitudinal Spatial and Social Mobility satellite of the Social Statistical Database (SSD) of Statistics Netherlands 1999–2005 (Bakker, 2002). The HDS data are based on a large cross-sectional survey in which information is gathered about the housing situation of people living in the Netherlands. Besides information about the housing situation, the survey also contains sociodemographic and socioeconomic information, and information about mobility intentions and housing preferences. The research population is representative of the Netherlands population aged 18 and older and not living in an institution. The HDS data have been enriched with longitudinal register data of the Spatial and Social Mobility satellite 1999–2005 by using a unique personal identification number. The Satellite contains national migration and emigration data of all persons who have lived in the Netherlands at any time since 1995. The dates of moves have been derived from the population register.

The combination of the survey and the register data made it possible to study the mobility of all persons in the survey (with or without moving intentions) in the years after the survey was held. In contrast to panel surveys, the data set is free of problems related to panel attrition (caused by moves or refusals to remain in the panel); all respondents can be tracked in time. Moreover, in comparison with the data used in most previous studies, this sample is much larger and hence made it possible to perform more in-depth analyses with greater statistical power.

The study excluded children living in the parental home, people living in dormitories or shared accommodation, and a small number of respondents ($n = 10$) of whom the preferred tenure is unknown. Furthermore, it also excluded

people expecting an involuntary move (for example, if the dwelling was going to be demolished) and people who had already found a new home. A small number of HSD respondents died in the two years after the time of interview. These were also excluded, with the exception of those who had already made a move within the period of observation. After these selections, the research sample included 61,580 respondents with non-missing information on the other variables in the analysis. Most analyses only include those respondents who expressed an intention to move in the HDS. This intention was measured by means of the question: “Do you want to move within the next two years?” (In Dutch: “Wilt u binnen twee jaar verhuizen?”). If someone answered “Possibly yes, maybe”, “I would like to, but I cannot find anything” or “Most certainly yes”, this person was considered to have an intention to move. If someone answered “Most certainly not” or “I do not know”, this person was considered not to have an intention to move. In the research sample, 12,832 respondents expressed an intention to move.

3.3.2 Variables

With the exception of the dependent variable, all variables were derived from the HDS and refer to the time of the HDS interview. The descriptive statistics and definitions of the dependent and independent variables are presented in Table 3.2. Table 3.2 also contains the percentages movers in the distinct categories of the independent variables among those intending to move and among those with a strong moving intention.

The dependent variable is whether someone actually moved in the two years after the interview was held. The study did not distinguish between migration within the Netherlands and emigration. The interviews were held between January 2002 and March 2003. This implies that those interviewed in January 2002 were followed up to January 2004, whereas those interviewed in March 2003 were followed up to March 2005.

The strength of the intention to move was derived from the same question that was used to determine intentions to move (see previous section). People who answered “Most certainly yes” on this question are considered to have a strong intention to move; those who answered “Possibly yes, maybe” or “I would like to, but I cannot find something”, are considered to have a less strong intention to move. This classification was partly based on empirical analyses, which showed that the moving behaviour of the last answer category showed more similarity with the second than with the first answer category.

Table 3.2 Descriptive statistics of dependent and independent variables and percentage moved for all intended movers ($N = 12,832$) and for those with a strong intention to move ($N = 4,940$)

	People with an intention to move		People with a strong intention to move	
	% of whom moved		% of whom moved	
<i>Moving behaviour (dependent variable)</i>				
did not move	68.0		50.2	
moved	32.0		49.8	
<i>Triggers for moving and strength of intention</i>				
Strength of intention to move				
less strong	61.5	20.9		
strong	38.5	49.8		
Current and expected household situation				
stable single	23.0	28.7	22.5	45.6
stable multi person	62.5	32.5	62.3	51.3
single–multi person	5.6	37.1	6.4	50.8
multi person–single	2.4	34.7	2.8	48.2
multi person–multi person	6.5	34.1	6.0	49.3
Crowding				
crowded	27.6	35.0	27.1	47.9
not crowded	20.4	33.1	25.5	51.4
spacious	52.0	30.3	47.3	49.9
Current and preferred tenure				
renter, wish to rent	39.5	30.8	46.3	43.6
renter, wish to buy	20.4	36.9	22.8	50.3
owner, wish to rent	6.4	34.3	5.9	58.8
owner, wish to buy	33.8	30.1	25.0	58.8
Work/education related trigger to move				
no	91.0	31.8	91.2	49.2
yes	9.0	34.2	8.8	56.0
<i>Resources and restrictions</i>				
Level of education				
up to lower secondary	37.4	28.9	37.5	44.9
higher secondary or medium vocational	31.7	33.6	30.5	51.8
higher vocational	20.7	33.6	20.4	54.0
university	9.4	36.0	10.5	55.1
unknown	0.8	28.0	1.0	34.0
Employment status				
employed	66.0	33.5	65.6	52.0
not employed	34.0	29.1	34.4	45.7
Income				
lowest quartile	19.3	30.7	21.2	42.7
middle-low quartile	27.7	31.0	29.4	47.6
middle-high quartile	26.9	31.8	25.0	49.4
highest quartile	26.2	34.4	24.5	59.0

