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Residential Experience and Residential Environment Choice over the Life-course

Peteke Feijten, Pieter Hooimeijer and Clara H. Mulder

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Abstract

The study reported in this article answers the question: how does experience with a certain type of residential environment contribute to the explanation of residential environment choice? The issues under investigation are whether residential experience with cities, suburbs and rural areas increases the probability of return migration and whether residential experience increases the probability of moving to other places with the same type of residential environment. The probability of moving to a city, suburb or rural area is investigated by applying multinomial logistic regression on a retrospective dataset of life-courses of more than 3000 Netherlands respondents. The results indicate that city experience and suburb experience only increase the probability of return migration, whereas rural experience also increases the probability of moving to another rural area.

Introduction

The residential environment—often categorised as urban, suburban and rural—is an important feature in residential choice (Michelson, 1977; Courgeau, 1989; Deurloo

et al., 1990). The various residential environments offer various opportunities, social networks and experiences. Cities are characterised by the presence of institutions of higher education and a large concentration of jobs, shops and entertainment services.

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The suburbs in the Netherlands, as in many Western countries, are associated with family living, because of their child-friendly design. They are mainly inhabited by middle-class households and the average quality of housing and public space is fairly good. Rural areas are more remote, lacking urban facilities but offering space and quiet, and a more traditional lifestyle.

Studies about moves between types of residential environment often find that these moves are triggered and conditioned by careers in the life-course, in particular the labour and the household careers (Mulder, 1993). Life events such as enrolment in higher education, a change of job, union formation and the birth of a child bring with them a raft of consequences. Life events imply or stimulate residential mobility; affect needs and preferences for a residential environment; influence the resources needed to occupy the desired housing; and impose restrictions on the search area for a dwelling (Deurloo *et al.*, 1990; Kruythoff, 1991; Lelièvre and Bonvalet, 1994). Lifestyle factors, in the sense of attitudes towards work and family, turn out to be important predictors of residential environment choice since many moves are made in anticipation of future life events (Bell, 1968; for the Netherlands, see Bootsma, 1998, and Pinkster and van Kempen, 2002).

Previous life experience has been identified as another predictor in the choice of residential location, in particular in the form of return migration (Reagan and Olsen, 2000; DaVanzo and Morrison, 1981; Harts and Hingstman, 1986; Fischer and Malmberg, 2001). Many of the factors that drive return migration are specific to the location, such as having friends or family there, or owning a house there. Yet having lived in a place may also change the awareness of and attitudes towards the type of residential environment it offers. These may contribute to a preference

for returning to that place; they might also contribute to a preference for the same type of residential environment later in life, even if one does not return to the exact place of origin. The previous spatial life-path may therefore not only influence return migration, but also the residential environment choice in onward migration.

This role of the previous spatial life-path has so far been underexposed in research on choice of residential environment. In this paper, we have sought to isolate the influence of residential experience from other factors influencing residential environment choice. We put forward a conceptual framework distinguishing the physical, social and mental aspects of spatial preferences, resources and restrictions to enable us to hypothesise how the spatial life-path can contribute to the explanation of residential environment choice. The research question of the paper is: how does experience with a certain type of residential environment contribute to the explanation of residential environment choice?

In the empirical part of the paper, we report our analysis of moves between city, suburban and rural areas. Apart from 'residential experience', the explanatory variables include age, partnership status, whether or not one has had children, work status, educational level, socioeconomic status and period. Using a retrospective dataset of 3650 respondents who left the parental home in the Netherlands, we applied a hazard analysis, estimating the probabilities of moving to the city and of moving away from the city to either a suburb or a rural area. This study is set in the context of the Netherlands where, throughout the 20th century, spatial developments have been influenced by an increasingly strong planning policy. The next section of the paper outlines these developments as they have evolved over time.

Characterisation of Residential Environments in the Netherlands

Cities, suburbs and rural areas each have their specific characteristics. Most of these will apply to other countries as well, but some characteristics may be unique to the Netherlands. First, cities have a large and almost exclusive supply of institutions of higher education (colleges and universities) and highly specialised, high-skilled jobs. The city also offers a wide variety of cultural and leisure facilities, such as museums, theatres, cinemas, restaurants and pubs. In addition, cities have a greater availability of affordable and small dwellings than do suburbs and rural areas (Dieleman and Mulder, 2002). Cities also offer good access to public transport and they are central places in networks of railways and air traffic.

Suburbs have quite different characteristics. They have historically come about mainly because city-dwellers were looking for places to live with higher housing quality than they could find in the city. Suburbs in the Netherlands are places with mainly single-family dwellings with gardens, in a green and spacious environment, with a lot of parking space compared with the city. The services and facilities offered in suburbs such as childcare, primary schools, sport facilities and supermarkets, are typically aimed at families. This mix of services and facilities ensures ease of access for the activities of all the household members.

Although the Netherlands is sometimes referred to as an 'urban field' (van der Valk, 2002), the Dutch do experience the more peripheral parts of the country, outside the cities, as rural (Heins, 2002). Compared with living in cities and suburbs, living in a rural area means having access to fewer services and facilities, and being further from employment and education, but also having more

space and quietness. The health and housing situations are generally better, local social contacts are on average stronger and rates of crime are lower. The attitudes of most people living in rural areas are more traditional than those of people in urban areas (SCP, 2006).

Trends in migration flows in the Netherlands can be observed between the three types of residential environment in the second half of the 20th century. We see an urbanisation trend from 1950 onwards, especially with people from the peripheral parts of the country (particularly the north) moving to cities in the Randstad because of the increasing employment opportunities there. Suburbanisation took off in the early 1960s as a result of increasing economic prosperity and increasing car use. Not only people, but also firms suburbanised. This led to an increase of employment in the suburbs (de Smidt *et al.*, 1986). Suburbanisation prevailed from the second half of the 1960s to the late 1970s. The direction of this suburbanisation trend was mainly from the big cities in the Randstad to bordering municipalities. Since the latter could not absorb new suburbanites indefinitely, the national government created growth centres, some of which are New Towns. From the second half of the 1970s, attempts were made to revitalise the cities through urban renewal programmes. The population in the cities stabilised and started to grow again from the late 1980s onwards (Jobse *et al.*, 1990).

Theory and Literature Review

The extent to which a person is likely to move to a certain residential environment depends on the preferences of an individual or household, within a choice set that is determined by resources (mostly financial); restrictions, such as the distance to the workplace; and opportunities and constraints at

the context level—for example, the limited availability of dwellings at certain locations.

