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**The uneven impact of different life domains on
the wellbeing of migrants**

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ABSTRACT

Life satisfaction and motives for migration are both complex entanglements, reflecting multiple desires and experiences. The aim of this paper is to show that a focussed analysis of satisfaction with particular domains of life can lend support to the claim that residential migration is not only a life stressor but also a positive means leading to enduring improvements in individual satisfaction. Using the British Household Panel Survey we examine overall life satisfaction and satisfaction in various life domains such as housing, job, social life, household income, spouse and health, both prior to and after moving. A temporal pattern of migrants' satisfaction for a number of years before and after the move is derived employing a fixed-effects model. Our results reveal that moving increases housing satisfaction considerably. Despite some decrease over time, five years after migration housing satisfaction is still significantly higher than it was initially. The positive effect of migration on housing satisfaction is much stronger and endures longer for those with a sustained desire to move before migration. Changes in satisfaction with other life domains are much less pronounced and no lasting improvements in satisfaction are observed for them.

KEYWORDS

Internal migration; life domain satisfaction; subjective wellbeing; mobility desires; panel model

EDITORIAL NOTE

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THE UNEVEN IMPACT OF DIFFERENT LIFE DOMAINS ON THE WELLBEING OF MIGRANTS

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1. INTRODUCTION

Each year in the period 1996-2008 roughly one third of UK adults expressed a desire to move home according to the British Household Panel Survey. Perhaps more surprising is the revelation that less than one fifth of those who wished to move actually fulfilled their desire within the next year. At the same time many individuals who changed their place of residence had no prior preference to do so. People who wanted to move constituted only 60% of all movers. The clear discrepancy between mobility desires and moving behaviour is now well-documented in the literature (Lu 1998, 1999; Coulter *et al.* 2011; de Groot *et al.* 2011). What is not evident is whether fulfilment of perceived needs and desires through migration leads to lasting improvements in people's subjective wellbeing and also whether those who do not desire to move but who find themselves being relocated can still benefit from migration. It seems plausible that when moving desires and subsequent actions coincide then migration should boost migrants' satisfaction. According to telic theories of subjective wellbeing individuals gain happiness when they reach their desired goals (Diener 1984). Satisfying the needs of others may be even more rewarding (Dunn *et al.* 2008; Aknin *et al.* 2012).

Life satisfaction and motives for migration are both, however, complex entanglements. They reflect a multitude of needs, preferences and values of individuals in question but also of their next of kin. They come from experience and evolve over the life cycle. Moreover, moving home is very often accompanied by major life events such as forming or dissolving a partnership, having children or losing a loved one that usually influence happiness (Lucas *et al.* 2003). Migration histories are, therefore, closely interwoven with personal satisfaction.

The objective of this paper is to investigate how moving can affect an individual's assessment of life satisfaction both before and after a move. In particular, the study looks at whether migration can serve as an effective and positive means of achieving enduring enhancements in individual subjective wellbeing. In order to give a comprehensive picture of the subjective wellbeing outcomes of migration, both overall life satisfaction and domain-specific satisfaction measures are used as subjective wellbeing indicators. The different domains that are considered include

housing, job, social life, household income, spouse and health. They may be affected very differently by changing locations, which is a function of, among others, migrant's values, priorities, desires and reasons for move. An individual may be very satisfied with the higher income after migration but may have no social life, which may result in decreased satisfaction with life overall. It is also natural to expect that people wanting to move for a prolonged period of time are more likely to fare better after migration than those without a sustained moving desire. This should be the case especially in a life domain that triggered both a desire to relocate and also informed decisions associated with the actual move. The impact of a sustained desire to move on migration outcomes is an additional concern of this study.

The paper first provides an overview of approaches to analysing causes and consequences of residential mobility. Using results from 13 waves of the British Household Panel Survey it then evaluates the relationship between life satisfaction and domain satisfaction for migrants compared to stayers. Next it sheds light on the interplay between satisfaction, desire to move and actual migration. Finally it presents satisfaction trajectories before and after migration for various domains and illustrates the impact of a sustained desire to move on migration outcomes based on housing satisfaction patterns.

2. LITERATURE REVIEW

There is a long history of migration research that represents residential mobility as a behavioural response to the combined effects of the internal needs and expectations of an individual or household and the external constraints and opportunities presented by housing and labour markets (Brown and Moore 1970; Clark 1986; Boyle *et al.* 1998). These approaches tended on the one hand to emphasise the economic dimensions of the costs and benefits of residential mobility (such as wages and house prices), while on the other hand representing the migration event as a means of removing the stresses presented by a former location and replacing these stresses with the more positive 'place utilities' (Wolpert 1965) offered by moving to a new home in another location (Roseman 1971). Many empirical studies posited that residential (dis)satisfaction is one of the key determinants of voluntary mobility (Speare 1974; Speare *et al.* 1982; Lu 1998). Household needs and external opportunities, which influence personal satisfaction, were initially analysed in relation to the lifecycle as

individual families formed, grew and later declined in size and consequently adjusted to their housing needs (Rossi 1955). Later research recognised the greater fluidity of household formation, growth and dissolution and noted that a range of mobilities could be observed over the life course, reflecting changes for example in marriage and divorce behaviour, partnering and having children, life expectancy and the changing housing needs of older people (Bailey 2009). Yet others have researched the links between 'life transitions' and housing pathways or 'housing careers' (Clapham 2005; Feijten 2005; Wulff *et al.* 2010) focusing on the relation between housing market processes and mobility in contrast with the mobility literature linking to demographic and familial change.