<i>Housing market opportunities</i>				
Degree of urbanisation desired place of residence				
not urbanised	11.8	32.6	10.0	55.4
hardly urbanised	16.4	34.8	15.8	53.5
moderately urbanised	22.2	33.3	25.4	49.2
strongly urbanised	21.6	31.9	24.6	47.4
very strongly urbanised	7.7	33.1	6.8	53.6
foreign country	2.4	29.6	2.8	44.5
unknown	17.9	27.6	14.6	46.4
Search location				
Randstad	45.6	31.3	48.8	47.3
intermediate zone	28.4	32.2	26.8	50.6
national periphery	23.6	33.6	21.6	55.1
foreign country	2.4	29.6	2.8	44.5
<i>Individual characteristics</i>				
Gender				
female	53.0	32.3	53.4	49.6
male	47.0	31.8	46.6	50.1
Ethnic background				
native	78.6	32.6	74.6	53.0
Western background	9.1	30.6	8.9	45.5
non-Western background	12.4	29.3	16.4	37.7
Continuous variables	Mean	SD	Mean	SD
Age	41.4	15.3	39.5	15.2
Age ²	1946.2	1492.9	1788.9	1473.4

The triggers for moving can be identified by studying the impact of life events on mobility or by analysing stated motives for moving (Mulder, 1996). In this study, triggers for moving related to the household and housing careers were derived using information about expected household changes and preferred tenure changes. Triggers related to the educational and occupational careers were derived from a question about the main motive for moving. People who want to move because of work ($n = 1031$), education ($n = 69$), or both work and education ($n = 51$) have a positive score on the variable indicating that the trigger for moving was related to work or education.

Crowding was measured by dividing the number of rooms by the number of persons in the household. It was categorised in three levels: neutral (one to two rooms per person), crowded (one room or less per person), and spacious (two or more rooms per person).

Household income was categorised in quartiles; the quartiles were based on the household income of all respondents in the survey. The study used household income rather than personal income because mobility behaviour is

likely to be based on the total income in the household in most cases (85 per cent do not expect a change in their household situation).

The degree of urbanisation of the desired place of residence in the Netherlands was measured using the standard definition of address density, provided by Statistics Netherlands. Five categories were distinguished: not urbanised (fewer than 500 addresses per square km), hardly urbanised (500 to 1000 addresses per square km), moderately urbanised (1000 to 1500 addresses per square km), strongly urbanised (1500 to 2500 addresses per square km), and very strongly urbanised (2500 or more addresses per square km). Two additional categories were added to the variable indicating the degree of urbanisation: foreign country (for those who intend to move abroad) and unknown (for those with missing information on the desired place of residence).

The search location was divided into foreign country, and three search regions within the Netherlands: the Randstad (core region), the surrounding intermediate zone, and the periphery of the Netherlands (see Figure 3.1). The classification into three search regions was based on the method used by Van Oort (2003). For the classification, a gravity equation of population size in all municipalities was used (496 in total) at the beginning of 2002. This gravity equation approximately reflects population density. Based on the gravity value of the municipality, all 496 municipalities were assigned to a region. In order to create uninterrupted zones, 11 municipalities of which the classification differed from the classification of the surrounding municipalities were assigned to the surrounding region. For those ($n = 2296$) who did not mention a desired place of residence within the Netherlands, information about the desired province was used. Because 10 provinces (out of the total of 12 provinces) are approximately situated within one single search region, desires for these provinces were assigned directly to a region. The two other provinces (Noord-Holland and Flevoland) are spread over all three search regions. Those who expressed a desire for one of these provinces ($n = 353$) were assigned to the search region in which the current place of residence was located. The current place of residence represents the most plausible search region, because most people move short distances (Clark & Dieleman, 1996).

