

A happy family?

Happiness outcomes of family-motivated migration

G.H. Westra

S2748878

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GEMTHPOPST

Supervisor:

Prof Dr C.H. Mulder

Date:

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University of Groningen

Faculty of Spatial Sciences Population Research Centre

Abstract:

This research combines two broad social approaches to studying internal migration: that of family ties and the effect of moving on wellbeing. Literature shows that the proximity to family takes up a significant portion of motivations behind moving. Further, social relations are found to be important for happiness. Hence, this research studies the effect that a family motivated long-distance move has on happiness as compared to having a different motivation or not moving. A life-course approach is taken to study migration, framing happiness from set-point theory. Using the UKHLS, a longitudinal approach is adopted. A clear selection into family-motivated migration of older, non-working, and unhealthier individuals is found. Furthermore, when taking the time since moving into account, it is found that family motivated movers are happier than non-family motivated movers in the long term, however their increase in happiness after moving starts later. Furthermore, it appears that especially those who move to form a union and those who move to be closer to the family are happier, the latter in the long term. No significant impacts on happiness after moving are found for those who move after separating and tied movers. The research concludes that the different motivations behind migrating matter in terms of happiness. Furthermore, an indication that proximity of family ties increases wellbeing is found.

Keywords: long-distance moves - migration– happiness – family ties – longitudinal analysis – internal migration

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1.0 Introduction

Traditionally, the outcomes of a migration have been measured in the economic domain and in financial terms (Nowok et al., 2013). However, it is often assumed that a migration is made with the expectation of an improvement in the quality of life (Hendriks & Bartram, 2018). Therefore, Bartram and Hendriks (2018) argue that the wellbeing of migrants in relation to their long-distance move should be central in research studying mobility to better understand the process and decision-making around mobility. Furthermore, it can be argued that happiness is the highest achievable goal in life (Frey & Stutzer, 2002) and, therefore, should be the central outcome measurement of life-decisions. Similarly, there is an increased awareness that policy outcomes should be measured by their effects on wellbeing (Frijters et al., 2019; Nowok et al., 2013). Nevertheless, very little is known about the exact relation between happiness and moving (Hendriks & Bartram, 2018). However, it is likely that moves, especially over long-distance, have an impact on happiness.

Indeed, a few studies find evidence that migration and happiness are interlinked. For example, Nowok et al. (2013) find a clear decline in happiness before the migration and a restoration of original levels over time after moving using British data. Erlinghagen et al. (2019) report a post-migration increase in happiness as well. However, they note that there are differences in happiness outcomes depending on the economic status, the destination of the move, and the characterisation of the move, albeit that they follow the same pattern. Therefore, it is relevant to study how the motives for moving affect happiness.

An interesting and under-researched motivation in relation to happiness is family-related migration. There is evidence that social relations have a tremendous impact on happiness: for example, marriage is universally found to have a positive impact (Ballas, 2013; Diener et al. 2018; Frey & Stutzer, 2002), while widowhood has a negative impact (Diener et al. 2018; Frey & Stutzer, 2002; Frijters et al., 2011). In terms of migration, the role of the family has been under-researched as a result of the economic paradigm as well. Furthermore, it is often assumed that long-distance moving is mostly done out of labour and education motivations and that social motivations most lead to residential mobility (Böheim & Taylor, 2002; Nedomysl, 2011). Nevertheless, family ties can be important providers of care and tend to be key actors in an individual's network (Mulder, 2018). Long-distance family motivated moves are especially interesting because support and contact with the family that was not available before becomes a possibility with such large distances, as instrumental support from the family is dependent on geographical proximity (Mulder & Van Der Meer, 2009).

Therefore, this research proposes to address these two gaps in migration research and study the effect of family motivations on the outcomes of a long-distance move in terms of happiness. In this research, a threshold of 25 kilometres is used as the demarcation between short distance moving and migration, as that approaches the distance to which someone cannot maintain their previous social network fully anymore (Nowok et al., 2013). Throughout this paper, long-distances moves and migration are used interchangeably, referring to a move of over 25 kilometres. Furthermore, the term move refers to migration as well, unless specified otherwise. In the few instances of discussions about short distance moving, the term relocation will be used. This leading question in this research is "How does family motivated internal migration affect happiness?". Furthermore, some secondary questions have been formulated. Firstly, it is addressed whether there is a selection of certain people into family motivated migration, for example by happier people. Secondly, it is explored how family motivated movers are different from those who do not move and those who move for other reasons. Thirdly, not all family motivated moves are the same. Hence, it can be questioned whether

having different family-related motivations to move lead to different outcomes. To answer these questions, a quantitative longitudinal approach has been taken using data from the Understanding Society Panel Survey (UKHLS).

2.0 Theoretical framework

2.1 Life-course approaches and migration

It is generally hypothesized that the decision to move originates from a disequilibrium: a person moves once the housing and geographical factors do not match their needs anymore (Coulter & Van Ham, 2013; Nowok et al., 2013). If there is a disequilibrium between needs and conditions, housing stress accumulates to a point that one moves. Where one moves is determined by several factors, ranging from information about available locations, previous experiences, and aspirations of an individual (Coulter & Van Ham, 2013). A very suitable framework to combine these aspirations and experiences that can create disequilibria and shape the decision to move is the life-course approach.

The life-course approach has been the dominant framework to study migration in recent years (Coulter et al., 2016). The life-course approach is designed to study the order and form of events over an individual's life. To do so, the life course approach conceptualizes careers in several aspects, such as housing, employment, and partnering. These trajectories can be summarized in biographies (Bailey, 2009; Coulter et al., 2016), which make it possible to study how long-term ambitions and sequences of life events in different trajectories shape life events and life-course careers (Coulter & Van Ham, 2013). For this research, these trajectories are incorporated by using a longitudinal approach, which enables to study the relation between happiness and moving the years before and after migrating.

Especially relevant for this research is the concept of relationality, proposed by Findlay et al. (2015). This is the idea that life-courses cannot be understood separately from their social, institutional, and time setting. One implication of this is that life events do not stand on themselves as discrete moments, but rather as long-term transitions induced by contextual and timing factors (Bailey, 2009; Coulter et al. 2016; Findlay et al., 2015). Crucially, relationality manifests itself on the micro-level through linked lives (Bailey, 2009): the phenomenon that life courses interlink and influence each other: for example, through marriage and divorce (Thomas et al., 2017). This relationality is clearly linked with family ties: events in a life-course of a family member can influence a move towards them or dissuade a move away from them. Indeed, one can argue a family motivated move is a manifestation of life-course trajectories linking or de-linking. Furthermore, the presence of someone else can have an effect on the satisfaction with life-course and, therefore, lead to higher happiness. For example, the presence of a partner through marriage (Diener, et al., 2018; Plagnol, 2010) or of a child (Clark et al., 2008) affect happiness.

2.2 Family ties and migration

As aforementioned, social motivations for moving have been underemphasized in migration studies. Nevertheless, in-household family ties have received quite some attention in scholarship, most particularly in regard to household migration. A major area of studies is that of tied movers: those who move because of someone else in their household moves (Cooke, 2003; 2008b). There are two main theories conceptualizing the decision of a household to migrate: the human capital model and the gender role model. The former posits that a household makes an informed decision considering the increase in the pooled utility of the household after moving. Nevertheless, as husbands are often older and the breadwinner of mixed-sex

households, migration decisions tend to be in favour of men. Conversely, the gender role model of household migration pays more attention to the gender dynamics of mixed-sex households. This model posits that women tend to have less power in the migration decision and are, furthermore, socialised in putting family first and entering careers that can more easily be combined with family care (Cooke, 2003). Empirical studies indeed reveal gendered patterns resulting from household migration, as women tend to be tied mover more often. Furthermore, women, especially mothers, tend to have more often negative labour outcomes from a household move than men (Cooke, 2003; 2008b). Moreover, it is found that income gains are made by the male partner, while women do not have a change in income, even if they are the higher earner in the couple (Cooke, 2003). Lastly, in same-sex couples, there is no such clear divide in labour market outcomes between partners which might be an effect of an absence of traditional gender roles (Cooke, 2005). In mixed-sex couples that hold egalitarian views on gender, the labour market status of the wife matters more in the decision to migrate than couples who hold traditional gender views (Cooke, 2008a). Therefore, there are strong indications that the gender model of household migration is more suitable to explain the decision and outcome of household migrations. To some extent, this model of decision-making might apply to the decision where to live together when moving in together to form a union or whose family to move closer to.