The brief account of behavioural research on residential mobility that has been presented above (for more extended and in-depth reviews see Mulder and Hooimeijer 1999; Feijten 2005; Rabe and Taylor 2010) maps, amongst other features, a shift towards recognition of the complex contexts in which migration decisions are taken. In parallel, migration researchers have increasingly argued that the motives underpinning mobility cannot be reduced to a singly dominant factor, but that the motives and meanings of migration are deep-rooted and complex, involving many inter-related factors (Halfacree and Boyle 1993) that change over the life course (Geist and McManus 2008) and involve an understanding of the complicated negotiations that take place between people within a household (Clark and Withers 2007; Boyle *et al.* 2008; Cooke 2008; Mulder and Cooke 2009). Analysis of the mobility of couples also illustrates that moves often take place which are desired by one member of a household, but not by others. Meaningful analysis of migration motivations and satisfaction with mobility experiences therefore needs to be sharpened by focusing on movers who actually desire to move rather than, as is so often the case, analysing the 'reasons' and 'experiences' of all movers in an aggregated and uniform fashion (Coulter and van Ham 2012).

Researchers have increasingly recognised that migration is motivated not only by economic factors, but also by social and cultural forces (Fielding 1993) and that often people's emotional attachments to social networks rooted in place help explain mobility as well as immobility (Lundholm *et al.* 2004; Lundholm and Malmberg 2006). The intensity of local bonds is reflected in overall life satisfaction and greatly

satisfied individuals will not even consider moving despite the fact that migration might be beneficial for them in economic terms (Speare 1974). Life satisfaction and quality of life factors have increasingly been recognised as key drivers of migration as well as explanations of people's unwilling to move on economically rational grounds (Findlay and Rogerson 1993; Nowok *et al.* 2012).

Pioneering work by Nakazato *et al.* (2011) has examined the effect of changes in life satisfaction on mobility in a German context. Their work is interesting for several reasons. First, they are one of the earliest group of researchers to examine rigorously the way in which life satisfaction varies over time in relation to the timing of migration (although this would also be true of Frijters *et al.* 2011; Nowok *et al.* 2012). Second, they observe that although no increase in overall life satisfaction emerges in relation to migration, there is a 'strong and persistent increase in average levels of housing satisfaction' associated with mobility (Nakazato *et al.* 2011). This may suggest that satisfaction with different life domains (such as housing or social life) relate differently to migration from measures of overall life satisfaction. Thirdly, they note that while individuals report little variation in overall life satisfaction over time (in line with set-point theory), the same is not true for housing satisfaction which is deemed to be 'highly unstable'.

These observations of the relationship between life satisfaction and mobility, therefore usher in the recognition that it is not only the motives underpinning migration behaviour that are complex and entangled. The same holds for the life domains driving life satisfaction. Lundholm and Malmberg (2006) provide evidence that different life domains correlate unevenly with migration behaviour. Although there is research that argues that measures of overall life satisfaction can be seen as an aggregate of people's happiness with various aspects of their life (van Praag *et al.* 2003; Schimmack 2008), in-depth analysis by González *et al.* (2010) and Rojas (2006) provides evidence that there is no simple relation between overall measures of life satisfaction and people's satisfaction with individual life domains such as housing. One might summarise these arguments by saying that people who are happy with life in general are not happy with everything in their lives and that people who are satisfied with specific aspects of their lives are not necessarily happy overall. Not surprisingly, therefore, there is an argument that migration researchers need to dig

deeper in investigating the complex ways in which satisfaction with specific life domains impact on migration (and vice versa), rather than relying solely on broad-brush indicators of overall life satisfaction to reach conclusions about how social and cultural dimensions of people's life courses affect and are affected by mobility.

An approach that recognises the value of disaggregating measures of life satisfaction in relation to specific domains has the advantage of making possible analysis of how life domains vary between people and also over the life course (McAdams *et al.* 2011). Moreover, such an approach makes possible examination of the ways in which some variables such as improved income have only a transitory impact on life satisfaction (Kahneman *et al.* 2006), while improvements in non-economic domains such as marriage and housing (Lucas *et al.* 2003; Nakazato *et al.* 2011) have been suggested to be more enduring in their effect on happiness (Easterlin 2006). To ask therefore whether migration makes one happy in an enduring fashion, can therefore be seen to be a very complex question, since it is not only difficult to unpick the meanings and motivations underpinning migration behaviour, but it is also necessary to recognise that mobility can be viewed both as a response to unhappiness with certain life domains and also as a means to increased happiness. Whether enhanced life satisfaction endures following migration, will be dependent on the specific life domains which have driven the initial move and which turn out to be most affected by mobility.