3.3.3 Method

The analysis consists of two parts. First, there is a descriptive analysis of the extent to which people express an intention to move. Furthermore, there is a description of the relationship between whether people intend to move and actual moving behaviour in a two-year period.

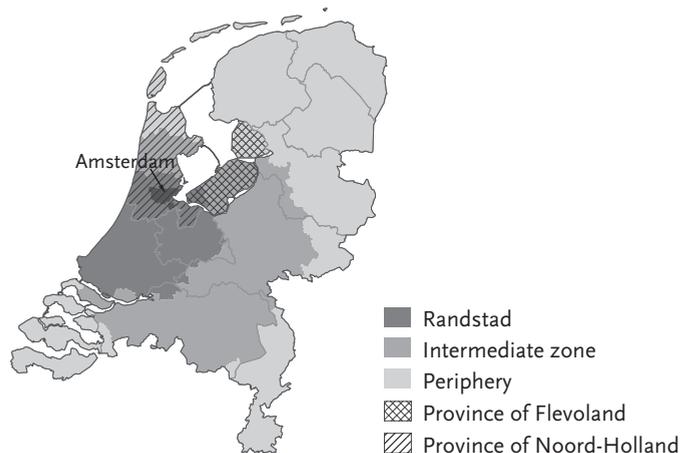


Figure 3.1 Macro-zoning of search regions in the Netherlands into Randstad, intermediate zone, and national periphery, 2002

The second part investigates the moving behaviour of those who expressed an intention to move using logistic regression models. One analysis is performed for those who expressed an intention to move (irrespective of the strength of the intention to move) and one for those who expressed a strong intention to move. If no differences are found between all intended movers and people with a strong intention to move, results are described only for all those with an intention to move.

3.4 Moving intentions and actual mobility: Results

3.4.1 Descriptive results

Approximately 21 per cent of all respondents expressed an intention to move within two years. With increasing age, the intention to move diminishes (Table 3.3). Almost half of those who are younger than 25 intend to move compared with 13 per cent of the middle-aged category (55–64 years old). The intention to move also differs with ethnic background. More than one-third of the non-Western immigrants express an intention to move compared with 20 per cent of the native-born. Compared with couples and families, singles and single-parent families more frequently express an intention to move. The intention to move also differs with such socioeconomic variables as income and education. Highly educated people more frequently express an intention to move than less educated people. Conversely, compared with those with lower incomes, those with higher incomes less frequently express an intention to move. This does not

Table 3.3 Percentage intending to move according to major background characteristics (N = 61,580)

	% Intending to move		% Intending to move
Age		Tenure	
18–24	47	renter	29
25–34	33	homeowner	15
35–44	21	Income	
45–54	16	lowest quartile	23
55–64	13	middle-low quartile	23
65–74	13	middle-high quartile	20
≥ 75	11	highest quartile	19
Household situation		Level of education	
single	23	up to lower secondary	18
couple without children	20	higher secondary or medium vocational	22
couple with children	18	higher vocational	23
single parent family	28	university	27
other	37	unknown	31
Ethnic background			
native	19		
Western background	24		
non-Western background	36		

Table 3.4 Percentage moving of those with and without a (strong) intention to move

	No intention to move		Intention to move		
	All	Less strong	Strong	All	
Did not move	94	79	50	68	
Moved	6	21	50	32	
N (100%)	48,748	7,892	4,940	12,832	

imply that people do not take into account their financial resources while formulating an intention to move; an additional analysis (not shown) revealed that after controlling for current tenure, those with a higher income had a higher likelihood to have an intention to move than those with a lower income. Compared to homeowners, renters more frequently express an intention to move; the percentage of those with an intention to move among renters is almost twice as high as among homeowners.

Of those who expressed an intention to move, almost one third moved within two years (Table 3.4). The moving behaviour is strongly connected with the strength of the intention to move. About 20 per cent of those with a less strong intention to move moved against almost half of those with a strong intention to move. Most of the moves occurred in the first year after the interview

(Figure 3.2). The longer the period after the interview, the smaller the probability that those who intend to move but have not done so yet eventually do so (see also Lu, 1998). Apparently, the majority of individuals (even those with a strong intention to move) are not able to realise their intentions within two years time, change their plans, or postpone their move.