In the case of ties to non-resident family, a reason to move towards the family can be found in the support that family networks provide. According to Mulder (2018), the family is still important for providing support, telecommunications do not fully replace the value of face-to-face family contact to maintain such support networks, and geographical proximity is prerequisite to access such support. In the decision to migrate, access to such support can be considered desirable. Consequently, support from the family becomes a reason for staying put or a reason to prefer one region over the other. Furthermore, family ties can provide information about a region and, therefore, make the costs of finding employment or suitable housing lower compared to regions where no family lives (Mulder, 2018). Beyond simple cost-benefit analysis, family lives are deeply linked. Indeed, unlike friends, a family is not chosen. In fact, relations to the family are durable and typified by feelings of responsibility for each other, especially between siblings, parents, and children (Mulder, 2018). Thus, family ties provide support and could ease the moving process, while also being generally some of the most important social ties an individual has.

The premise of family ties as a magnet with regards to the decision to migrate is backed up by empirical evidence: living longer than a one-hour drive away from parents increases the propensity of long-distance moving (Ermisch & Mulder, 2019) and living geographically close to parents has been found as a negative factor predicting migration (Hünteler & Mulder, 2020; Michielin et al. 2008; Mulder & Malmberg 2011, 2014; Mulder & Wagner 2012). Furthermore, some life events such as loss of income, divorce, and injury can lead to moving towards the family and re-entry into coresidence with parents or children (Smits et al., 2010; Stone et al., 2014). Not only negative turning-point life events are associated with coresidence. For example, leaving education is also found to increase the probability of coresidence (Stone et al., 2014). This can be seen as another form of social support that needs geographic proximity. In the cases of coresidence with parents, the needs of the adult child are found to be more leading than the needs of the parents (Smits et al., 2010). Lastly, Stone et al. (2014) report that women in their early twenties in the United Kingdom tend to increasingly enter coresidence with their parents after studying.

However, the specific effect of being able to use those social resources from family ties is less straightforward: while instrumental support works as a deterrent to moving, emotional support has been found to increase the likelihood of migration. In the case of instrumental support, previous research has shown that a need for instrumental support from family both reduces the likelihood of moving away from family and increases the likelihood of moving towards family (Michielin et al., 2008). Furthermore, Mulder and Ermisch (2019) found that frequent interactions with parents and neighbours decrease the likelihood of moving. The amount of received support is found to be associated with distance (Mulder & Van Der Meer, 2009). Somewhat contradictory, the opposite seems to be the case with emotional support: Hünteler and Mulder (2020) found that the likelihood of migrating increases with the amount of emotional support from the family in Germany. A potential explanation might be that emotional support gives the required confidence for a long-distance move and that face-to-face contact is not necessary for the exchange of emotional support, unlike instrumental support.

As mentioned above, it is often assumed that a long-distance move is generally made out of labour and education motivations (Niedomysl, 2011). Nevertheless, the family is a substantial motivation for migration, albeit often secondary (Gillespie & Mulder, 2020). In fact, Caldera Sanchez and Andrews (2011) even report that in Germany, more people move over long distances for family motivations than for labour motivations. Niedomysl (2011) reports, based on Swedish data, that social motivations to move are the second most frequent motivation, after employment, and that proportion remains similar between short-distance and long-distance movers. Furthermore, women, younger individuals, and retirees are more likely to move out of social motivations (Niedomysl, 2011). Moving away from family is less often reported as a specific motivation than moving towards family members. An explanation for this might be that moving away from family is not an explicit motivation but an effect of labour motivated movers and that some reasons to move away from family can be stigmatized, traumatic, and highly private (Gillespie & Mulder, 2020). Furthermore, Caldera Sanchez and Andrews (2011) report that in larger-sized countries such as the United Kingdom, moving for labour motivations is more common than in smaller-sized countries, which might be due to commuting not being an option. Similarly, Faggian and McCann (2009) report a relatively high proportion of education motivated moves in the United Kingdom. Nevertheless, Caldera Sanchez and Andrews (2011) report family motivations to be more common than labour reasons in the United Kingdom.

Conclusively, there is considerable empirical evidence that family ties are of substantial impact on the decision to migrate. Indeed, the assumptions that family support needs frequent contact and geographical proximity are reproduced in several studies. The outcome is that family works as a magnet, either discouraging the decision to leave a region or encouraging to come regions where the family is present. Furthermore, family ties are durable and vital to the individual, making it desirable for those ties to be close. However, within the household, the needs of a spouse can lead to negative effects in the labour life-course trajectory for women in mixed-sex couples.

2.3 Happiness

2.3.1 Conceptualizations of happiness

Happiness is a subject that has received increasing attention from economists, sociologists, and psychologists alike (Ballas, 2013; Diener et al., 2018). While there is some distinction in terms used, such as happiness, life satisfaction, subjective wellbeing, or quality of life, most of the referenced literature on such terms uses the same sort of variables to measure them.

However, it is somewhat hard to define happiness exactly. What further confounds measuring happiness is that what is perceived to constitute a happy life is different over geography. In fact, Lu and Gilmour (2004) illustrated how Chinese students tend to define happiness as something embedded within social roles, and their American counterparts define happiness as a feeling stemming from individual liberty. Consequently, the Chinese adopt different strategies than their American counterparts to achieve happiness. Nevertheless, Lu and Gilmour (2004) also report important commonalities. Notably, both groups define happiness as a positive state of mind. Similarly, most scholars define happiness as an inclination to have positive feelings (Hendriks & Bartram, 2016; 2018; Veenhoven, 2000). Similarly, Nowok et al (2013) define happiness as a tendency to evaluate life positively, similar to Diener et al.'s (2018) description of subjective wellbeing as an overall evaluation of an individual of their lives. In that sense, happiness and high subjective wellbeing are the same.

Generally, there are two ways to measure happiness. Firstly, there are so-called objective measures of wellbeing. These often consist of indices tracking a score in certain domains, often reflective of access to goods as housing (Diener et al., 2018). Problematically, such measures often lack a method of weighing their different components correspondingly to the interests of the respondent. In addition, such measures can exclude factors that are important for the respondent in their happiness, which can include considerable factors as illustrated by the aforementioned cultural differences in conceptions of happiness. Therefore, it can be argued that objective measures of wellbeing measure the opportunity to be happy, rather than actual happiness (Hendriks & Bartram, 2018; Veenhoven, 2000).

Alternatively, there are subjective approaches to happiness. Often, these rely on questions among the lines of "How satisfied are you with life overall?". Self-evidently, subjective wellbeing is not the same as the well-being covered by objective measures (Diener et al., 2018). However, it does indicate that the minimum of living conditions for a person to thrive has been reached and that there is a minimum fit between opportunities and expectations (Veenhoven, 2000). Nevertheless, because of the self-reported nature of these measures, there are some concerns about its reliability. For example, Diener et al. (2018) give an elaborated overview of studies that report daily influences on the evaluation of life satisfaction such as the weather, the success of local sports teams, and general researcher induced mood boost. However, most of these mood and context effects are found in small-scale studies and have not been replicated (Diener et al., 2018).

A suitable theory to study happiness from a life course perspective is the set-point theory of happiness. This theory posits that there is a baseline of happiness, which is affected by life events but will return to previous levels over time (Nowok et al., 2013). For example, in figure 1, individual X has a baseline happiness of five out of seven. However, in year four of the observation, an undesired life event happens, and happiness is at a lower level for some years before being restored.