Drawing on this research literature in relation to the objective of this paper (to investigate how migration affects and is affected by life satisfaction over time) leads to three main research questions:

- a) do different life domains play the same role in determining happiness for migrants and stayers?
- b) do people who desire to move have distinctive patterns of dissatisfaction with particular aspects of their life?
- c) is there evidence of migration producing lasting changes in life satisfaction in relation to different life domains or are effects temporary?

3. DATA

The study uses 13 waves of the British Household Panel Survey (BHPS), covering 1996 to 2008. These are waves for which data on life satisfaction were collected. The BHPS is a nationally representative sample of about 5,500 private households with approximately 10,000 adults recruited in 1991. The adult members of the same sample of households are interviewed every year. An attempt is made to follow up all migrants who remain in the United Kingdom. If an original panel member forms a new household, then all adult members of the new household are also interviewed. The BHPS was also augmented by regional geographical samples. Therefore in 2008 the total sample size was around 9,000 households including some 15,000 individuals.

Migration is defined in the study as a change in the usual place of residence (address) between two consecutive interviews. This definition produces 21,000 migration events in the dataset. The analysis is based on all observed moves, regardless of reason, distance and recurrence of migration. Migrations are identified combining the information contained in two different variables available in the dataset. The BHPS provides a derived individual mover status variable indicating whether sample members have moved location since the last interview. Panel members are also directly asked whether they still live at the same residence as before 1 September of the previous year. In the case of change of residence, information on month and year of the move is collected along with information on reasons for reported move. Respondents are first asked to indicate whether migration was for reasons associated with their own job or employment and then to name (other) main reasons for moving. In addition, there is information on mobility preferences of the interviewed individuals, which enables us to distinguish desired moves from other moves.

Participants rate their satisfaction with life in general and with specific life domains. The satisfaction with life in general is measured by the question: 'How dissatisfied or satisfied are you with your life overall?' In the BHPS dataset eight separate life domains are distinguished. Respondents are asked to report how dissatisfied or satisfied they are with their health, house/flat, husband/wife/partner, job (if in employment), social life, the income of their household, the amount of

leisure time they have and the way they spend their leisure time. There are seven possible response options ranging from ‘not satisfied at all’ (one) to ‘completely satisfied’ (seven). A neutral point of the scale (four) indicates that respondents are neither satisfied nor dissatisfied.

4. METHODS

The Goodman-Kruskal gamma statistic is used to measure the strength of the association between the ordinal-scale satisfaction variables. The impact of various aspects of life on a migrants’ overall satisfaction is estimated using an ordinal logistic regression with the overall life satisfaction as a dependant variable and domain satisfaction scores as independent ones. The multicollinearity is tested using a variance inflation factor (VIF).

The changes in domain and life satisfaction relative to the time of migration are derived applying fixed effect models, separately for each domain. To capture the time path of the migrants’ satisfaction a series of dummy duration variables are created. They denote the number of years before or after a migration event. The details of dealing with individuals who migrate more than once are presented below. The model is specified as:

$$DS_{it} = \alpha_i + \beta \mathbf{X}_{it} + \sum_{k=-T_1}^{T_2} \theta_k M_{it}^k + \varepsilon_{it}, \quad (1)$$

where DS_{it} denotes domain satisfaction of individual i in period t . The individual fixed effect, α_i , controls for any time-invariant heterogeneity. \mathbf{X}_{it} is a vector of time-varying covariates and ε_{it} is a stochastic error term. The dummy variables, M_{it}^k , indicate if an individual i migrates in period $t-k$, with k indexing the variables beginning T_1 years before and ending T_2 years after migration. The last time category refers to all years beyond T_2 . For instance, $M_{i2000}^3 = 1$ if an individual i migrated in 1997. In other words, in 2000 he or she has been living in a current place of residence for three years. If $M_{i2000}^{-3} = 1$, it indicates that a person i will change a place of residence in 2003. The parameters θ_k measure the effect of migration on domain satisfaction prior to ($k < -1$) and following the move ($k \geq 0$).

Note that multiple migrants add a major complication to the analysis, because years between two subsequent migrations are both before and after a move. We assume that there is only one effect for each year either in anticipation of or adaptation to a move. An anticipation effect takes precedence over the adaptation effect back to year T_1 . Shortening this threshold has very limited impact on the substantive results. The model was also run with years between migrations representing both a lag and lead effect at the same time. This produced very similar trajectories of domain satisfaction.

This modelling approach originates from economic literature on earnings losses of displaced workers (Jacobson and LaLonde 1993; Couch 2001; Couch and Placzek 2010; White 2010; Couch *et al.* 2011). In analysis of life satisfaction similar models were used by Clark *et al.* (2008) and Frijters *et al.* (2011) to evaluate the effects of major life events (a change of residence was included in the latter study) on overall life satisfaction. A study by Nowok *et al.* (2012) focused exclusively on the effects of migration. We use a linear model instead of an ordered response regression because of the ease of interpretation and a negligible impact on substantive results (Ferrer-i-Carbonell and Frijters 2004; Clark *et al.* 2008).