Since residential environment choice is a spatial choice, it is subject to spatial preferences, resources and restrictions. These can be broken down into a physical, a social and a mental part, referred to respectively as 'activity space', 'social space' and 'awareness space' by Hooimeijer and van der Knaap (1994). *Activity space* refers to the radius within which people conduct their daily activities: going to work, going to school, shopping, participating in sports activities and so forth (Hägerstrand, 1970). *Social space* refers to the radius within which people interact with members of their social network, such as friends and family. *Awareness space* refers to the space with which people can identify. For example, some rural-dwellers cannot imagine that they would ever live in a city, while others can; thus their awareness spaces differ. Awareness space consists of an (objective) information part and a (subjective) value part. To return to a certain type of residential environment, awareness space is most important (hence, activity space and social space are located in fixed places). Awareness space is based not only on personal residential experience, but also on other information sources such as the media and conversations with others (Downs and Stea, 1973). Thus, people do not need to have lived somewhere to make it part of their awareness space. A qualitative study by Feldman (1996) revealed that the majority of people felt attached to a certain type of settlement (metropolitan, suburban or rural), regardless of whether they had ever lived there or not. This is not to say that the awareness of a place where one has lived is necessarily positive. One may have negative associations with a certain place or residential environment, whether as a result of residential experience or not.

Residential Experience

The accumulated residential history of a person leads to increasing 'residential experience'

of places. Residential experience contributes to the development of an individual's activity space, social space and awareness space. Residential experience may influence people to return to places where they (or members of their household) previously lived because they still participate in activities there (activity), or because they may want to be closer to members of their social network (social), or because they know that place and value it in a positive way (awareness).

With increasing age, residential experience becomes more extended. The place(s) where one lived as a child are more distant in time, but do not necessarily become less important. The place of birth/childhood often retains a significant meaning in people's awareness space. Recreating elements from childhood—for example, by returning to the type of residential environment where one was born—provides continuity and a sense of security over the life-course (Cooper Marcus, 1992). Part of the social space may also remain located in the birth/childhood place, especially when, for example, (grand)parents or brothers and sisters still live there.

Once people leave their parents' home, they can express their individual preferences for a residential environment instead of being subject to their parents' relocation decisions. Choosing a place to live is part of a young adult's process of shaping his/her own life and identity (Bonney *et al.*, 1999). In general, people are attached to the places where they lived during periods in their life that are meaningful to them—for example, where they raised their children or where they developed a professional career (Cooper Marcus, 1992). Again, places once left can continue to make up a part of people's social space, awareness space and sometimes even activity space.

Several studies have found that people tend to return to places where they lived before (DaVanzo, 1981; DaVanzo and Morrison, 1981; Fischer and Malmberg, 2001; Morrison and DaVanzo, 1986; Newbold, 1997, 2001; for the Netherlands: Harts and Hingstman, 1986;

Nicolaas and Sprangers, 2000). Return moves are made for several reasons: because of ties to the place of origin (that is, the social space and activity space); as a corrective move (out of regret about having moved away; see Morrison and DaVanzo, 1986; Newbold, 1996); or emotional attachment to a place (Rubinstein and Parmelee, 1992; Feldman, 1996). The latter suggests that awareness space does in fact play an important role in return migration decisions.

Since social and activity space are location-fixed, they can trigger 'true' return migration, but cannot trigger migration to a new place in a familiar residential environment. Awareness space, however, can trigger a move to a residential environment of which one has experience. Awareness space can cover a whole residential environment rather than an exact location. If that is the case, one may move to a place that is similar to a place from the past with respect to the elements one is attached to.

Considering these points, our hypothesis is that having lived in a certain residential environment increases the probability of moving to that type of residential environment again. Whether the childhood place, or places experienced in adulthood are more important is not clear *a priori* and requires empirical investigation.

Other Resources and Restrictions

A number of other resources and restrictions, apart from residential experience, have been found to affect the probability of moving to cities, suburbs and rural areas. Concerning household composition, we expected single people to have a higher probability of moving to the city than people in a partnership (Hall and Ogden, 2003; Bootsma, 1998; Faessen, 2002). Moves to the suburbs were expected to be made mainly by young families and couples about to start a family (Atzema, 1991; Deurloo *et al.*, 1990; South and Crowder, 1997). A separation or divorce was expected to increase the likelihood of moving to the

city (Feijten, 2005; van Noortwijk *et al.*, 1992), while living with a new partner was expected to increase the probability of a move from the city to the suburbs or to a rural area.

Moves to the city are often undertaken for work reasons and therefore we expected these to be made mainly by those in employment (Fielding, 1992; Crommentuijn, 1997; Détang-Dessendre *et al.*, 2002). Since the suburbs are located within commuting distance of cities, being in employment is also likely to lead to a greater probability of moving from cities to suburbs (van Ham *et al.*, 2001). Those out of the labour force were expected to stay more often in rural areas.

Enrolment in higher education (while living independently) could be expected to prompt a move to the city and to hamper a move away from the city. A high educational level is associated with urban living (Bootsma, 1998) and therefore we expected the highly educated to be particularly likely to move to the city. When moving away from the city, the highly educated can be expected to avoid the suburbs in favour of the rural areas (Pinkster and van Kempen, 2002). Those with a middle-level education were expected to be more likely to move to the suburbs (Atzema, 1991). Less-educated people are less mobile than more highly educated people (Clark and Dieleman, 1996, p. 44), but if they move, moves to the city can be expected to prevail, because of the availability of affordable housing and low-skilled jobs in the service sector and industry.

Because mobility in general decreases with age, it was considered important to account for age. Lastly, we controlled for period, because people are constrained in their residential environment choice by the housing market circumstances at the time they (want to) move. We categorised the period variable according to the fluctuations in internal migration described in the previous section.

One other well-known determinant of moves to cities, suburbs and rural areas is income. Since our dataset does not contain

data on income (retrospective studies rarely do), we left it out of consideration. Had we had a variable on income, then this would probably have had a considerable positive effect on all types of move and especially on moves to suburbs and rural areas. We tried to compensate for this lack of data by including income proxies: educational level, employment status and socioeconomic status.

Data and Method

Data and Variables

The data we used to test our hypotheses consist of three pooled retrospective surveys. The Netherlands Family Survey 2000 (de Graaf *et al.*, 2000) covers the life-courses of 850 respondents; the Netherlands Family Survey 1992 (Ultee and Ganzeboom, 1993) those of 1000 respondents; and the SSCW survey (ESR/STP, 1992)¹ those of 2256 respondents. Each dataset is representative of the Netherlands population in the year of data collection (partly effected through a weighting procedure, based on known population distributions of, for example, age, gender and region). We selected respondents who had started their independent housing careers (that is, had left the parental home). Within this selection, 27 respondents had too much information on their background variables missing and therefore they were excluded from the analysis. The composition of the missing values was checked on a number of indicator variables and the missing values turned out to be fairly randomly distributed in the sample, so the risk of selectivity due to omitting these respondents is limited. A dataset of 3603 respondents remained. For this sample, information was available on their household, educational, labour market and spatial/housing careers. The dataset represents respondents born between 1903 and 1981. For each respondent, information is

available from the age at which they started to live independently until the age at interview.