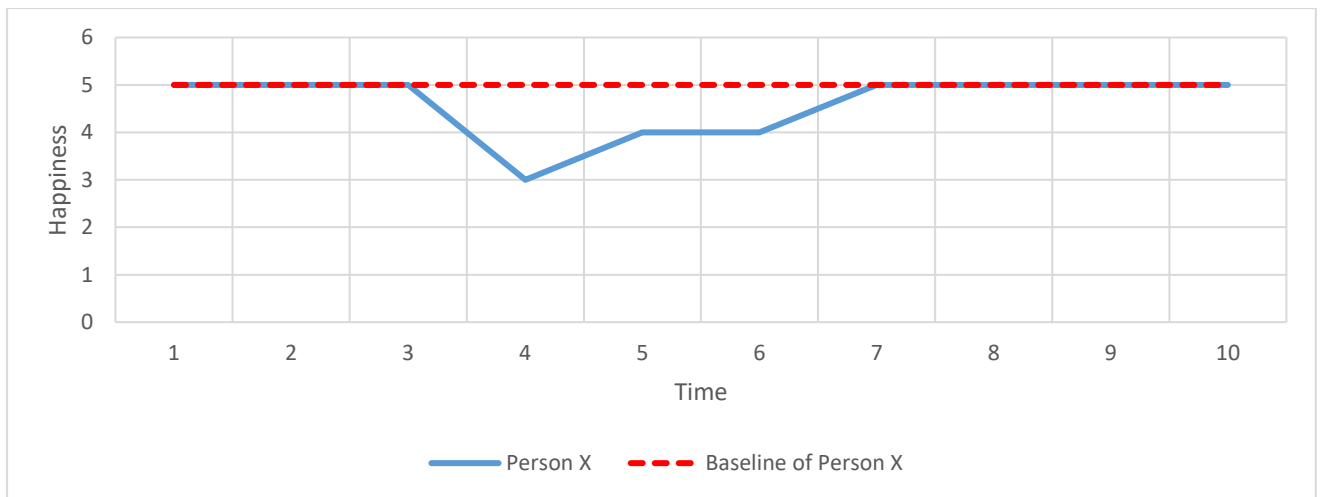


Figure 1: set-point theory of happiness

A central idea is that the baseline is set by genetics and personality (Diener et al., 2013; Nowok et al., 2013). However, there is increasing pressure to revise that assumption. For example, differences in average reported happiness are found between countries, a finding that differences in genetics and character cannot explain (Diener et al., 2018). Furthermore, despite strong effects of adaption for most life events (Frijters et al., 2011), it is found that some social life events have a lasting effect on happiness (Frijters et al., 2011; Nowok et al., 2013). For example, unemployment leads to long-term decreases in happiness (Clark et al., 2008). Indeed, most scholars reject a fixed baseline and assume that certain circumstances change the wellbeing trajectory. In fact, some life events adjust the baseline, while some other events are found to mirror the original premises of adaptation to a baseline (Nowok et al., 2013). In that sense, figure 1 can be specified in figure 2. In this case, an undesired life event, like job displacement, happens in year four of observation and permanently lowers the baseline to three. In year eleven, a desired life event happens, increasing happiness to four. However, its effects wear off and after two years reported happiness is back to the baseline level.

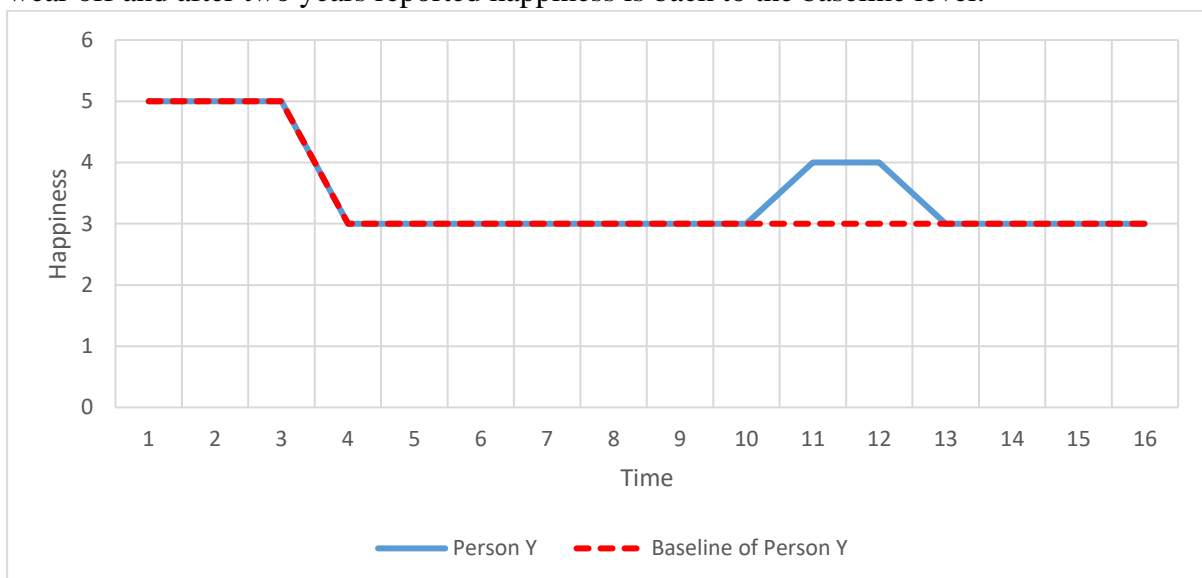


Figure 2: an updated model of set-point theory

2.3.2 Family and happiness

Family is one of the domains that has been argued and found to have a tremendous impact on happiness (Ballas, 2013; Frey & Stutzer, 2002; Plagnol, 2010). Therefore, this section will briefly explore different events within the family career and their relation to happiness.

Firstly, marriage does have a positive effect on happiness, but it is unclear whether marriage improves happiness short term or also long term (Ballas, 2013; Diener et al., 2018; Frey & Stutzer, 2002). However, the direction of this causality remains unclear, as it could be that happy people are more likely to form a union (Frey & Stutzer, 2002). In addition, there is evidence that adaptation after marrying is quick, with reported happiness returning to baseline levels (Diener et al., 2018; Plagnol, 2010). Similarly, Soons et al. (2009) report that happiness increases after marrying but decreases slowly over time. On the other hand, remaining single (never entering a union), is found to have a positive impact at a young age, but this impact decreases with the years (Soons et al., 2009).

Divorce, on the other hand, is found to have a negative impact on the short term. Furthermore, the years leading up to divorce are found to come with a decrease in happiness (Clark et al., 2008; Diener et al., 2018; Plagnol, 2010). However, in the subsequent years after the divorce, an increase in happiness is found, albeit not to previous levels of wellbeing (Diener et al., 2018). Soons et al. (2009) report a large decrease in happiness after divorce but report an increase over time and after starting a new partnership. Widowhood is another form of relationship change that has been found to have a negative impact on happiness on the longer term (Clark et al., 2008; Diener et al., 2008; Frey & Stutzer, 2002; Frijters et al., 2011; Plagnol, 2010), with little evidence of restoration of previous wellbeing levels.

With childbirth, a gender divide becomes apparent: mothers see an increase in happiness after the birth of their first child, and fathers do not (Kohler et al., 2005). Adaptation is, however, found to be quick (Clark et al. 2008). Interestingly, Engelhart and Schreyer (2014) report no effects for the timing of parenthood and later-life happiness. Rather, there are selection processes at work: individuals in more deprived situations start families earlier, with their situations leading to lower happiness.

Conclusively, partner formation is found to have a positive effect on happiness. However, it is unclear whether this is on the long-term or the short-term. Divorce, on the other hand, is found to have a negative effect. The duration of these negative effects is also somewhat unclear. Indeed, while adaptation overtime happens, some find a long-term decrease in happiness preceding the move. Furthermore, the relationship between happiness and the proximity of out of residence family ties on happiness are largely unexplored.