5. RESULTS

5.1 RELATIONSHIP BETWEEN LIFE SATISFACTION AND DOMAIN SATISFACTION FOR MIGRANTS AND STAYERS

Migrants are, on average, significantly less satisfied with their lives than stayers. The average overall life satisfaction judgements for migrants and stayers are respectively 5.16 and 5.30 on the seven point scale used by the BHPS, 1 being least satisfied, 7 being most satisfied. Migrants are also, on average, less satisfied than stayers with specific life domains.

Table 1 presents the eight life domains for which the BHPS collects detailed information. It can be seen that, for both migrants and stayers, only satisfaction with spouse and with housing exceeds the score for overall life satisfaction. On all other domains respondents were less satisfied than for life overall.

	Life overall	Spouse	House	Health	Job	Social life	Use of leisure	Amount of leisure	Income
Migrants	5.16	6.17	5.22	5.00	4.97	4.86	4.75	4.62	4.49
Stayers	5.30	6.27	5.61	4.92	5.09	5.03	5.03	5.03	4.66

Table 1 Average domain and life satisfaction of migrants and stayers

Table 1 presents specific life domains in order of the migrants' satisfaction level. From the perspective of this paper, of greater interest than noting the low levels of satisfaction with amount of leisure or income, is the difference between migrant and stayer satisfaction for each domain. The greatest statistically significant absolute differences are recorded for housing, amount of leisure and use of leisure. Since housing satisfaction elicits one of the most significant differences between stayers and movers, this is the main focus for our analysis later in this paper. Prior to this, to get insights into the relationship between life satisfaction and domain satisfaction of migrants we examined the correlation between satisfaction judgements. Correlations of satisfaction across domains of life and life overall are all positive (Table 2). This confirms a general tendency found in the literature (Schimmack 2008). Positive correlation values indicate that, in general, if individuals are satisfied with some aspects of their life they are also satisfied with others and with life overall. Overall life satisfaction correlates most strongly with social life satisfaction. The correlation coefficient equals 0.64 and is significantly higher than correlation coefficients for other life facets. Nonetheless, the relatively high values of coefficients for other domains suggest that each of them may provide additional useful information. For most domains, the correlation with overall life satisfaction is the strongest one. The exceptions are the variables of social life, amount of leisure and use of leisure which are strongly correlated with each other.

By contrast housing satisfaction is much less strongly correlated with other variables, although the coefficients remain significant at the 1% level. Migrants' housing satisfaction is more closely correlated with overall life satisfaction and income than with any other variable. This raises the issue of the direction of any causal links between these variables, an issue discussed by other researchers such as Cohen (2000), Rojas (2006) and González *et al.* (2010).

	Health	Income	House	Spouse	Job	Social life	Amount of leisure	Use of leisure	Life overall
Health	1.00								
Income	0.39	1.00							
House	0.28	0.43	1.00						
Spouse	0.23	0.23	0.33	1.00					
Job	0.32	0.42	0.29	0.27	1.00				
Social life	0.39	0.38	0.35	0.39	0.39	1.00			
Amount of leisure	0.25	0.30	0.31	0.28	0.33	0.60	1.00		
Use of leisure	0.36	0.35	0.35	0.35	0.33	0.71	0.68	1.00	
Life overall	0.52	0.49	0.44	0.53	0.52	0.64	0.48	0.61	1.00

Table 2 Correlations of satisfaction across domains of life and life overall for migrants (Goodman-Kruskal gamma)^a

Notes: ^a all correlation coefficients are significant at the 1% level

High levels of correlation between the independent variables lead to a multicollinearity problem in regression analysis. In the researchers' work multicollinearity was judged to be a problem between the social life, amount of leisure and use of leisure variables and as a result the latter two were dropped from the model presented below. Only social life was kept. For clarity and without losing much information, other results on life satisfaction in relation to amount and use of leisure are also not reported in the remainder of this paper.

More often than not, migration is viewed as a selection process that filters certain types of person. It is worthwhile, therefore, to explore whether migrants are distinctively different from stayers in terms of domain and life satisfaction structure. A comparison between correlation coefficients for migrants and stayers reveals some key differences between the two groups. Most of the associations between satisfaction with different domains are significantly (at 1% level) weaker for migrants, although tabulated evidence is not included in this paper for space reasons.

In order to evaluate in a more systematic way the importance of different domains for the overall life satisfaction of migrants we estimated an ordinal logistic regression with the overall life satisfaction as a dependant variable and domain satisfaction scores as independent ones. A variance inflation factor (VIF) was calculated for each predictor variable. No multicollinearity was detected. Results show that satisfaction with each domain considered has a significant positive effect on

overall life satisfaction (Table 3; domains are presented in descending order of importance for migrants).

Variable	Migrants		Stayers	
Social life	0.66	(0.009) ^b	0.77	(0.011)
Spouse	0.54	(0.009)	0.46	(0.010)
Health	0.41	(0.008)	0.39	(0.009)
Job	0.35	(0.008)	0.35	(0.009)
Income	0.26	(0.009)	0.24	(0.009)
House	0.20	(0.008)	0.25	(0.010)

Table 3 Ordinal logistic model of overall life satisfaction for migrants and stayers in relation to satisfaction with different life domains^a

Notes: ^a all coefficients are significant at 1%; ^b standard errors in parentheses

Overall life satisfaction is most closely associated for migrants with their social life but not as much as for stayers. The lower coefficient for migrants than for stayers is not surprising since social ties are one of the most important factors that prevent people from moving. Migrants seem to value their spouses more highly than stayers. This may seem intuitive because spouse is the most important social connection they have after moving, while for stayers other aspects of their social network are not ruptured. Table 3 suggests housing is the least important domain of overall life satisfaction for both migrants and stayers. In the case of migrants this may seem surprising, given that their moves are often motivated by housing considerations. We return to this paradox later.