The data were transformed into a person-year file. In this process, each year in a respondent's independent life about which information has been gathered in the survey is made into a single case. This data format allows a comprehensive representation of a respondent's life events and statuses. The last person-year of each respondent represents the year in which that person was interviewed, or reached the age of 70 (for people aged 71 and older at the moment of interview). We omitted person-years over the age of 70 because from that age health-related migration tends to prevail.

A value 'city', 'suburb' or 'rural area' was attached to the birthplace, the place of residence directly after birth or at age six, depending on data availability,² and each of the places of residence in the independent housing career of the respondents, according to the categorisation shown on the map in Figure 1. We chose to apply rather time-robust criteria for the definition of city, suburb and rural area, based on geographical location. We first selected cities, on the basis of the central function to the surroundings and a minimum size of 100 000 inhabitants in 1995 (CBS Statistics Netherlands, 2006). New towns that have grown larger than 100 000 were disregarded as they do not have a central function. All selected municipalities belong to the traditional cities in the Netherlands. Suburban communities are defined as the municipalities directly adjacent to these cities. As the main thrust of suburbanisation only happened from 1960 onwards, some of these may have been more rural than suburban in nature in the 1950s, yet within commuting distance of the central city for the more mobile families. Some of the rural communities might actually be within commuting distance at this very moment and may be developing a more suburban nature.

Figure 1. Residential environments in the Netherlands, 1995.

However, we decided to use a time-invariant variable to be able to identify return migrants. For most municipalities, this categorisation is appropriate for the whole period under study (compare the map in Figure 2 of the Netherlands in 1960 with Figure 1 for 1995). Had we defined the residential environments allowing for change over time, the problem would have arisen that people who return to the same place are not recognised as return migrants, because the place where they return to now belongs to a different type of residential environment than when they lived there before.

For the multivariate analysis, we constructed 'residential-experience' variables for each of the residential environments, indicating whether a respondent: had never previously lived in a certain residential environment; had been born in a certain residential environment, but had never lived there independently of their parents; had not been born in a certain residential environment, but had lived there independently; or, had been born and had lived independently in a certain residential environment.

While interpreting our results, we recognised that the rural area covers the largest

Figure 2. Residential environments in the Netherlands, 1960. Source: based on a map by the Atlas of the Netherlands Foundation (copyright: Stichting Atlas van Nederland, 2001).

land area in our classification (see Figure 1). At the same time, the rural area is the least densely populated and offers the least number of possible addresses to which to move per square kilometre, whereas cities form concentrations of addresses. So, because we have only analysed moves *between* residential environments, the inhabitants of cities, suburbs and rural areas have inherently different probabilities of moving to a different residential environment.

The Appendix (Table A1) provides an overview of the descriptions and frequencies of the variables used in the multivariate analysis. We recoded age as 'age minus 18' in order to make the intercept of the equations interpretable as the log-odds of moving for someone aged 18 (the age at which the observation starts). Socioeconomic status was measured using the International Socioeconomic Index (ISEI; see Ganzeboom *et al.*, 1992). The ISEI scale ranges from 10 to 88 and we divided the

ISEI score by 10 to get parameters that are large enough to display.

Method

We commenced with a descriptive analysis of the sequence of residences of each respondent in one single variable: 'spatial life-path'. This variable indicates to which type of residential environment a respondent moved when leaving the parental home, whether they had ever left this residential environment and, if so, whether they had ever returned to it before the age of 40. To make residential histories comparable between respondents, we fixed the observation at age 40, so that the housing career of each respondent was of approximately equal length.³ We did this because the period before age 40 is one with frequent moves resulting from major life events (cohabitation, marriage, childbirth, job change and so forth). Some move-triggering life events such as divorce, repartnering and worsening health may take place in later life but, as Clark and Dieleman (1996, p. 42) have found for several Western countries, "young adults between the ages of twenty and thirty-five are the most migratory segments of the population". As a consequence, the spatial life-paths of respondents interviewed at ages below 40 are not included in the graph; this part of the analysis is therefore based on only 2057 respondents and only represents birth years 1903 up to 1960. We drew a distinction only between city and non-city, because the analysis would have become too complicated if we had also distinguished between a suburb and a rural area. Spatial life-paths that consisted of many moves between residential environments were compressed leaving the beginning and the end intact. For example: the spatial life-path 'city—outside city—city—outside city—city' was compressed to 'city—outside city—city'. Note that we had no information on the municipality of the parental home and therefore could not establish whether people moved to a different type of

residential environment when leaving the parental home. Had we had this information, then we would probably have observed more residential histories beginning with a move to the city, because it is quite common for young people to move from the parental home (often located in the suburb or the rural area) to the city (to study or to start a first job).

When the descriptive analysis had provided us with an impression of the proportions of non-movers and movers, and the directions of moves, we investigated the determinants of moves between residential environments in two multivariate analyses. These analyses required no age fix, so they include all 3603 respondents aged 18 and over, as described in the data section. Both models are discrete time hazard models estimated by means of a logistic regression of person-years. Logistic regression of person-years is an adequate method for data containing time-varying covariates measured in years, particularly when non-repeatable events are studied (we only study the first move to a familiar residential environment) (Allison, 1982; Yamaguchi, 1991). The first model is a discrete time hazard model (logistic regression of person-years), estimating the probability of moving to the city for people living outside the city. The second model is a discrete time multinomial hazard model (multinomial logistic regression of person-years), estimating the probability of people living in the city moving to either a suburb or a rural area. The dependent variable in the first analysis is a binary variable 'move to the city'. It is coded 0 for all person-years outside the city (in a suburb or rural area) and 1 in the year in which the move to the city was made. The dependent variable in the second analysis is a move out of the city to either a suburb or a rural area. This variable is coded 0 for all person-years in the city, 1 for a person-year in which a move from a city to a suburb was made and 2 for a person-year in which a move from a city to a rural area was made. Note that, for both these

variables, the move out of the parental home was not counted as a move because we did not have full information on the residential environment preceding this move and so could not determine whether people had changed residential environment.