2.3.3 Migration and Happiness

The research on migration and happiness is relatively limited. As aforementioned, it is to be expected that life conditions improve after a move, as one would not move otherwise (Mulder, 2018). However, there are also some reasons to doubt whether long-distance moves will have such a positive impact. For example, the information that a mover has about their destination might prove to be incomplete or incorrect, resulting in disappointment (Hendriks & Bartram, 2018). In this sense, as mentioned above, the family can be a resource for information, which might lead to a better assessment of the decision to move, and therefore, higher happiness. Furthermore, moving can be a stressful event due to the high costs, new surroundings, and logistical difficulties. Indeed, it is found that even relocations over a small distance can be rather stressful (Boyle et al., 2008). In terms of happiness, this means that can be expected that happiness decreases before moving, as the environment is not experienced as suitable anymore.

As the family can provide help in the moving process by providing local knowledge, the moving process might be less stressful for those who move towards the family. For tied movers and those who move to form a union, it is not explored yet whether the human capital model or the gender role model of migration also apply to happiness after household migration. In fact, this might be mediated by the gender values the couple have. Indeed, if they have traditional gender values, the wife is more likely to be a tied mover (Cooke, 2008a). However, she might not necessarily see a decrease in happiness as her values shape her aspirations differently. If egalitarian values are held, aspirations of equality cannot be met through a tied move, and happiness might decrease.

A decline in happiness is indeed reported in the period preceding a relocation or a migration (Nowok et al., 2013). Interestingly, Nowok et al. (2013) report no significant differences between the effects of long-distance and short-distance moves. However, Erlinghagen et al. (2019) do not find a decline preceding a move, but marginally significant positive effects the years before the move. Fuchs-Schündeln & Schündeln (2009) find no preceding effects before moving in East-West migration in Germany. Erlinghagen et al. (2019) found an increase in happiness after moving which lasts in the long term. Similarly, Melzer (2011) finds a long-lasting increase in that same population. Based on Swedish data, an increase in happiness for Swedish young adults is found as well by Switek (2012), although only labour motivated moves are found to have a lasting impact. Additionally, the satisfaction with housing is often found to have improved after migrating (Findlay & Nowok, 2012; Nowok et al., 2018; Switek, 2016) although this increase does not necessarily translate into increased happiness (Hendriks & Bartram, 2018; Nowok et al., 2013; Switek 2016). Wolbring (2017) and Nowok et al. (2018) report a negative effect of housing satisfaction the years before moving, similar to the effects found for happiness before moving reported by Nowok et al (2013).

Nowok et al. (2013) also found an increase in happiness after moving for those that have the aspiration to move for a longer time. Fuchs-Schündeln and Schündeln (2009) have found that German permanent migrants that move from the former DDR to Western Germany have significantly higher levels of life satisfaction after migrating. Conversely, those who return migrate have no significantly higher differences before and after their decision to move.

In studying international migration, there is some research that finds short-term increases in happiness as well. It can be argued that the expectation that life will be better after moving is likely to turn out as true less often than with internal migration, as accurate information might prove harder to acquire for the migrant. Bartram (2011;2013;2015) found that both natives in the host society and stayers in their country of origin report higher happiness than international migrants. However, destination and origin matter: individuals who move to countries with higher liveability than their origin report positive outcomes in terms of happiness, while the opposite takes place when migrating to countries with lower liveability (Hendriks & Bartram, 2018). Furthermore, happiness does not increase over time after internationally migrating. This is generally explained by the fact that while the conditions of the immigrant might improve with integration, the migrants start comparing their life situation with their host society after some time, instead of their country of origin (Hendriks & Bartram., 2018).

In conclusion, the outcomes of migration in terms of happiness are unclear. Generally, an improvement of happiness is found, it either being an improvement or a restoration after a decline in happiness before moving. A reason for these differences can be the cultural differences in the used datasets, the greater difference between destination and origin (East-West migration in the German context), or a difference in methodology (Nowok et al. (2013)

exclude stayers from their analysis). The duration of effects on happiness is unclear due to conflicting findings. Furthermore, some findings point towards the importance of characteristics of the mover and the motivation behind the move (Erlinghagen et al., 2019; Switek, 2012).

2.3.4 Life-course and happiness.

Apart from family ties and migration, several other life-course domains and transitions affect happiness. In fact, two life-course domains have been found to greatly influence happiness besides family: health and finance (Plagnol, 2010). Firstly, in the financial domain, the effect of income on happiness is small. Indeed, there is some evidence of a minor positive relation between income and happiness (Ballas, 2013; Clark, 2003). However, some argue that this is an effect of other variables that increase happiness such as hours worked. Furthermore, there are some who argue that income relative to the national income distribution is more important than absolute income (Ballas, 2013; Clark, 2003). Additionally, some argue that the larger the income inequalities are within a nation, the larger the impact of relative income is (Ballas, 2013).

Moreover, unemployment is found to be one of the most negative life events in terms of happiness that one can experience, beyond factors that can be explained by loss in financial status (Ballas, 2013; Clark, 2003; Frey & Stutzer, 2002; Plagnol, 2010). Adaptation to unemployment is slow and is not found to happen fully. After reemployment, individuals who have experienced job displacement still report lower wellbeing. Timing matters in job displacement: the older one is when they lose their employment, the more negative the impact on happiness (Frey & Stutzer, 2002). Like marriage, the direction of causality is not completely clear: unhappy individuals lose their job more often, although job displacement has stronger negative effects than vice versa (Frey & Stutzer, 2002; Winkelmann, 2014). Furthermore, less educated individuals (Clark & Oswald, 1994) and women (Van der Meer, 2014) report lower negative impacts of job displacement. Not all economic inactivity has a negative impact, however, retirement is generally reported to have a positive effect on wellbeing (Plagnol, 2010).

Lastly, good health is found to be positively linked to happiness (Ballas, 2013; Frey & Stutzer, 2002; Plagnol, 2010). Once again, the direction of the relationship remains somewhat unclear: for example, Diener et al. (2018) state that happier individuals engage in healthier behaviour. Furthermore, not all ill-health is the same: health that limits mobility is found to reduce happiness. Nevertheless, there is some proof of adaptation after disability, but not to previous levels of happiness (Plagnol, 2010; Oswald & Powdthavee, 2008).

Moreover, the phase of the life-course a person is in also has an impact on happiness. In fact, the general level of happiness is found to be u-shaped over the life-course, being lowest at middle-age when corrected for material conditions (Blanchflower & Oswald, 2004). However, when these material conditions are not taken into account, the reverse is found: people are happiest at middle-age. In fact, age might have a concave effect, people tend to be in the best circumstances around middle age (Plagnol, 2010). Crucially, aspirations in certain domains differ over the life-course. For example, older individuals are found to find good health more important (Plagnol, 2010). Furthermore, for younger individuals, the ambition to have a happy marriage declines with age, being highest around the age of nineteen (Plagnol & Easterlin, 2008). In fact, it can be argued that after some of the more impactful life events such as marriage and childbirth, the weight of certain life-course trajectories will change. For instance, one will attach more importance to the partnership career after marrying (Plagnol, 2010).

Conclusively, employment and health have an unambiguous impact on happiness: unemployment and poor health are universally found to have a negative and long-lasting impact. Nonetheless, the effect of income is less straight-forward. Indeed, for income, there is some discussion whether it is actually income that matters for happiness or relative income or that income measures some unobserved related effects. Crucially, it should be noted that the aspirations and prioritizations of life-course domains are not stable over time and can differ based on age turning point events.