5.2 RELATIONSHIP BETWEEN DESIRE TO MOVE, MIGRATION AND SATISFACTION.

Regardless of the importance of the specific life domain for migrants, migration might or might not be a possible and effective means for increasing their satisfaction and achieving happiness. We turn now, therefore, to analysing the relationships revealed by the BHPS with survey respondents' 'desire to move' as well as their observed mobility. The coefficients of correlation between satisfaction in various facets of life and desire to move are all significantly lower than zero (Table 4). Logically, the less satisfied people are, the more they desire to move. Those dissatisfied with housing especially demonstrate a strong preference to move. Correlations between satisfaction in various domains and migration are statistically significant but their values are close to zero. Patterns of housing satisfaction, by contrast, remain distinctive with the

strongest inverse association (-0.36) indicating that those most dissatisfied with their housing are amongst those most likely to move. Dissatisfaction in the housing domain is therefore the most powerful trigger both for ‘desire to move’ and also for migration.

Domain/life satisfaction ^b	Desire to move	Migration
House	-0.56	-0.36
Income	-0.23	-0.10
Social life	-0.21	-0.03
Job	-0.16	-0.05
Spouse	-0.14	-0.09
Health	-0.09	0.02
Life overall	-0.26	-0.10

Table 4 Correlation coefficients for desire to move, migration and a range of life satisfaction variables (Goodman-Kruskal gamma)^a

Note: ^a all correlation coefficients are significant at the 1% level; ^b for domain/life satisfaction-migration correlation, satisfaction is measured before the move

In the previous paragraph we showed that some differences are evident in the BHPS between ‘desire to move’ and the actual process of migrating (Table 4). Extending this point, the researchers noted a significant difference between those having a sustained desire to move over many years (measured as a consistent desire to move for at least four years) and other movers, in terms of a reported switch in housing satisfaction before and after a move. About 68% of those who reported a sustained desire to move were happier with their house after migration than they were prior to it, which is approximately 20 percentage points higher than for other movers who had no long established desire to move. For other life satisfaction domains a sustained desire to move had a much smaller impact on the percentage of respondents reporting increases and decreases in wellbeing (Figure 1). Amongst those who reported a sustained desire to move, housing emerges as the life domain that produces the most significant increase in wellbeing associated with migration. Logically, this may result from the relatively high chance of ‘desire to move’ and subsequent migration to be motivated by housing dissatisfaction. A desired move for a housing reason should bring the highest gains in housing wellbeing because of the prioritization of this domain over other domains.

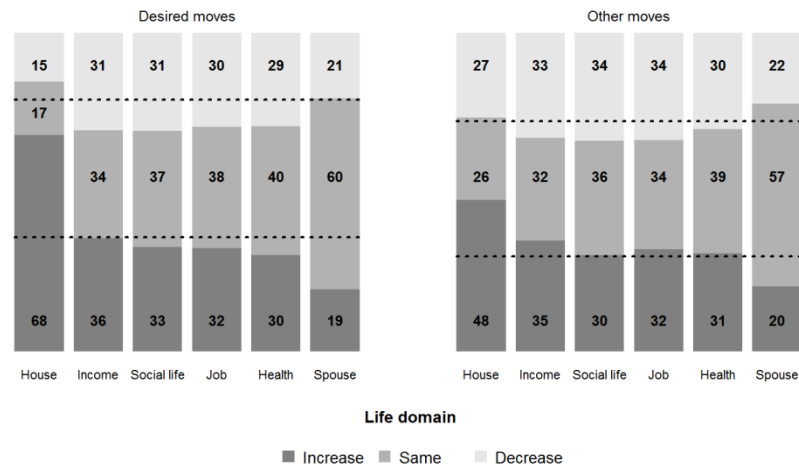


Figure 1 Percentage of migrants who reported increased, decreased and same satisfaction level after desired moves (left panel) and other moves (right panel), compared to before it; dotted lines indicate percentages for satisfaction with life overall

In the BHPS dataset, most individuals with a sustained desire to change place of residence (60%) wanted to do this because of housing or ‘area’ considerations (Table 5). Desired moves are less often motivated by personal and job reasons than is true for moves which were not desired. This should not be surprising since when a family moves for ‘job reasons’ this usually reflects a job change for just one member of the household, leaving other members of the household engaging in an undesired move. Similarly moving for ‘personal reasons’ includes a mix of positive and negative circumstances such as divorce or downsizing of a house following death of a partner.