In order to distinguish between a move to a familiar residential environment and a return to a specific place, we also carried out an analysis from which we excluded return moves to the same region as that where a respondent was born or had lived before in their independent housing career.⁴ In this way, we ruled out the effect of the specific characteristics of a place, such as a local social network.

In the SSCW survey, more than one respondent per household was interviewed and therefore observations are not independent and standard errors can be biased. We resolved the problem of biased standard errors by applying a correction for the clustering of

observations of individuals in households (Huber–White estimator; see Huber, 1967).

Results

Descriptive Results

Figure 3 shows the distribution of spatial life-paths from the first step in the housing career (after moving out of the parental home) up to age 40 by the residential environment of birth. We see that the most common life-path is to continue living in the residential environment where one was born. This is the case for 37 per cent of the city-born, 35 per cent of the suburban-born and over 60 per cent of the rural-born. This result suggests that the rural-born are the most closely tied to their residential environment, but we must be aware that this finding is likely to be to some extent the result of the large land area of the rural area in our definition (see Figure 1).

Figure 3. Spatial life paths after leaving the parental home until age 40, by residential environment of birth.

Just over one in every four people who started their independent housing careers in the city have moved away, not to return before the age of 40 (bar 4 of 'city'). This spatial path is also relatively common among the suburban-born and the rural-born. This indicates that, for many people, the city is a temporary place in which to live. Young people often live in the city because of their education and, when they enter a new life phase, with a new job or a partner, they move to other residential environments.

Finally, it is remarkable to see in this graph how few rural-born people have spatial life-paths that include city episodes. If they have ever spent a period of time in a city, they have usually moved out again by the age of 40 (bars 4 and 8). The reverse is the case for the suburban-born. Over 25 per cent start their housing careers in the city and at the age of 40 more than a third of them still live in an urban environment.

Multivariate Results

Moving to the city. The effects of city experience on moving to the city are strong and in the expected direction (Table 1). Each category of people with city experience has a significantly higher estimated probability of moving to the city than people without any city experience. Early childhood experience seems to play a more important part in this decision than later life experience, although it should be remembered that part of the later life experience has included the decision to leave the city among those who have lived there independently, since the population at risk is those who live outside the city.

In the model in the second column in Table 1, return moves have been removed from the analysis (these made up 45 per cent of moves to the city). The effects of the city experience change dramatically. The effect of 'only born in the city' decreased and the effects of the other two even became negative (although no longer significant). This finding suggests

that it is not so much the general urban living environment that attracts people to return, but a specific city. Having been born in and/or having lived in a city do not seem to turn people into urbanites who prefer the urban environment to suburban or rural living; however, many people return to the particular city in which they have spent part of their lives. It should be noted that, for some of the return movers, the fact that they had previously lived in that particular city might not have played a part in the move and they may have simply moved to the nearest available city.

Most of the effects of the more familiar individual characteristics are in the expected direction and hardly change if we exclude moves to the former city of residence. Singles have a significantly higher probability of moving to the city than people in a stable partnership. Separated and repartnered people have a higher probability of moving to the city. Both life events trigger a residential move of at least one of the partners, causing them to be more mobile than stable singles or couples. The fact that the separated choose to move to the city more often than the repartnered is in line with our expectation that separated people are attracted to the city because of the availability of affordable housing and the access to urban amenities. People with children have a significantly lower probability of moving to the city than people without children.

As expected, people out of employment have a significantly lower probability of moving to the city than working people and people in education. Note that this effect would probably be even stronger if the move out of the parental home had been analysed as well, because nest-leavers are often in their first job, or are students.

For educational level, we see a significant and positive relationship: the higher the educational level, the greater the probability of moving to the city. This tendency should

Table 1. Logistic regression model (additive parameters) for moving to the city

	<i>All moves to the city</i> (N = 56 273)		<i>Return migrations</i> <i>excluded</i> (N = 56 103)	
	<i>Coefficient</i>	<i>Standard error</i>	<i>Coefficient</i>	<i>Standard error</i>
Age –18	–0.081	0.009 ***	–0.086	0.012 ***
<i>City experience</i> (ref = neither born nor lived independently in city)				
Only born in city	0.996	0.120 ***	0.255	0.144 *
Only lived independently in city	0.340	0.164 **	–0.233	0.198
Both born and lived independently in city	0.880	0.159 ***	–0.268	0.238
<i>Partnership status</i> (ref = steady relationship)				
Steady single	0.286	0.146 *	0.363	0.168 **
Separated	1.568	0.179 ***	1.512	0.218 ***
Repartnered	0.741	0.297 **	0.731	0.378 *
<i>Family status</i> (ref = never had children)				
Year before childbirth	0.067	0.213	0.241	0.237
Has child(ren)	–0.538	0.145 ***	–0.425	0.168 **
<i>Work status</i> (ref = in education)				
Not working	–0.359	0.174 **	–0.410	0.208 **
Working	0.008	0.162	0.126	0.189
<i>Educational level</i> (ref = low)				
Middle	0.155	0.123	0.108	0.152
High	0.536	0.145 ***	0.681	0.176 ***
<i>Socioeconomic status</i> (ISEI/10)	0.115	0.037 ***	0.128	0.048 ***
<i>Period</i> (ref = before 1971)				
1971–84	–0.669	0.117 ***	–0.750	0.140 ***
After 1984	–0.801	0.136 ***	–0.861	0.160 ***
<i>Datasource</i> (ref = SSCW survey)				
Family Survey 1993	–0.374	0.126 ***	–0.224	0.144
Family Survey 2000	–0.135	0.123	–0.117	0.142
Intercept	–3.792	0.269 ***	–4.003	0.325 ***
Number of events	511		349	
Model fit, Wald χ^2 (18)	755.52		517.99	

*** = $p < 0.01$; ** = $p < 0.05$; * = $p < 0.1$

be attributed to some extent to the greater availability of jobs in the city, but also in some measure to the generally higher migration rates of the better-educated. The same holds for socioeconomic status. The strong and positive effect of a high educational level may also be partly attributable to the different awareness space of the highly educated

compared with that of people with a middle and low level of education. Since cities often have characteristics that they value, the city is likely to have a more prominent place in the awareness space of the highly educated.

The significantly negative effect of age can be attributed to the general decline in mobility with age, since we see the same sign and

magnitude of the coefficient in the analyses of moves from the city in the next section. We checked for non-linearity of the age effect by adding an age-squared variable, but its effect was very small and not significant.

The period effects show that the probability of moving to the city is significantly greater in the first period than in later periods. After 1971, the coefficient remains relatively stable and there is no indication of increased reurbanisation after 1984.