Table 3.4 and Figure 3.2 also provide information about moves among people who did not have an intention to move. The majority of the population (almost 80 per cent) did not intend to relocate. Only a small proportion of them, about 6 per cent, moved within two years. The occurrence of these previously unintended moves may be explained from the fact that some events in the life course, such as separation or job change, can cause an urgent reason for moving and a subsequent move within a short period of time (Speare, 1974). Moves among those without a stated intention to move may also be explained by the unexpected opportunity to move to a better home. Indeed, previous research found evidence of the existence of such unexpected “windfall-moves” (see for example, Rossi, 1955).

Although the majority of the people with an intention to move do not move within two years time, they relocate considerably more frequently than those without an intention to move. The strength of the relationship between stated intentions to move and actual moving behaviour was calculated using Cramer’s V. This statistic indicates a rather strong and significant ($p < .001$) association between stated intentions to move and actual moving behaviour (Cramer’s $V = 0.329$). Therefore, despite the substantial gap between intention

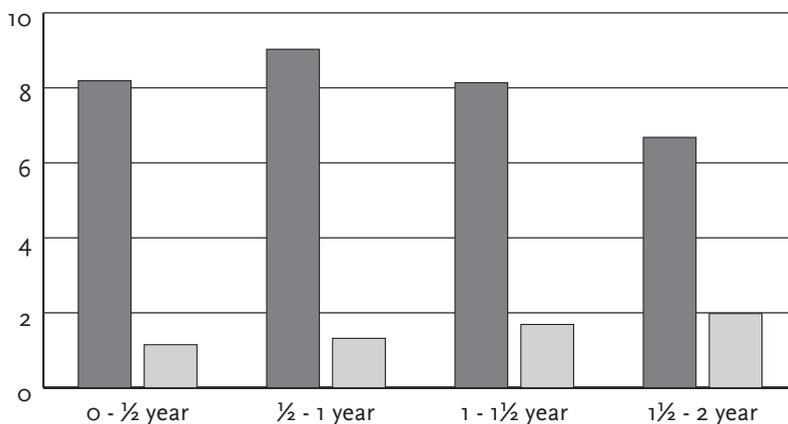


Figure 3.2 Percentage moved of those with an intention to move (dark grey coloured columns) and without an intention to move (light grey coloured columns) by length of period between interview and first relocation

and actual behaviour, intentions to move are important predictors of subsequent moving behaviour (see also Lu, 1998).

3.4.2 The influence of anticipated triggers for moving and strength of the intention to move

The first column in Table 3.5 shows the results of a logistic regression model of the probability of moving for all people who intend to move; the second column refers to the probability of moving only for those with a strong intention to move. It should be noted that, although the explanatory models shed more light on the factors that play a role in the process from stated intentions to move to actual moving behaviour, the overall explanatory power of the logistic regression models, indicated by the Nagelkerke R^2 , is modest. It is not unusual to find a low pseudo R^2 in analyses of the realisation of stated intentions to move (see for example, Duncan & Newman, 1976). Apparently, it is quite difficult to predict mobility behaviour on the level of individuals using the available independent variables.

The realisation of an intention to move strongly depends on the strength of the intention. People with a strong intention to move are estimated to be 3.7 times as likely to move as people with a less strong intention to move. The Nagelkerke R^2 measure rises from 0.051 to 0.157 when the strength of the intention to move is added to the model. These findings indicate that the strength of an intention to move is an important predictor of actual moving behaviour.

Singles who expect to form a multi-person household are more likely to move than stable singles. This is in line with the idea that intended moves prompted by a household change are more necessary than intended moves of households that remain the same. Furthermore, pooling of incomes can help those who want to cohabit realise their intention to move more easily whereas stable single households do not have that advantage. In contrast to what was expected, expectations to become single do not significantly influence the realisation of intentions to move. For people with a strong intention to move, the effect of the current and expected household situation is not significant. However, it must be borne in mind that the decision to separate will be followed almost immediately by a subsequent move. This implies a small probability of observing someone in the survey whose intention to move is triggered by a wish to separate.

Although people who want to move because of work or education move somewhat more frequently than others (Table 3.2), the effect of work- and education-related triggers for moving is not statistically significant after control-

ling for the other variables. The absence of a significant effect might possibly be attributed to the fact that only few people have expressed an intention to move for reasons of work or education.

As expected, owners with a preference for a rental dwelling are more likely to realise an intention to move than renters with a preference for another rental dwelling. This can be explained from the fact that homeowners do usually not move out of owner-occupied dwellings unless it is really necessary to do so. Renters who intend to move to an owner-occupied home are not significantly more likely to move than renters who want to move within the rental housing sector. Similarly, living in a crowded home does not have a significant effect on the extent to which people realise their intentions to move within two years (see also Lu, 1998). As soon as there is control for the strength of the intention to move, the negative effect of living in a spacious home becomes insignificant.