2.4 A conceptual framework

Taken the discussed theory together, a theoretical framework can be created, which is shown in figure 3. The green arrows are related to family ties and family motivated migration. As depicted, the life-course trajectories of a person are embedded in the linked lives of, among others, their family ties. Furthermore, their past experiences shape their aspirations. An event in their life or in a linked life can trigger a re-evaluation based on their life-course and their life-course aspirations. Furthermore, life-aspirations and life experiences continuously inform the evaluation of life. If the current life-course situation is deemed unfavourable compared to the aspirations of the person, a disequilibrium comes to exist. In fact, migration can be among the considerations to reduce this. As family ties are conceptualised to ease the moving process, linked lives once again influence this decision. Furthermore, as family ties are among the most important social relations, they are likely to be among the more important aspirations an individual has. The migration leads to a new evaluation of the life-course, in which satisfaction with life is reassessed, leading to either an adjustment of the baseline of happiness or a short-term change, as discussed in section 2.3.1. Family motivated migration is important in three ways in this model: through life events of linked lives that are just as important as personal life events as discussed in section 2.1, as an important life-course career as discussed in section 2.2 and 2.3.2, and as a possible magnet for migration as they can reduce the costs of migration as discussed in section 2.2.

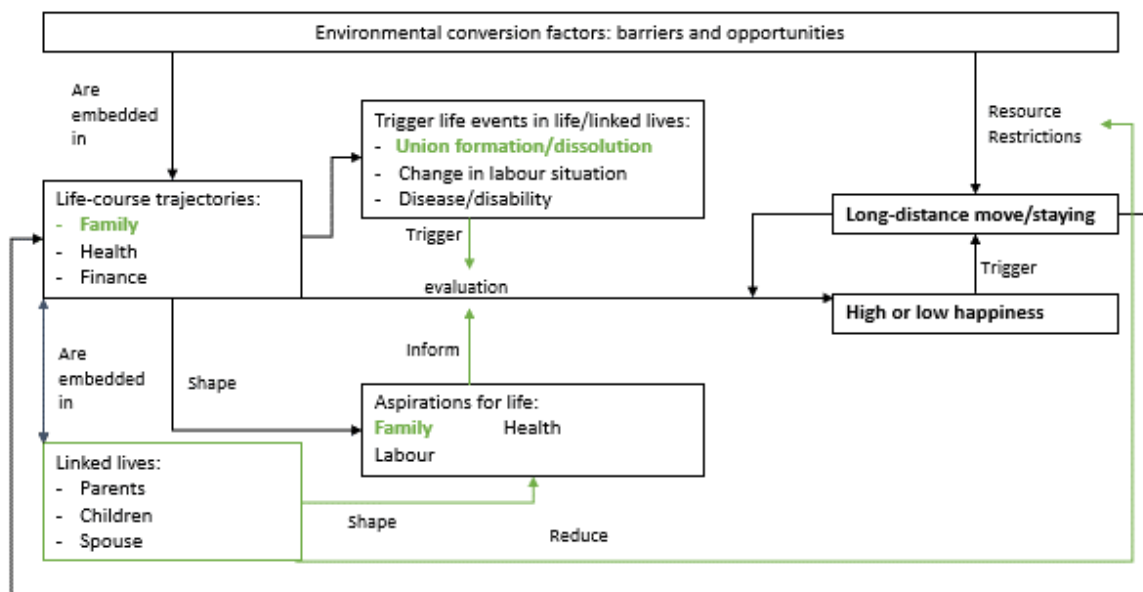


Figure 3: a conceptual model of migration, happiness, and the life-course

3.0 Methods

3.1 Data and data transformation

The data that is used for this research is the Understand Society Panel Survey, (henceforth referred to as UKHLS), a British dataset first collected in 2009-2010. It uses the same sampling strategy as the British Household Panel Survey (or BHPS) of which it is the successor. It contains about 50.000 respondents in the first wave. The dataset is chosen because it has a detailed measurement of moving, life satisfaction and family characteristics. For this research, the first nine waves are used, using data collected between 2009 and 2018 (Institute for Social and Economic Research, 2019).

The dependent variable to measure happiness is a question measuring life satisfaction, which asked for every wave. The question asks how satisfied the respondents are with their life overall. The answers are measured on a seven-point scale reaching from “completely dissatisfied” to “completely satisfied” (Institute for Social and Economic Research, 2019). This measure is similar to previous studies of happiness and migration as Nowok et al. (2013) and Erlinghagen et al. (2019).

The data contain several variables measuring motivations to move, starting from the second wave onwards. Indeed, there is one measuring educational motivations, housing motivations, labour motivations, area related motivations, and, of course, family motivations. The variables were collected with the following question: “Thinking about the reasons why you haven’t lived continuously at this address since we last interviewed you, did you move from this address for [reason]?” (Understanding Society, n.d., p. 134). or “ Last time we interviewed you, you were living at a different address. Did you move from that address for [reason]?” (Understanding Society, n.d., p. 134). In figure 4, the distribution of these motivations is depicted for long-distance movers. Notably, motives can be mentioned concurrently and are not mutually exclusive. The data do not contain a variable indicating whether motives are primary or secondary. Similar to Calderez Sanchez and Andrews (2011) findings, housing and family are the most common motives. Interestingly, the level of education and employment motivated moves is lower than Calderez Sanchez and Andrews (2011) report. Based on this variable, it is assumed that one does not move out of family motivations when they have not mentioned this, giving a clear distinction between family motivated moves and non-family motivated moves.

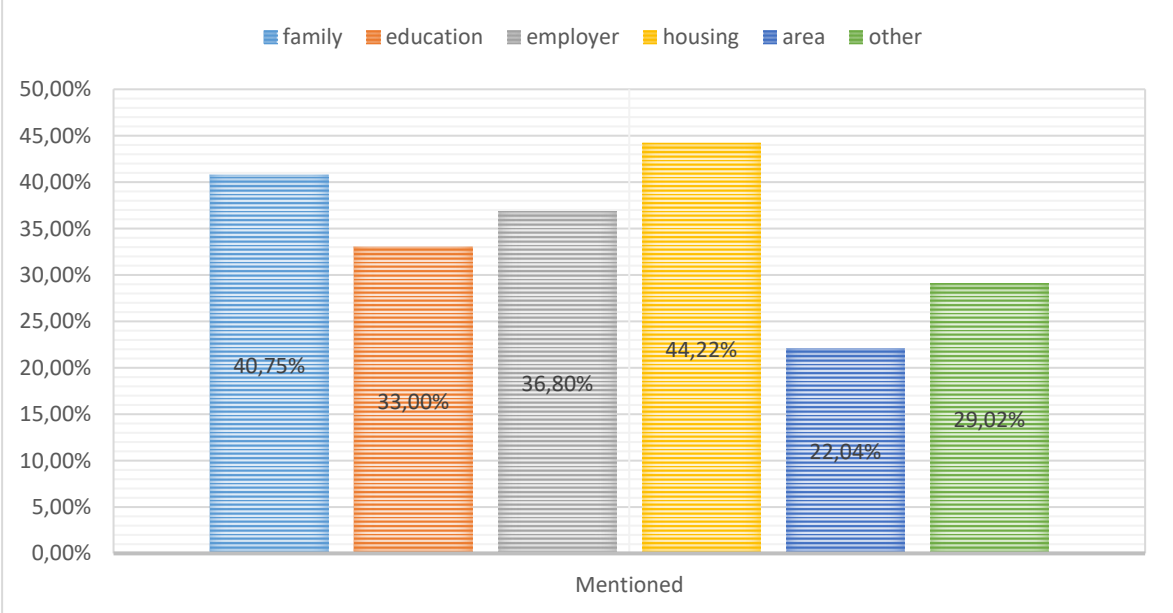


Figure 4: distribution of motives for a long-distance move

If the question whether one moved for family reasons was answered affirmatively, then a follow-up question was asked: “What family-related reason was that?” (Understanding Society, n.d., p. 134), which was coded accordingly. This variable reveals interesting details. An overview is given in table 1. Some motives are not common enough to incorporate independently, although that can be seen as a finding in itself. Unfortunately, the “other” category, while big, has provided no information on what type of motivations it may contain. Therefore, the “moved away”, “moved in with friends”, and the “other” category are merged. Furthermore, the “moved in” and the “moved because partner moved” have few cases, thus, extra caution is needed when interpreting those results.