Moving out of the city. Table 2 shows the model of moving out of the city to a suburb or rural area for all city-dwellers. The effects of the spatial experience variables are in the expected direction. People who had previously lived in a suburb have a significantly higher probability of moving to a suburb and the same holds for the effect of having lived in a rural area. People who were born in a suburb and lived there independently have a higher likelihood of moving to a rural area; however, rural experience does not increase the likelihood of moving to a suburb. While it is sometimes assumed that suburban and rural areas offer very similar living environments (green and quiet; see Heins and van Dam, 2001), this analysis suggests that they differ. When comparing the sub-types within suburban experience, we see that being born in a suburb has a stronger effect than having lived in a suburb in the independent housing career. The same is the case for the effects of the sub-types of rural experience on the probability of moving to a rural area. In the first analysis, we also found this for cities; thus, for all three residential environments, being born there influences the probability of returning more strongly than having lived there independently.

We also ran a model which excluded return moves to the region where one was born or had previously lived in the independent housing career (these made up 56 per cent of

moves out of the city). In this model (see cols 3 and 4 in Table 2), the effects of suburban experience decrease and become insignificant. This finding is similar to that derived from the analysis of the cities (Table 1). Exurbanites and ex-suburbanites thus seem to be attached to a specific location rather than to a particular type of residential environment.

In contrast, the effects of rural experience on the probability of moving to a municipality in a rural area where one has not previously lived did remain significant. This result indicates that it is not only the specific place characteristics that make people return to a rural area, but also the more general aspects of a rural residential environment. An alternative explanation is that people with rural experience do attach these memories to a particular place, yet there are certain reasons for not going back to precisely the same place. For example, the local housing market may not offer suitable opportunities, whereas a neighbouring area does.

The effects of other individual characteristics are as expected. Singles living in the city have a significantly lower probability of moving to a suburb or rural area than do couples living in cities. The effect for the separated is also negative, but only significantly so for moves to a suburb. Repartnered people have a significantly greater probability of moving from a city to a suburb than do couples, as we expected. Repartnering has no effect on the probability of moving to a rural area (which contradicts our expectation).

People who intend to have children are more likely to move from a city to a suburb than people either with or without children. People often move in anticipation of the forthcoming family extension in the year preceding the birth. If they prefer a quiet and safe environment in which to bring up their child(ren), as many do, they are likely to move outside the city. The results show that for this category the suburb is more popular than a rural area. Once people

Table 2. Multinomial logistic regression model (additive parameters) for moving out of the city to suburb or rural area

	<i>All moves out of the city</i> (N = 24 970)				<i>Return migrations excluded</i> (N = 24 829)			
	<i>Suburb</i>		<i>Rural area</i>		<i>Suburb</i>		<i>Rural area</i>	
	<i>Coefficient</i>	<i>Standard error</i>	<i>Coefficient</i>	<i>Standard error</i>	<i>Coefficient</i>	<i>Standard error</i>	<i>Coefficient</i>	<i>Standard error</i>
Age-18	-0.057	0.008 ***	-0.08	0.009 ***	-0.054	0.008 ***	-0.079	0.009 ***
<i>Suburb experience</i> (ref = neither born nor lived independently in suburb)								
Only born in suburb	0.812	0.145 ***	0.264	0.178	0.221	0.168	0.344	0.180 *
Only lived independently in suburb	0.485	0.188 **	0.139	0.191	0.182	0.205	0.224	0.203
Born and lived independently in suburb	0.717	0.230 ***	1.073	0.214 ***	0.084	0.317	1.024	0.223 ***
<i>Rural experience</i> (ref = neither born nor lived independently in rural area)								
Only born in rural area	0.141	0.131	0.907	0.122 ***	0.179	0.134	0.512	0.136 ***
Only lived independently in rural area	0.118	0.207	0.688	0.202 ***	0.199	0.207	0.487	0.214 **
Born and lived independently in rural area	0.300	0.233	1.285	0.177 ***	0.264	0.231	0.690	0.221 ***
<i>Partnership status</i> (ref = steady relationship)								
Steady single	-0.685	0.153 ***	-0.490	0.156 ***	-0.682	0.165 ***	-0.651	0.176 ***
Separated	-0.626	0.261 **	-0.316	0.261	-0.735	0.290 **	-0.370	0.283
Repartnered	0.508	0.259 *	0.396	0.275	0.565	0.273 **	0.364	0.300
<i>Family status</i> (ref = never had children)								
Year before childbirth	0.500	0.216 **	0.211	0.230	0.525	0.232 **	0.234	0.244
Has child(ren)	-0.097	0.148	0.111	0.144	-0.121	0.156	0.134	0.154

<i>Work status (ref = in education)</i>									
Not working	0.328	0.207	0.234	0.198	0.324	0.227	0.303	0.241	
Working	0.724	0.195 ***	0.594	0.183 ***	0.751	0.210 ***	0.737	0.221 ***	
<i>Educational level (ref = low)</i>									
Middle	0.180	0.132	0.207	0.133	0.214	0.142	0.186	0.143	
High	0.249	0.174	0.358	0.155 **	0.302	0.183	0.376	0.165 **	
Socioeconomic status (ISEI/10)	0.116	0.043 ***	0.005	0.037	0.125	0.046 ***	0.035	0.042	
<i>Period (ref = before 1971)</i>									
1971–84	0.371	0.136 ***	0.059	0.119	0.433	0.146 ***	0.007	0.131	
After 1984	–0.020	0.160	–0.385	0.153 **	–0.040	0.172	–0.393	0.168 **	
<i>Datasource (ref = SSCW survey)</i>									
Family Survey 1993	0.431	0.125 ***	0.301	0.131 **	0.407	0.132 ***	0.238	0.145	
Family Survey 2000	–0.086	0.133	0.354	0.122 ***	–0.065	0.140	0.284	0.135 **	
Intercept	–4.661	0.322 ***	–3.931	0.302 ***	–4.827	0.359 ***	–4.132	0.354 ***	
Number of events	453		464		393		386		
Model fit, Wald χ^2 (42)	467.00				341.81				

*** = $p < 0.01$; ** = $p < 0.05$; * = $p < 0.1$.

have children, they are unlikely to move, as the small and negative effects of 'has child(ren)' indicate in all the models.

As we expected, people in employment have a significantly higher probability of moving to a suburb or a rural area than do people who are in education, or who do not work for other reasons. A higher socioeconomic status leads to the expected greater probability of moving to a suburb, but it does not lead to more moves into rural areas. In contrast, a higher educational level does take people into the countryside more often. This might indicate that, given the resources to make the move, the more highly educated prefer rural living to suburban living, as we expected on the basis of the literature.