3.4.3 The influence of resources and restrictions

The effect of a high income on realising an intention to move is only marginally significant, but among those with a strong intention to move the probability of moving is significantly greater in the highest income quartile. The fact that previous research did not show an unequivocal relationship between income and the realisation of an intention to move can perhaps be explained from differences in the definition of an intention to move. A high income seems to facilitate particularly the realisation of strong intentions to move.

As expected, a high level of education has a positive and significant influence on the actual mobility of those intending to move. Highly educated people not only more frequently express an intention to move than less well educated people (Table 3.3), but they also have a higher probability of realising this intention (Table 3.5). For those with a strong intention to move, the effect of level of education is only marginally significant. Compared to employed people, people who are not employed have a significantly lower probability of realising an intention to move. However, this effect is not significant for those with a strong intention to move.

Current tenure in combination with tenure preferences plays a significant role in the probability of realising an intention to move within two years time. Homeowners who want to move to a rental home have a higher probability of moving than renters who want to move to another rental home. The influence of current and preferred tenure is especially manifest among people with a strong intention to move. Although previous research (Kearns & Parkes, 2003; Lu, 1998) shows that homeowners are less likely to realise an intention to move than renters, the results here show that this does not hold for those with strong

highest quartile	0.137*	0.083	1.147	0.365***	0.119	1.441
<i>Housing market opportunities</i>						
Degree of urbanisation desired place of residence (ref: not urbanised)						
hardly urbanised	0.013	0.093	1.013	0.160	0.146	1.173
moderately urbanised	0.092	0.088	1.096	0.164	0.137	1.178
strongly urbanised	-0.071	0.087	0.931	0.060	0.131	1.061
very strongly urbanised	-0.053	0.096	0.948	0.120	0.144	1.128
unknown	-0.220**	0.090	0.803	-0.097	0.140	0.907
<i>Search location (ref: national periphery)</i>						
Randstad	-0.150***	0.058	0.860	-0.239***	0.087	0.788
intermediate zone	-0.102*	0.057	0.903	-0.188**	0.087	0.829
foreign country	-0.364**	0.153	0.695	-0.399*	0.212	0.671
<i>Individual characteristics</i>						
Age	-0.111***	0.008	0.895	-0.083***	0.011	0.920
Age ²	0.001***	0.000	1.001	0.001***	0.000	1.001
Female (ref: male)	0.012	0.042	1.012	0.006	0.061	1.006
<i>Ethnic background (ref: native)</i>						
Western background	-0.070	0.072	0.933	-0.237**	0.104	0.789
non-Western background	-0.281***	0.070	0.755	-0.421***	0.090	0.657
Constant	1.123***	0.210	3.074	1.440***	0.393	4.219
Initial -2 Log Likelihood			16097			6848
Model -2 log Likelihood			14568			6612
Improvement (<i>Chi</i> ²)		1529***, <i>df</i> = 32			236***, <i>df</i> = 31	
Nagelkerke <i>R</i> ²			0.157			0.062
<i>N</i>			12832			4940

* $p < .10$, ** $p < .05$, *** $p < .01$

intentions to move. Homeowners (irrespective of tenure preferences) are approximately 1.5 times more likely to realise strong intentions to move than renters with a preference for another rental dwelling. This indicates that, among those with a strong intention to move, homeowners encounter fewer obstacles than renters who want to move within the rental sector of the housing market.

The expected household situation also has a significant effect on the realisation of intentions to move. Contrary to what was expected, stable multi-person households are more likely to move than stable single households. This cannot be attributed to income differences, because there was control for those. For people with a strong intention to move, the expected household situation does not have a significant effect.

3.4.4 The influence of local housing market opportunities

As expected, the search location matters to the extent to which people realise an intention to move: people whose search location is in the Randstad have a lower probability of moving than those who search for a home in the national periphery. This finding corresponds with the fact that housing shortages are especially problematic in the Randstad, and may reflect barriers to realise an intention to move in areas with high housing demand (Kearns & Parkes, 2003). People whose search location is in the intermediate zone and those wishing to move abroad also have a lower probability of moving. In contrast to the search location, the degree of urbanisation of the desired place of residence does not have a significant influence on the probability of moving.