Family motivation	Frequency
Partnering	107
Separating	79
Moved in with family other than 1	29
Moved away other than 2	17
Moved in with friends	2
Moved to be closer	357
Moved because partner moved	41
Other	85
Total	717

Table 1: distribution of family related motivations

The data have undergone several transformations. Firstly, only long-distance movers were selected as mentioned in the introduction. The cut-off mark between long-distance and short-distance was decided to be 25 kilometres, a threshold more commonly used in British migration research (Nowok et al. 2013; Nowok et al., 2018) as it approaches the threshold in which people are able to maintain close social ties and might need to form new social ties (Nowok et al., 2013). There are several reasons to make this choice. Firstly, as with long-distance moves, instrumental support becomes either possible or impossible, a larger impact on wellbeing can be expected. As this definition of moving is easily measured, movers can relatively easily be identified in the dataset as opposed to other methods. A drawback is that it becomes impossible to determine whether someone has moved in the first two waves, as the moving distance has only been measured from wave 3 onwards. The first two waves are included in the regression, but only as a control for not moving.

After this selection, a dataset is created of 86,094 individuals making up over 40,9863 observations. The longest an individual is observed is for all nine waves, but on average an individual is followed for 5 waves. All respondents are sixteen years old or older. These data contain 2,649 long-distance movers are found who have been observed for 9,255 observations. Out of these, 717 are family motivated, making up 2,577 observations. The analysis was done on the life satisfaction reported for every observation. The sequences of those who move multiples times are right-censored the year before they move to prevent overlap in effects.¹

3.2 Analytical approach

To study the effect of non-family motivated migration and family-motivated migration, it is essential to clearly define whom the movers are compared to. Theoretically, the ideal comparison would be with the happiness of the individual if they had not moved (Switek, 2012). As this is impossible, there are two ways to simulate this: compare to a period when the mover was observed staying as is done in Nowok et al. (2013) and in Nowok et al. (2015) or compare to those who have not moved as done in Switek (2012; 2016). This research adopts the latter approach.

¹ Models including multiple moves and without have been run, the differences have been found to be minimal.

Therefore, at the start of the observation period, nobody has been observed migrating (yet) and at the end, one can be a someone who has not migrated, a non-family motivated long-distance mover, or a family-motivated long-distance mover (mutually exclusive to non-family motivated long-distance mover). Furthermore, throughout the observed period, one can be in the process of making a long-distance move or a family motivated long-distance move. In this approach, the effects of a family motivated long-distance move and a non-family motivated long-distance move are in comparison to the baseline of those who have not migrated. Subsequently, a second model was created by making the period after moving time-specific: in this model one can be a stayer, moving, or being in a specific year after moving. The moving variables and year after moving variables again are either being a non-family motivated move or a family motivated move. Furthermore, the same two approaches are adapted for specific family motivations making a third and fourth model. The number of states and life events one can be in per model is shown in table 2. In order to deal with heterogeneity that comes with the hierarchy of the data, namely that of individual and occasion, and to deal with selection bias into moving, some further statistical modelling is needed.

3.2.1 A Mundlak approach

Firstly, there is the heterogeneity that comes as a result of the hierarchy between individual and occasion. Because of the longitudinal nature of the data, there are two levels on which a variable can be measured: the individual and the occasion. As occasion level measurements are related to the individual for whom they are observed, the observations are not independent of each other and a standard OLS yields biased results. A solution to this lack of independent observations is to split the residual variance into individual-level variance and occasion level variance. This type of modelling is also known as the random effects approach (Bell & Jones, 2015). For example, the function of life satisfaction of individual i in moment t can be expressed as:

$$1. LS_{it} = \beta_0 + \beta_1 X_{it} + \beta_2 Y_i + (c_i + \varepsilon_{it})$$

In this equation, X_{it} is a vector of time-varying independent variables that control for causes of happiness or unhappiness from other sources than migration. The vector covers factors like health, income, and age. The Y_i is a vector of time-invariant control variables such as gender which are measured on the individual level. The error term is split between individual-specific error in c_i and time-variant error in ε_{it} . Moreover, it is assumed that time-invariant individual effects are represented in c_i . A key assumption of this model is that the c_i and ε_{it} are unrelated to X_{it} (Bell & Jones, 2015).

However, this assumption is often violated, also in this model. This often stems from the problem that c_i estimates two effects for X_{it} at the same time. Indeed, every variable X_{it} is related to two processes: the variation between individuals and the variation between occasions. As such, the coefficient of X_{it} contains two parts. Firstly, there are effects that are specific to the individual level and do not vary between occasions, the so-called between-effects (that is variation between individuals). Secondly, there are the effects that represent the differences between occasions within the individual level, the within-effects. If the between-effects and the within-effects are unequal to each other, like they are in the models for this research, the coefficients become uninterpretable as they become an average of the two effects. Unless the model is altered, it will suffer bias as a result of heterogeneity (Bell & Jones, 2015).

Model 1	Model 2	Model 3	Model 4
Has not migrated	Has not migrated	Has not migrated	Has not migrated
Making a non-family motivated move	Making a non-family motivated move	Making a non-family motivated move	Making a non-family motivated move
Making a non-family motivated move	Has made a non-family motivated move: 1 year ago 2 years ago 3 years ago 4 or more years ago	Making a non-family motivated move	Has made a non-family motivated move: 1 year ago 2 years ago 3 years ago 4 or more years ago
Making a family motivated move	Making a family motivated move	Making a family motivated move: 1. To form a union 2.To separate 3. To move in 4. To move closer 5.Because partner moved 6.Other motivations	Making a family motivated move: 1. To form a union 2.To separate 3. To move in 4. To move closer 5.Because partner moved 6.Other motivations
Has made a family motivated move	Has made a family motivated move: 1 year ago 2 years ago 3 years ago 4 or more years ago	Has made a family motivated move: 1. To form a union 2.To separate 3. To move in 4. To be closer 5. Because partner moved 6. Other motivations	
			Has moved to form a union: 1 year ago 2 years ago 3 years ago 4 or more years ago
			Has moved to separate: 1 year ago 2 years ago 3 years ago 4 or more years ago
			Has moved to move in: 1 year ago 2 years ago 3 years ago 4 or more years ago
			Has moved to be closer: 1 year ago 2 years ago 3 years ago 4 or more years ago
			Moved because partner moved 1 year ago 2 years ago 3 years ago 4 or more years ago
			Has moved out of other family-related motivations 1 year ago 2 years ago 3 years ago 4 or more years ago

Table 2: states and life events per model

If there is heterogeneity there are two solutions to control for this, either switch over to a fixed-effects modelling approach, eliminating within effects and therefore the bias, with the drawback that no identity level variables can be included. Alternatively, the heterogeneity can explicitly be included in the model as suggested in Mundlak (1978) (Bell & Jones, 2015). Indeed, the within-effects and between-effects can be separated if c_i is further specified:

$$2. \quad c_i = \beta_3 \bar{X}_i + \sigma_i$$

In this model, the mean value of every time-variant variables is added. β_3 then measures the difference between within and between effects and σ_i the time-invariant individual related error term. β_1 measures the within effects. When incorporated in equation 1, the life satisfaction function becomes:

$$3. \quad LS_{it} = \beta_0 + \beta_1 X_{it} + \beta_3 \bar{X}_i + \beta_2 Y_i + (\sigma_i + \varepsilon_{it})$$

The advantages of such a model are multiple. Firstly, the heterogeneity is an aspect of the data, so modelling it in rather than deleting the source is more appropriate. Secondly, individual-level time-invariant covariates can be included. Lastly, as there is an individual level error term, unobserved individual-level selection bias can be controlled for, which cannot be done in a fixed-effects approach.