	Job change	Personal	House	Area	Other ^b
Desired moves	5.0	17.1	44.6	15.9	17.4
Other moves	8.9	25.1	33.3	6.6	26.1

Table 5 Migration reasons for desired and other moves (percentage of all reported reasons)

Note: ^a ‘other’ includes forced moves, moves for educational related reasons and reasons classified as ‘other’ in the BHPS.

A comparison of housing satisfaction in terms of percentage of respondents whose wellbeing increased or decreased after migration suggests that regardless of reason for migration people who had a sustained desire to move had a higher chance of increasing their satisfaction with their housing through migration than most other movers (Figure 2). Nonetheless, even the latter group of migrants has the highest chance of improving their housing satisfaction after migration.

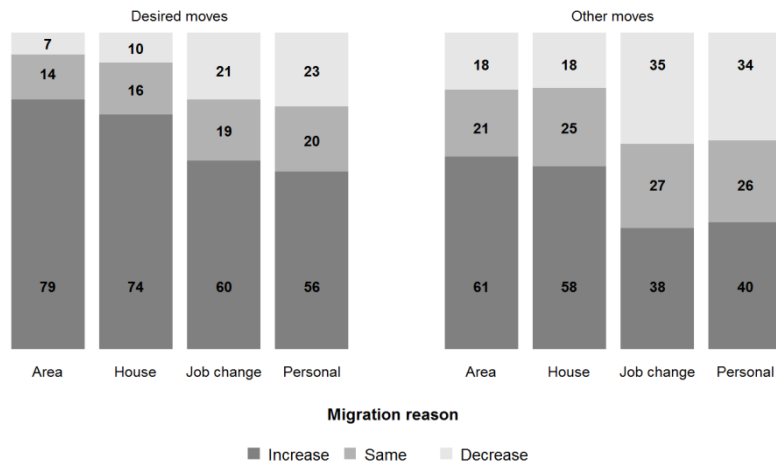


Figure 2 Percentage of migrants who reported increased, decreased and the same housing satisfaction level after desired moves (left panel) and other moves (right panel), compared to before, by migration reason

Thus, migration can enable adjustments to desired housing conditions, even if the primary reason for migration was different (i.e. not primarily driven by housing ambitions). For those with a sustained migration desire that move for area- and house-related reasons it is almost certain that they will not worsen their housing situation (the chance of being worse off after move is only 7% and 10% respectively).

5.3 SATISFACTION TRAJECTORIES BEFORE AND AFTER MIGRATION

A key issue is whether migration leads to enduring improvements in how people feel about different aspects of their lives. The changes in satisfaction observed just after migration, which were shown in the previous subsection, may be only transient, as suggested by the set point theory of wellbeing. Analysis of satisfaction with specific domains a number of years before and after migration using a fixed-effects model reveals significant changes in housing satisfaction relative to the timing of moving. Figure 3 graphs the coefficients of the fixed-effects model for the five years before and after migration. It is particularly valuable because it offers an original insight using longitudinal information about migration and life satisfaction and is one of the primary contributions of this paper. Unlike most small scale sample surveys of migration that ask only about migration and migrants' feelings after moving, Figure 3 uses longitudinal data from the BHPS to allow analysis of year on year changes in life satisfaction for people who became migrants in year zero. Figure 3 goes further in

allowing longitudinal analysis of different domains of life satisfaction before and after an individual's move. Not surprisingly, people are dissatisfied with many aspects of their life ahead of migration, but Figure 3 hints that housing dissatisfaction is particularly problematic and that dissatisfaction enters a distinct trough in the year before an individual's move. To facilitate legibility, Figure 3, only charts migration and three life domains, but the researchers analysed all the domains reported in Table 1, and only in the case of housing is a high positive coefficient achieved both in the year of migration and subsequently.

Moving into a new home increases housing satisfaction considerably. If migration has a very positive effect on housing satisfaction, this tends to decrease to some extent over time. This is not surprising since with the passage of time continuing life course changes, amongst other factors, will mean the 'new home' no longer matches the migrants' needs quite so well (e.g. if a couple experience the growth of their family as a result of having more children). Nonetheless, the very point emerging from the fixed-effects model is that five years after migration, housing satisfaction is still significantly higher than it was initially. This was not true for any of the other seven life domains.

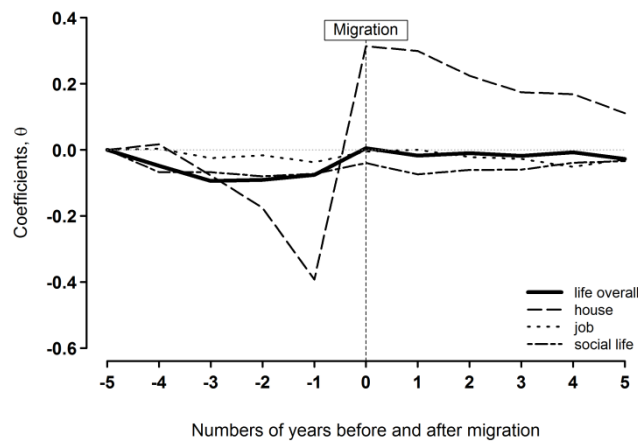


Figure 3 Dynamic effect of migration (all migrants) on life satisfaction and selected life domains

Changes in satisfaction with other life domains are much less pronounced at the time of migration and no lasting improvements in satisfaction were observed for other domains in the years following migration.