3.4.5 The influence of other individual characteristics

The probability that intended movers actually move decreases with increasing age. However, the effect of age squared is slightly positive, which means that the age-effect is positive at older ages. The probability of realising an intention to move is estimated to decrease until the age of 51 and to increase from that age on.

Whereas intentions to move are particularly prevalent among immigrants (Table 3.3), non-Western immigrants who intend to move actually do so significantly less frequently than the native-born. Among people with a strong intention to move, non-Western as well as Western immigrants have a lower probability of moving than natives. This finding suggests that immigrants and their descendants face more difficulties in realising their intention to move.

The effect of being female on the probability of realising an intention to move is not significant. This was also found before controlling for socioeconomic characteristics.

3.5 Conclusion and discussion

This paper addresses the relation between the intention to move and actual mobility for the period 2002–2005. Using a unique longitudinal data set in which survey data from a large-scale sample for the Netherlands were enriched with register data, this study gained more insight into the extent to which various determinants influence the moving behaviour of those with an intention to move.

The results show clearly that there exists a relationship between intentions to move and the incidence of moving: people with an intention to move relocate considerably more frequently than people without an intention to move. However, this relationship is far from perfect. Only one-third of those intending to move within the next two years actually moved within this period, whereas 6 per cent of those not intending to move did so.

Among those with an intention to move, the probability of moving is particularly influenced by the strength of the intention to move. Furthermore, a new finding compared with previous research is that the realisation of intentions to move is not only affected by current background characteristics, but also by current characteristics in combination with expectations or preferences about these characteristics after a potential move. This finding suggests that the wish to accomplish something in a particular life course trajectory (indicated by the anticipated trigger for moving) is not only relevant to the formation of intentions to move, but also to the extent to which these intentions are realised. Moving intentions that are accompanied by an expected change in the housing or household situation are more likely to be realised. In particular, those who want to move out of homeownership have a higher probability of moving. This finding is in line with the well-established finding that moves out of homeownership are often prompted by life events such as union dissolution, and are associated with a greater perceived necessity of moving.

Although it is often argued that people take their financial resources into account when they formulate an intention to move, income also proved to be important to the realisation of intentions to move. The influence of income was particularly strong among people with a strong intention to move. The results also show that homeowners (irrespective of tenure preferences) are more likely to realise strong intentions to move than renters with a preference for another rental home. It appears that homeowners encounter fewer obstacles than renters

who want to move within the rental sector of the housing market. Furthermore, stable single households are less likely to realise an intention to move than stable couples and families. It is possible that singles tend to search in housing sectors in which the availability and affordability of dwellings is problematic. Moreover, the results confirm that the search location matters to the extent to which people realise their intention to move: people whose search location is in the Randstad – an area that is characterised by housing shortages – are less likely to translate intentions into action than those who prefer a home in the periphery of the Netherlands.

Several variables, most notably current housing tenure, were found to influence the actual mobility of intended movers in a different way than they have been found to influence moving intentions in stated preference research, or the probability of moving in revealed preference research. This indicates that the formation of moving intentions and the realisation of these intentions are indeed different phases in the process of moving that are subject to different determinants: mainly preference-based determinants in the formation of intentions and mainly resources, restrictions and opportunities in the realisation of intentions.

A limitation of the data is that if people did not move within two years, it is not possible to be certain that what was observed were actually non-realizations of intentions to move. Intentions might fade, and the data do not give any clue about whether this happens and if so, at what speed. People may postpone or drop their intention to move because of unfavourable changes in economic or housing market circumstances. The realisation of intentions to move among homeowners may be thwarted by an unanticipated fall in house prices, as individuals tend to be reluctant to sell at a loss (Chan, 2001). People may also postpone or drop their intention to move due to the occurrence of an unforeseen event such as the loss of a job or the decease of a household member. Unforeseen events may prevent some people's moves, but may lead others to move rather unexpectedly, even though they would indicate in surveys that they do not intend to move (Hooimeijer & Oskamp, 1996). Further research is needed to find out to what extent changes in the determinants influence the mobility behaviour of those intending to move. Future extensions of the SSD will allow for the inclusion in the analyses of household changes taking place after the HDS interview. This information will also be highly valuable in the analysis of moves among people without an intention to move.

Despite these limitations, the results here not only provide strong evidence that intentions to move, particularly strong intentions, are good although not perfect predictors of subsequent moving behaviour, but they also provide more insight into the extent to which anticipated triggers, resources and

restrictions, housing market opportunities, and other individual background characteristics influence the moving behaviour of those with an intention to move.

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