3.2.2 Incorporating migration

In order to construct the models shown in table 2, some more specific variables measuring the effects of family motivated and non-family motivated migration need to be added to the model. For Model 1, this results in simply adding two dummy variables signifying that the observation is in the year that a respondent is making a non-family motivated migration (R_{it}) or is in the year of making a family motivated migration (FR_{it}), to approach the effects of being on the process of a move. Moreover, two additional dummy variables are added to signify that the respondent has made a non-family motivated migration (M_{it}) or a family motivated migration (F_{it}). This combines into:

$$4. \quad LS_{it} = \beta_0 + \beta_1 X_{it} + \beta_3 \bar{X}_i + \beta_2 Y_i + \beta_4 M_{it} + \beta_5 R_{it} + \beta_6 F_{it} + \beta_7 FR_{it} + (\sigma_i + \varepsilon_{it})$$

Model 3 was very similar to this, but the dummy variable F_{it} was replaced by a categorical variable S_{it} signifying if someone has migrated for one the six prementioned family motivations. Similarly, FR_{it} is replaced with a categorical variable signifying whether the observation is in the year of migrating out of a specific family motivation. This combines into:

$$5. \quad LS_{it} = \beta_0 + \beta_1 X_{it} + \beta_3 \bar{X}_i + \beta_2 Y_i + \beta_4 M_{it} + \beta_5 R_{it} + \beta_6 S_{it} + \beta_7 SR_{it} + (\sigma_i + \varepsilon_{it})$$

For Model 2, M_{it} is replaced with a categorical variable ranging from one year to four or more years since moving: D_{it} . Similarly, F_{it} is replaced with DF_{it} having the same function as D_{it} but for those who have made a family motivated long-distance move. This combines into:

$$6. LS_{it} = \beta_0 + \beta_1 X_{it} + \beta_3 \overline{X}_i + \beta_2 Y_i + \beta_4 D_{it} + \beta_5 R_{it} + \beta_6 DF_{it} + \beta_7 SR_{it} + (\sigma_i + \varepsilon_{it})$$

Similarly, for Model 4, M_{it} is similarly replaced by D_{it} . Furthermore, S_{it} is replaced with six categorical variables signifying the years since the respondent migrated out of a specific family-related motivation. The numbering is the same as the motives are numbered in table 2. This adjustment combines into:

$$7. LS_{it} = \beta_0 + \beta_1 X_{it} + \beta_3 \overline{X}_i + \beta_2 Y_i + \beta_4 D_{it} + \beta_5 R_{it} + \beta_6 DF1_{it} + \beta_7 DF2_{it} + \beta_8 DF3_{it} + \beta_9 DF4_{it} + \beta_{10} DF5_{it} + \beta_{11} DF6_{it} + \beta_{12} SR_{it} + (\sigma_i + \varepsilon_{it})$$

This approach is largely similar to the approach of Switek et al. (2012; 2016) to measure happiness after migration, but with more migration motivations and more time effects. Similarly, Soons et al. (2009) have taken a similar approach to study wellbeing and relationship duration. Nevertheless, these studies rely on fixed-effects to phase heterogeneity out, while this model models the heterogeneity explicitly in, using a random-effects model, thus allowing individual-level covariates and an individual-level error term. As a result of this individual-level error term, unobserved selecting factors as personality are part of the error term.

Ideally, an ordered response regression would be best suited to study the ordinal dependent variable. Nonetheless, a linear model is preferred as such models are easier interpretable (Nowok et al., 2013; Nowok et al., 2018). Furthermore, it does not lead to considerably different outcomes (Clark et al., 2008; Ferrer-i-Carbonel & Frijters, 2004, Nowok et al., 2013).

4.0 Results

4.1 Descriptive analysis

4.1.1 Not having migrated, Family motivated migrants, and non-family motivated migrants

Before the results of the regression are presented, the differences between the life-courses of those who have not migrated, non-family motivated movers, and family-motivated movers and how this might affect their happiness should be discussed. Firstly, as shown in table 5, family motivated migrants have the highest mean life satisfaction, slightly higher than non-family motivated movers. Both types of long-distance movers have a higher mean happiness than those who have not migrated by a relatively large margin. This is similar to the findings by Nowok et al. (2013), Erlinghagen et al. (2019), and Switek (2016) that moving leads to an increase in happiness.

In figure 5, the happiness after moving for family motivated movers and non-family motivated movers are depicted. Both types of movers and those who have not migrated appear to have about 20% of answers in the non-satisfied categories. However, while non-family motivated movers' answers appear to fluctuate in the lower reach of 20%, the answers of family motivated movers and particularly those who have not migrated approach 30% non-satisfied answers more closely. Notably, the completely dissatisfied category is larger in size for those who have not migrated.

Furthermore, there is a negative trend in the proportion of positive answers up to four years of staying put. It might be that the attrition of unhappy respondents is higher and most unhappy respondents drop out after a couple of waves. Alternatively, it might be that those who migrate are unhappy before moving and most of them move around the fifth year of observation, as posited by the disequilibrium theory of moving. Like those who have not migrated, non-family motivated movers do appear to have a downwards trend in happiness, whereas family motivated movers do not.

Lastly, it appears that family motivated movers have a larger proportion of answers in the extreme categories as they have a higher proportion in the completely satisfied category and a higher percentage in the negative answers. This polarising effect might be due to the difference in the nature of the family motivated moves. For example, separating from a partner has been found to reduce life satisfaction, while marrying is found to increase it as mentioned before. Therefore, the level of life satisfaction around the move might be higher or lower as a result of the processes around union formation and union dissolution.

In order to explain the underlying differences in life satisfaction and to assess whether there are selection factors into family motivated migration, the life-courses of the two types of movers and those who have not migrated will be studied here. Firstly, as shown in table 5, there are some differences in age. While non-family motivated movers are on average the youngest, family motivated movers are the oldest contrary to what Niedomysl (2011) reports, which might be caused because he only studied the labour force. The mean age of the family motivated movers and those who have not migrated is an age that tends to be lower in happiness than younger or older ages (Blachflower & Oswald, 2004).

The younger age of non-family motivated movers might be partially explained by the fact that some of the non-family motivated movers move for education reasons and, therefore, are younger. Furthermore, it is often found that younger individuals are more mobile (Fackler & Rippe, 2017), which explains the generally younger age of non-family motivated movers compared to those who have not migrated. The selection of older individuals into family motivated migration could be caused by a desire to give instrumental support to family members through, for example, childcare. Furthermore, life events that trigger coresidence, such as graduation and job displacement; tend to happen after labour or an education motivated move.



Figure 5: life satisfaction for those who have not migrated (up), non-family motivated movers (middle) and family motivated movers (bottom)

As health is found to be closely tied to happiness, it is necessary to study how both types of migrants and those who have not migrated differ in this domain. Both types of movers have better mean health than those who have not migrated as can be read in table 5, though family motivated movers only marginally. The better health of non-family motivated movers might be partly due to their younger age. Similarly, as depicted in figure 6, non-family motivated movers have a larger proportion of positive health answers, while family motivated movers and those who have not migrated have a similar health distribution. This could be a reason for the slightly higher proportion of unsatisfied answer compared to non-family motivated movers. It might be that the ill-health will make the need for instrumental support higher for family-motivated movers.