The idea that migration is responsible for a lasting increase in housing satisfaction is supported by comparing the scores of those who desired to move and those who moved but had no sustained desire to do so. The positive effect of migration on housing satisfaction is much stronger and endures longer for those with a sustained desire to move (Figure 4, left panel). Therefore, a sustained desire for migration is not just a reflection of stress factors, but appears to be associated with enduring benefits for the mover in terms of their life quality many years after migration. A sustained desire to move does not appear, however, to have as strong and enduring an effect when the measure of overall life satisfaction (i.e. not relating to any of eight specific life domains) is used (Figure 4, right panel). Nonetheless, a desired move has a short-term positive effect on happiness, which is not the case for the other moves.

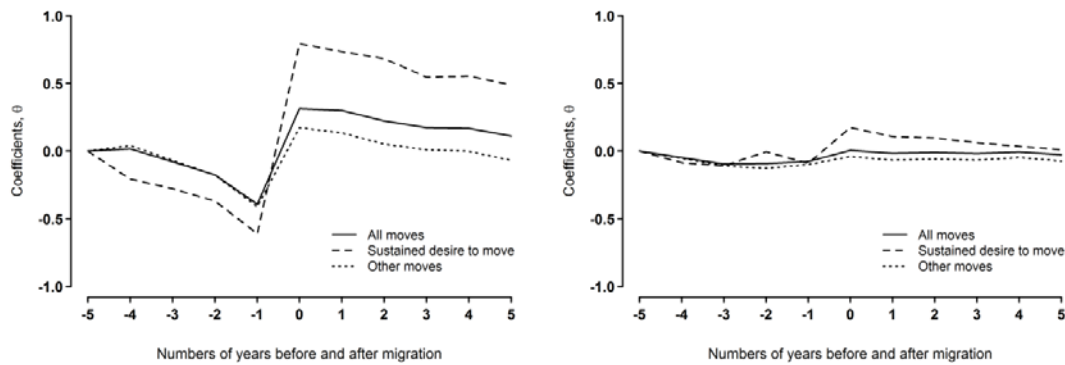


Figure 4 Dynamic effect of migration on satisfaction with the housing domain (left panel) and life satisfaction overall (right panel) by desire to move

However, people who do not express a desire to move, but despite this eventually migrate (for example because of a spouse’s job relocation) also become happier with their housing conditions after migration but the statistically significant positive effect disappears after three years (Figure 4 and Table 6). Moreover, the range of changes in housing satisfaction is much smaller than for those with a sustained desire to move. The fact that desired moves are preceded by a significantly larger drop in housing satisfaction than other moves also contributes to the resulting differences.

Variable	Desired moves		Other moves	
<i>No. of years before and after migration</i>				
-4	-0.207***	(0.065)	0.040	(0.033)
-3	-0.277***	(0.065)	-0.069**	(0.032)
-2	-0.368***	(0.066)	-0.178***	(0.031)
-1	-0.610***	(0.069)	-0.411***	(0.031)
0	0.795***	(0.074)	0.174***	(0.030)
1	0.736***	(0.080)	0.134***	(0.033)
2	0.684***	(0.086)	0.052	(0.034)
3	0.548***	(0.090)	0.010	(0.036)
4	0.555***	(0.097)	-0.001	(0.038)
5	0.488***	(0.111)	-0.068*	(0.039)
Age	-0.059***	(0.014)	-0.029***	(0.004)
Age squared/100	0.055***	(0.012)	0.032***	(0.005)
<i>Marital status</i>				
Married / living as couple	-0.495***	(0.078)	-0.011	(0.023)
Widowed	-0.508***	(0.145)	0.002	(0.059)
Divorced	-0.436***	(0.118)	-0.099**	(0.041)
Separated	-0.485***	(0.125)	-0.168***	(0.044)
<i>Labour market status</i>				
Unemployed	-0.107	(0.075)	-0.090***	(0.027)
Student	-0.036	(0.090)	0.088***	(0.027)
Long term sick, disabled	-0.286***	(0.090)	-0.105***	(0.036)
Child born this year	-0.036	(0.056)	-0.037*	(0.021)
Number of children	0.043*	(0.022)	-0.012	(0.009)
<i>Housing tenure</i>				
Owned with mortgage	0.057	(0.052)	0.136***	(0.022)
Local authority rent	-0.735***	(0.080)	-0.370***	(0.032)
Other rented	-0.293***	(0.075)	-0.333***	(0.026)
<i>Type of accommodation</i>				
Semi-detached	-0.269***	(0.047)	-0.169***	(0.019)
Terraced house	-0.433***	(0.056)	-0.291***	(0.021)
Flat	-0.886***	(0.072)	-0.482***	(0.025)
Other	-0.351***	(0.114)	-0.461***	(0.038)
Shortage of space	-0.464***	(0.031)	-0.452***	(0.013)

Table 6 Fixed-effects model of housing satisfaction; the coefficient estimates for desired moves (a sustained desire to move) and other moves ^{a, b}

Note: ^a coefficients on wave dummies are not reported; reference categories are never married, owned outright and detached; ^b standard errors in parentheses; c in thousand pounds; * significant at 10%, ** significant at 5%, *** significant at 1%.