The effects of age are negative and significant. The period effect is as expected: the probability of moving to the suburb is significantly greater in the period 1971–84 than in the preceding and following periods. The probability of moving to a rural area became particularly small after 1984, probably as a result of the scarcity of housing in rural areas.

Conclusion and Discussion

The aim of the study reported in this paper was to isolate residential experience from other factors influencing residential environment choice. To that end, we used three concepts: activity space, social space and awareness space. The first two concepts help us to understand why the city provides a good environment for those enrolled in tertiary education, for people living as singles, for the (recently) separated and for the highly educated. The availability of affordable (student) housing and the abundance of highly differentiated job opportunities facilitate the creation of an efficient activity space. Urban facilities such as pubs and clubs, cinemas and theatres, provide meeting places for those with outgoing lifestyles, in contrast with the suburbs and rural areas that provide

a better social space for the more family-oriented. Indeed, our results confirmed that, in any given year, the probability of moving to the city was higher among the singles, the students, the separated and the highly educated; and, having arrived there, the first three groups show consistently lower probabilities of leaving for the suburbs or a village. Leaving the city is more common among the more prosperous, the highly educated and those who (intend to) have children. It is clear that some of the major trends in the second half of the 20th century, such as increased participation in higher education, the postponement of union formation and child-bearing and rising divorce levels, have contributed to the re-urbanisation of recent decades. Our results also indicate that, for many, the stay will only be temporary, since most decide to leave the city once they have embarked on a steady relationship and intend to have children—at least, if they can afford to do so.

In understanding the role of residential experience in residential environment choice, the concepts of social space and awareness space are elucidating. The social bonds to family or friends that tie people to their place of origin are often mentioned in explanations of return migration. The awareness space refers to the process through which people have learned to appreciate a certain place or environment in their previous life-course experience. Our first results showed that the effect of residential experience is indeed strong. The magnitude of the parameters supersedes those of the more common variables such as family composition or socioeconomic status. In particular, the place of birth turns out to play a decisive part in shaping residential environment choices later in life, regardless of whether this is a city, a suburb or a rural community.

To unravel the ties to a specific place from a more general positive awareness of a residential environment that one has learned to appreciate, we repeated the analyses, excluding those who returned to the region of origin.

The effect on the parameters was substantial. For both cities and suburbs, we conclude that residential experience is only effective in shaping the preference for that particular place and hardly at all for city or suburban life in general, although being born in a city does increase the probability of moving to another city later in life. However, the results suggest that both suburban and rural experience early in life do shape a preference for rural living later on. Apparently, the associations with 'rural' are rather general. A proportion of those with rural experience do not care if they live again in the rural area from which they come; other rural areas are fine for them as well (or they might even prefer to live in a different rural area).

An obvious drawback of our analyses is that we did not measure preferences directly, but inferred them from the 'revealed choices' in migration. It is impossible to reconstruct the formation of attitudes in early life on the basis of retrospective data. Finding a statistical relationship between early life-course experience and actual behaviour seemed to be the best we could do with the data to hand.

In our analyses, we used personal residential experience and residential preferences as a starting-point. However, we should keep in mind that residential choices are made at the household level. People may migrate to a place in the partner's residential history (therefore being a return move for the partner, but not for the respondent). A personal wish to move back to a familiar residential environment may be hampered by conflicting interests or by the preferences of the partner. Therefore, the effects we found for the impact of residential experience may well be underestimated, if we consider that some of the moves in our data are likely to be return moves and/or moves to a familiar residential environment of the partner. An analysis that takes into account the decision structure in households (on data which include both partners'

residential histories) could possibly lead to further clarification.

It should also be acknowledged that part of the attraction of residential environments with which people have experience might not have so much to do with the environment itself, but with the type of housing found there or with the price of the housing.

It would be interesting to see in which residential environment people 'end up' after reaching retirement age. In our data, there were too few older people to investigate this. Future research could shed some light on this topic. A number of studies have been carried out on return migration after retirement, but the research suggests that, in the Netherlands, this is only a minor phenomenon (Visser, 2003). Retirement migration to a familiar residential environment might be a more common phenomenon and may again be different between people coming from cities, the suburbs and rural areas.

Notes

1. The survey was commissioned by the Stichting Sociaal-culturele Wetenschappen (SSCW), Nederlandse Organisatie voor Wetenschappelijk onderzoek (NWO). The dataset is available under the title 'Aspects of life-event history of the Dutch population: part 1: changes in socio-demographic data, social mobility, relationships history, educational career, and work mobility' at the Niwi Steinmetz Archives (under no. P1107).
2. The datasets differ in the availability of information about place of residence in early youth. In the SSCW survey, place of residence directly after birth is available. Family Survey 1993 contains place of birth, but otherwise only places of residence after the respondent has left the parental home. For Family Survey 2000, there was no information available on birthplace, but on residence at age six (which was the earliest information available in this dataset). For convenience, we denote the earliest known place of residence as 'place of birth', even though

- technically this is not correct for the SSCW survey and for Family Survey 2000.
3. Note that different respondents reached age 40 in different years because we have respondents from different birth years; the birth year range for those who were at least 40 years old at the moment of interview is 1903–60.
 4. A region is operationalised as a 'corop'. The Netherlands is sub-divided into 40 *corops*. A *corop* is an administrative level that lies between the level of municipalities ($N = 537$ in 2000) and the level of provinces ($N = 12$). Each *corop* is an agglomeration of municipalities; it does not cross provincial borders. The division into *corops* was created following the nodal principle that each *corop* has a central core municipality/area.

References

- Allison, P. D. (1982) Discrete-time methods for the analysis of event histories, *Sociological Methodology*, 13, pp. 61–98.
- Atzema, O. A. L. C. (1991) *Stad uit, stad in: residentiële suburbanisatie in Nederland in de jaren zeventig en tachtig* [Out of the city, into the city: residential suburbanisation in the Netherlands in the nineteen seventies and eighties]. Utrecht: Faculteit Ruimtelijke Wetenschappen Universiteit Utrecht.
- Bell, W. (1968) The city, suburb, and a theory of social choice, in: S. Greer, D. C. McElrath, D. W. Minar and P. Orleans (Eds) *The New Urbanization*, pp. 132–168. New York: St Martin's Press.
- Bonney, N., McCleery, A. and Forster, E. (1999) Migration, marriage and the life course: commitment and residential mobility, in: P. J. Boyle and K. Halfacree (Eds) *Migration and Gender in the Developed World*, pp. 136–150. London: Routledge.
- Bootsma, H. G. (1998) *The Myth of Reurbanization: Location Dynamics of Households in the Netherlands*. Amsterdam: Thela Thesis.
- CBS Statistics Netherlands (2006) *Number of inhabitants on January 1st 1995, per municipality in the Netherlands* (<http://statline.cbs.nl/>; accessed 5 June 2006).
- Clark, W. A. V. and Dieleman, F. M. (1996) *Households and housing*. Center for Urban Policy Research, New Brunswick, NJ.
- Cooper Marcus, C. (1992) Environmental memories, in: I. Altman and S. M. Low (Eds) *Place Attachment*, pp. 87–112. New York: Plenum Press.
- Courgeau, D. (1989) Family formation and urbanization, *Population: An English Selection*, 44(1), pp. 123–146.
- Crommentuijn, L. (1997) *Regional Household Differentials*. Amsterdam: Thela Thesis.
- DaVanzo, J. (1981) Repeat migration, information costs, and location-specific capital, *Population and Environment*, 4(1), pp. 45–73.
- DaVanzo, J. and Morrison, P. A. (1981) Return and other sequences of migration in the United States, *Demography*, 18(1), pp. 85–101.
- Détang-Dessendre, C., Piguet, V. and Schmitt, B. (2002) Life cycle variability in the micro-economic determinants of urban–rural migration, *Population* (English edn), 57(1), pp. 31–56.
- Deurloo, M. C., Clark, W. A. V. and Dieleman, F. M. (1990) Choice of residential environment in the Randstad, *Urban Studies*, 27(3), pp. 335–351.
- Dieleman, F. M. and Mulder, C. H. (2002) The geography of residential choice, in: J. I. Aragonés, G. Francescato and T. Gärling (Eds) *Residential Environments: Choice, Satisfaction, and Behavior*, pp. 35–54. Westport, CT: Bergin and Garvey.
- Downs, R. M. and Stea, D. (1973) *Image and Environment: Cognitive Mapping and Spatial Behavior*. Chicago, IL: Aldine.
- ESR/STP (1992) *ESR/STP (formerly SSCW-Telepanel) data file*. Owner: Stichting Economische, Sociaal-culturele en Ruimtelijke Wetenschappen (ESR) of the Netherlands Organisation for the Advancement of Scientific Research (NWO), The Hague. Data collection: Stichting Telepanel, Amsterdam. Data management: Steinmetz Archive, Amsterdam.
- Faessen, W. (2002) Present and preferred housing of one-person households in the Netherlands, 1998, *Journal of Housing and the Built Environment*, 17(3), pp. 337–350.
- Feijten, P. (2005) Union dissolution, unemployment and moving out of homeownership, *European Sociological Review*, 21(1), pp. 59–71.
- Feldman, R. M. (1996) Constancy and change in attachments to types of settlements, *Environment and Behavior*, 28(4), pp. 419–445.

- Fielding, A. J. (1992) Migration and social mobility: south east England as an escalator region, *Regional Studies*, 26(1), pp. 1–15.
- Fischer, P. A. and Malmberg, G. (2001) Settled people don't move: on life course and (im-) mobility in Sweden, *International Journal of Population Geography*, 7(5), pp. 357–371.
- Ganzeboom, H. B. G., Graaf, P. M. de and Treiman, D. J. (1992) A standard international socio-economic index of occupational status, *Social Science Research*, 21(1), pp. 1–56.
- Graaf, N. D. de, Graaf, P. M. de, Kraaykamp, G. and Ultee, W. C. (2000) *Family survey Dutch population 2000* (dataset). Department of Sociology, Nijmegen University.
- Hägerstrand, T. (1970) What about people in regional science?, *Regional Science Association Papers*, 14, pp. 7–21.
- Hall, R. and Ogden, P. A. (2003) The rise of living alone in inner London: trends among the population of working age, *Environment and Planning A*, 35(5), pp. 871–888.
- Ham, M. van, Hooimeijer, P. and Mulder, C. H. (2001) Urban form and job access: disparate realities in the Randstad, *Tijdschrift voor Economische en Sociale Geografie*, 92(2), pp. 231–246.
- Harts, J. J. and Hingstman, L. (1986) *Verhuizingen op een rij: een analyse van individuele verhuisgeschiedenissen* [Residential relocations in line: an analysis of individual residential histories]. Royal Netherlands Geographical Society/Geografisch Instituut Rijksuniversiteit Utrecht.
- Heins, S. (2002) *Rurale Woonmilieus in Stad en Land: Plattelandsbeelden, Vraag naar en Aanbod van Rurale Woonmilieus* [Rural residential environments in city and countryside: countryside images, demand for and supply of rural residential environments]. Delft: Eburon.
- Heins, S. and Dam, F. van (2001) *Stated preferences for rural housing in the Netherlands: absolute, trade-off or relative preferences?* Paper presented at the *Housing Imaginations Conference*, Cardiff, September.
- Hooimeijer, P. and Knaap, G. A. van der (1994) From flows of people to networks of behaviour, in: P. Hooimeijer, G. A. van der Knaap, J. van Weesep and R. I. Woods (Eds) *Population Dynamics in Europe*, pp. 177–185. Utrecht: Royal Netherlands Geographical Society.
- Huber, P. J. (1967) *The behavior of maximum likelihood estimates under nonstandard conditions*. Paper presented at the *Fifth Berkeley Symposium on Mathematical Statistics and Probability*. Berkeley, CA.
- Jobse, R. B., Kruijthoff, H. M. and Musterd, S. (1990) *Stadsgewesten in Beweging: Migratie naar en uit de Vier Grote Steden* [Urban agglomerations on the move: migration to and from the four big cities]. Utrecht: IRO-RUU.
- Kruijthoff, H. M. (1991) *Tweeverdieners vergeleken: woonmilieudifferentiatie van tweeverdieners, eenverdieners en geenverdieners in de Randstad* [Two-earner households compared: residential environment differentiation of two-earner households, one-earner households and no-earner households in the Randstad]. Stedelijke Netwerken Werkstukken No. 30, Onderzoeksinstituut voor Technische Bestuurskunde, Delft.
- Lelièvre, E. and Bonvalet, C. (1994) A compared cohort history of residential mobility, social change and home-ownership in Paris and the rest of France, *Urban Studies*, 31(10), pp. 1647–1665.
- Michelson, W. (1977) *Environmental Choice, Human Behavior, and Residential Satisfaction*. New York: Oxford University Press.
- Morrison, P. A. and DaVanzo, J. (1986) The prism of migration: dissimilarities between return and onward moves, *Social Science Quarterly*, 67(3), pp. 504–516.
- Mulder, C. H. (1993) *Migration Dynamics: A Life Course Approach*. Amsterdam: Thesis Publishers.
- Newbold, K. B. (1996) Income, self-selection and return and onward interprovincial migration in Canada, *Environment and Planning A*, 28, pp. 1019–1034.
- Newbold, K. B. (1997) Primary, return and onward migration in the U.S. and Canada: is there a difference?, *Papers in Regional Science*, 76, pp. 157–198.
- Newbold, K. B. (2001) Counting migrants and migration: comparing lifetime and fixed-interval return and onward migration, *Economic Geography*, 77(1), pp. 23–39.
- Nicolaas, H. and Sprangers, A. H. (2000) De nieuwe gastarbeider: manager uit de VS of informaticus uit India [The new labour migrant: manager from the USA or IT-professional from