Table 6 includes coefficient estimates for a set of control variables. People living in a flat are significantly less satisfied than those living in a detached house. Similarly, living in a property rented from a local authority is associated with lower housing satisfaction compared to living in an owned property. These relations are stronger for

those who desire to move. Thus, a sustained desire to move may reflect a desire to live in one's own house. Besides, among those who desire to move, those never married report significantly higher housing satisfaction than other groups. For other movers we observe a significant negative impact of being divorced or separated, which suggests that people forced to move for personal reasons end up living in a less satisfactory dwelling.

6. CONCLUSIONS

The long history of migration research on residential mobility has received a major impetus in recent times with the availability of longitudinal datasets that have permitted new insights into the correlates of people's migration histories. In place of cross-sectional analysis of the relation between migration and a range of features such as quality of life, it has become possible to analyse migration longitudinally and to show for the first time how the drivers and experiences of migration alter over time. The growing availability of longitudinal datasets has opened the possibility of new conceptions linking residential dissatisfaction (Diaz-Serrano and Stoyanova 2010), moving desires (Ferreira and Taylor 2009) and the final action of subsequently moving to another location (Lu 1998).

The potential of longitudinal data has also meant a methodological shift in favour of approaches that control for unobservable heterogeneity across individuals (Boyce 2010). In migration research this has brought the exciting prospect of being able to model how the drivers of migration and the life experiences of migrants change in the years before movement and in the years after migration. The major contribution of this paper has been to undertake this exercise for a UK panel dataset that has permitted investigation of the variation of people's expressions of life satisfaction in eight different domains both before and after migration. This has opened up the possibility for the first time of asking whether migration makes people stressed or happy in relation to features as diverse as their marriage situation and their job prospects.

The longitudinal data analysed in this paper show for the first time that life satisfaction changes over time in relation to migration in very different ways for

different domains of life. Three key findings emerged from the subsequent analysis. First, it was shown that migrants and stayers rated some life domains very differently from their overall life satisfaction, with housing being the domain that was least strongly associated with overall wellbeing scores. These results complicate the findings of previous research on migration and wellbeing that was based only on overall life satisfaction scores (Nowok *et al.* 2012) and demand that researchers attempt more nuanced understandings of the relationships between migration and feelings of (dis)satisfaction over time with different dimensions of life.

Second, the research benefitted from using the BHPS in being able to identify people who desired to move from others in the population (e.g. those who moved but did not desire to). This allowed the researchers to test if ahead of migration those who desired to move held specific patterns of life (dis)satisfaction. The domain that emerged as the strongest source of dissatisfaction was housing. This was even more strongly correlated with a desire to move than with the action of actually migrating. From this one may deduce that, were it not for a range of constraints, many more people would migrate because of unhappiness with their housing.

Thirdly, and most crucially, the research provided evidence that breaks new ground in terms of revealing the long-run benefits of migration. Longitudinal analysis has previously shown that measures of overall life (dis)satisfaction vary over time ahead of migration taking place (with the pattern typically being of rising unhappiness before a move, followed by a return to previous levels of satisfaction after a move – Nowok *et al.* 2012), the research reported in this paper shows that migration can have a longer lasting impact on some life domains. In the case of satisfaction with housing it has been shown that migrants, especially those who desired to move, reported a year on year sustained improvement in their life satisfaction. Wellbeing in this instance endured long after migration and at a level of wellbeing that was significantly higher than existed five years before the migration event.

Long-term improvements in housing satisfaction contradict hedonic treadmill theory which suggests that adaptation to a new quality of life means that only short term changes in happiness are possible (Brickman and Campbell 1971; Headey and Wearing 1989; Lykken and Tellegen 1996). By contrast a similar housing satisfaction

pattern to that found by the current authors was reported by Nakazato et al (2011) for Germany. Migration is, therefore, not merely an external stressor but a potentially positive process. By seeing migration as a process imbued with meaning by movers and non-movers alike one can come closer to comprehending why subjective wellbeing varies not only immediately before and after the event of relocation, but also over the longer run in relation to the lived experiences of those contemplating a move and those experiencing the consequences of a move. Those fulfilling their sustained desire to move experience very substantial and lasting improvements in housing satisfaction as they move through the life course (Bailey 2009). Nonetheless, increases in housing satisfaction are found also for other migrants. Moving home may be seen as a means to housing improvements regardless of the primary motive for migration.

(Dis)satisfaction with housing is the main factor driving mobility in our sample, which may, at least partially explain the less pronounced changes in satisfaction with other life domains. Nonetheless, there is a significant drop in social life satisfaction of migrants before moving home and it does not recover thereafter. Migrants focusing on housing issues may neglect the impact of breaking various bonds with current location on their overall satisfaction with a new place of residence. Positive changes in housing satisfaction are not therefore necessarily reflected in satisfaction with life overall. Logically, this can be explained by the small contribution of housing satisfaction to overall life satisfaction and the effect on individuals of faring worse in other, more crucial, life domains as a result of migration.

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