- India], *Maandstatistiek van de bevolking*, 48(9), pp. 9–12.
- Noortwijk, L. van, Hooimeijer, P. and Dieleman, F. M. (1992) Divorce and the disruption of the housing career, in: P. Korcelli and J. van Weesep (Eds) *Housing and Urban Policy in Transition*, pp. 87–101. Warsaw: PAN IGiPZ.
- Pinkster, F. and Kempen, R. van (2002) *Leefstijlen en woonmilieuvoorkeuren* [Lifestyles and residential environment preferences]. Urban and Regional Research Centre, Utrecht.
- Reagan, P. B. and Olsen, R. J. (2000) You can go home again: evidence from longitudinal data, *Demography*, 37(3), pp. 339–350.
- Rubinstein, R. L. and Parmelee, P. A. (1992) Attachment to place and the representation of the life course by the elderly, in: I. Altman and S. M. Low (Eds) *Place Attachment*, pp. 139–164. New York: Plenum Press.
- SCP (Social and Cultural Planning Office) (2006) *Thuis op het platteland: de leefsituatie van platteland en stad vergeleken* [At home in the countryside: the living situation in the countryside and the city compared]. SCP, The Hague.
- Smidt, M. de, Ottens, H. F. L. and Ploeger, H. A. (1986) Werkgelegenheidsdynamiek in de vier grote stadsgewesten, in het bijzonder het Utrechtse [Labour supply dynamics in the four large urban agglomerations, in particular the agglomeration of Utrecht], in: F. M. Dieleman, A. W. P. Jansen and M. de Smidt (Eds) *Metamorfose van de Stad: Recente Tendensen van Wonen en Werken in Nederlandse Steden*, pp. 19–34. Utrecht: Royal Netherlands Geographical Society.
- South, S. J. and Crowder, K. D. (1997) Residential mobility between city and suburbs: race, suburbanization, and back-to-the-city moves, *Demography*, 34(4), pp. 525–538.
- Ultee, W. C. and Ganzeboom, H. B. G. (1993) *Netherlands Family Survey 1992–93* (machine-readable data set). Department of Sociology, Nijmegen University, Netherlands.
- Valk, A. van der (2002) The Dutch planning experience, *Landscape and Urban Planning*, 58(2/4), pp. 201–210.
- Visser, P. (2003) Vergrijzing in de regio: aantal ouderen neemt toe [Ageing in the region: number of elderly increases], *Demos*, 20(3), pp. 21–24.
- Yamaguchi, K. (1991) *Event History Analysis*. Newbury Park, CA: Sage.

Appendix

Table A1. Variable summary statistics

	<i>All person-years</i> (N = 79 815)		<i>Last person-year of each respondent</i> (N = 3603)	
	<i>Mean/ frequency</i>	<i>Standard deviation/ percentage</i>	<i>Mean/ frequency</i>	<i>Standard deviation/ percentage</i>
<i>Moving to the city (dependent variable in Table 1)</i>				
Living in the city for the 1st time	18 571	23.3	686	19.0
Living outside the city	55 762	69.9	2 677	74.3
Year of moving to the city	511	0.7	3	0.1
Living in the city for the 2nd time or more	4 971	6.2	237	6.6
<i>Moving out of the city (dependent variable in Table 2)</i>				
Living outside the city for the 1st time	41 867	52.5	1 947	54.0
Living in the city	24 053	30.1	926	25.7
Year of moving to the suburb	453	0.6	3	0.1
Year of moving to the rural area	464	0.6	4	0.1
Living outside the city for the 2nd time or more	12 978	16.3	723	20.1
<i>City experience</i>				
Neither born nor lived independently in city	44 187	55.4	2 021	56.1
Only born in city	21 222	26.6	849	23.6
Only lived independently in city	7 228	9.1	383	10.6
Both born and lived independently in city	7 178	9.0	350	9.7
<i>Suburb experience</i>				
Neither born nor lived independently in suburb	63 460	79.5	2 804	77.8
Only born in suburb	12 231	15.3	578	16.0
Only lived independently in suburb	2 870	3.6	157	4.4
Both born and lived independently in suburb	1 254	1.6	64	1.8
<i>Rural experience</i>				
Neither born nor lived independently in rural area	39 317	49.3	1 720	47.7
Only born in rural area	35 489	44.5	1 644	45.6
Only lived independently in rural area	2 568	3.2	121	3.4
Both born and lived independently in rural area	2 441	3.1	118	3.3

(Continued)

(Table A1. Continued)

	All person-years (N = 79 815)		Last person-year of each respondent (N = 3603)	
	Mean/ frequency	Standard deviation/ percentage	Mean/ frequency	Standard deviation/ percentage
<i>Partnership status</i>				
Steady single	12 477	15.6	240	6.7
Steady relationship	62 216	78.0	2 940	81.6
Separated	2 995	3.8	218	6.1
Repartnered	2 127	2.7	205	5.7
<i>Family status</i>				
Never had children	24 566	30.8	972	27.0
Year before childbirth	2 335	2.9	—	—
Has child(ren)	52 914	66.3	2 631	73.0
<i>Work status</i>				
Not working	35 285	44.2	1 574	43.7
Working	40 638	51.0	2 029	56.3
In education	3 892	4.9	—	—
<i>Educational level</i>				
Low	32 544	40.8	1 328	36.9
Middle	29 265	36.7	1 445	40.1
High	18 006	22.6	830	23.0
<i>Socioeconomic status (ISEI/10)</i>	4.6	1.7	4.6	1.7
<i>Period</i>				
Before 1971	15 490	20.0	1.0	0.0
1971–84	31 817	39.9	31.0	0.9
After 1984	32 058	40.2	3 571	99.1
<i>Datasource</i>				
SSCW survey	44 993	56.4	2 036	56.5
Family Survey 1993	16 080	20.2	809	22.5
Family Survey 2000	18 742	23.5	758	21.0
<i>Age</i>	36.2	11.1	43.7	12.4