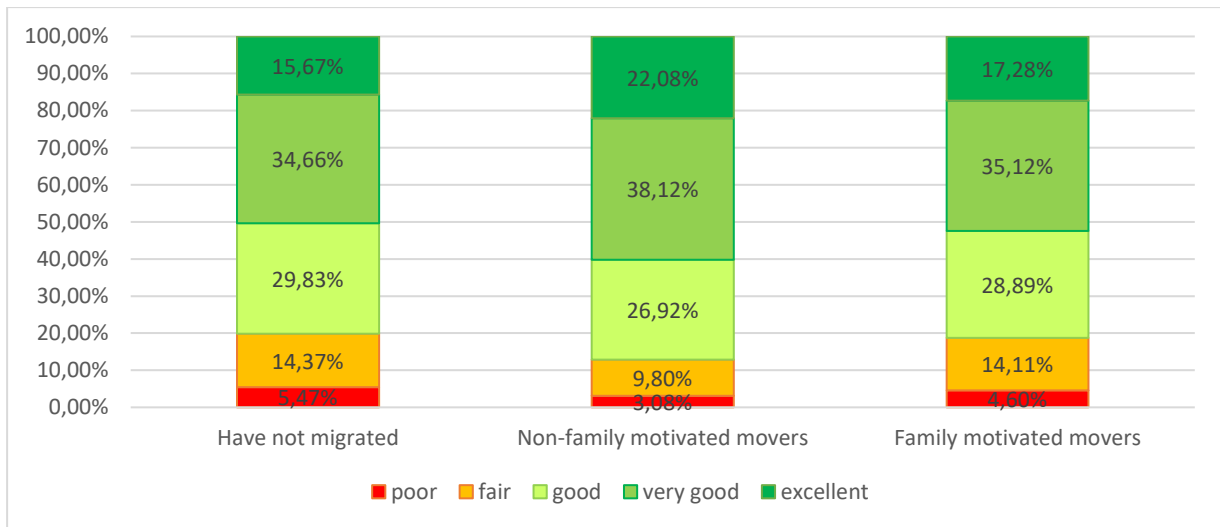


Figure 6: distribution of health per moving status

In the financial domain, there are differences as well. In table 3, the employment statuses of those who have not migrated, non-family motivated movers, and family motivated movers are shown. Similar to the age differences, non-family motivated movers are less often retired, more are employed, and more are full-time students compared to the other two states. Family motivated movers are more often retired than those who have not migrated, the least often students, and more often unemployed than non-family motivated movers. Interestingly, both those who have not migrated, and family motivated movers are about as often engaged in family care. This could be the reason that family motivated movers and non-movers are relatively similar: some non-movers already live close to their family, while others first have to move to provide this care. Unfortunately, the information about the proximity of family ties contains a lot of gaps. Nevertheless, these variables show that those who have not migrated tend to live close to family mover often than family motivated movers. A further discussion of this can be found in appendix 2.² The lower proportion of unemployed individuals might provide an explanation for the smaller proportion of unsatisfied answers for the non-family motivated movers. Furthermore, the higher proportion of unemployed family motivated movers, as opposed to non-family motivated movers, might explain why family motivated movers move towards the family.

² There was a variable measuring distance to family, however, this was only collected once every two years. Therefore, it has not been included here. More information on this can be found in appendix 2.

	Has not migrated	Non-family motivated	Family motivated
Self employed	7.71%	8.01%	8.58%
Paid employment	46.74%	57.84%	44.70%
Unemployed	5.09%	3.58%	4.24%
Retired	22.91%	14.97%	29.18%
On maternity leave	0.54%	0.91%	1.06%
Family care or home	5.69%	2.83%	5.24%
Full-time student	6.90%	9.53%	2.33%
LT sick or disabled	3.64%	1.39%	2.60%
Other	0.77%	0.93%	2.07%

Table 3: distribution of employment statuses per migration status

Lastly, it is useful to explore how the migrants and those who have not migrated are doing in the family domain. Unsurprisingly, as shown in Table 4, the family motivated movers are least often single. Furthermore, they have the largest proportions in every other marital status category except having a partner, which is more common among those who do not move. Interestingly, non-family motivated migrants tend to be most often single, which might be because there is only one person's human capital to consider or no gender dynamic.

	Has not migrated	Non-family motivated	Family motivated
Single/never married	29.30%	48.14%	23.48%
Official partner	50.85%	37.04%	45.24%
Separated	10.15%	6.67%	13.74%
Widowed	6.46%	1.92%	9.35%
Partnering	2.43%	5.18%	5.87%
Separating	0.81%	1.05%	2.31%

Table 4: distribution of marital statuses per moving status

As shown in figure 7, these differences in relationship status are likely to have effects on the reported happiness as well. Indeed, those who are separating or have separated report more answers in the lowest categories of life satisfaction, while those with a partner tend to be happier. Therefore, some of the higher proportion of happy answers of non-motivated movers might be explained by that. Interestingly, those who are widowed have a similar level of happiness as singles and widows have the largest proportion of completely satisfied respondents. This unexpected happiness of widows might be caused by the fact that widowhood tends to happen at later age and, thus, the positive effects of being retired and older are larger than that of being a widow.

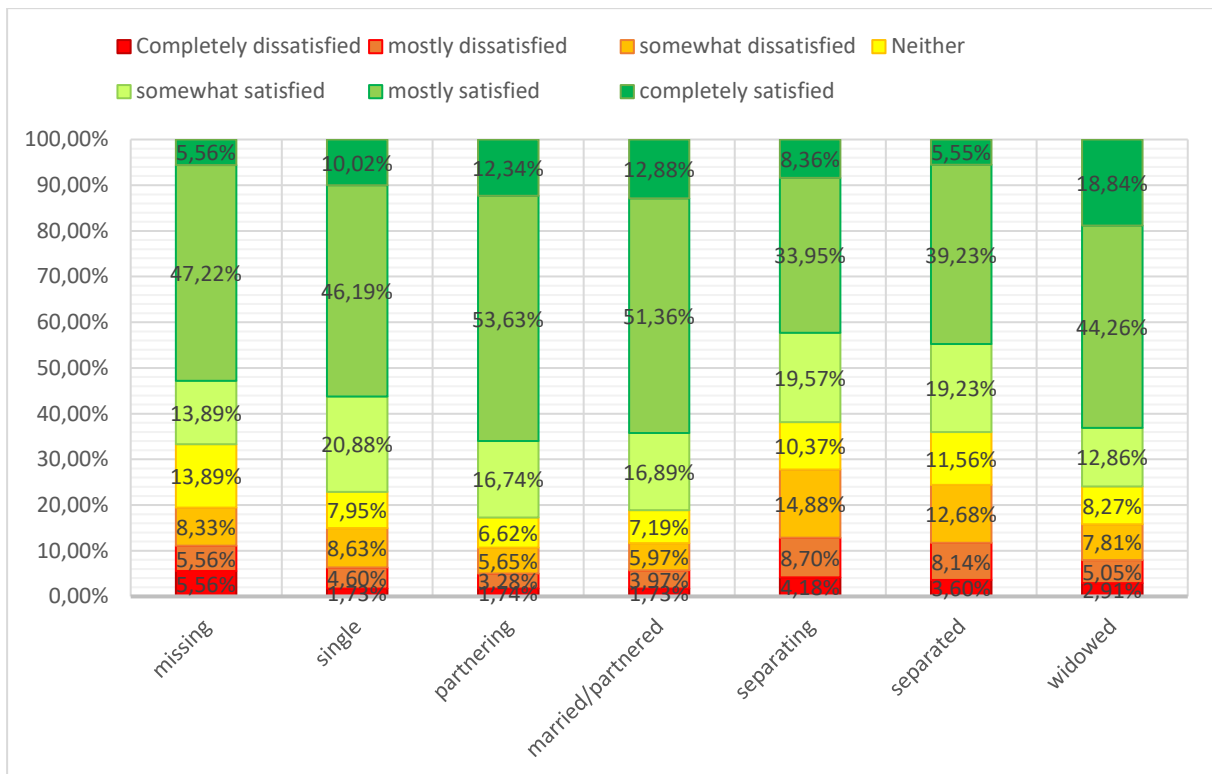


Figure 7: life satisfaction by partnership status

Conclusively, it appears that non-family motivated movers are slightly happier than family motivated movers and those who have not migrated. Family motivated movers, in turn, appear to be slightly happier than those who have not migrated. However, the differences between the two types of movers are rather small. Furthermore, upon a further comparison of other life-course domains, some explanations for these differences can be found. Indeed, non-family motivated movers are on average younger, single, healthier, and more often a student or in full-time employment, which are generally found to have a positive effect on wellbeing. Family motivated movers are on average older and tend to be in later life-course stages: they more often have a partner or have had one, are more often retired, and tend to have poorer health. In terms of the life-course, those who have not migrated appear to often fall in between the two types of long-distance movers, but closer to family motivated movers, which is the case in terms of health, employment status, and marital status. Based on these statistics, there is clearly a different selection into family motivated migration. In fact, given their similarity to those who have not migrated, it might be that these people would have stayed put if they already lived close to their family.

	Has not migrated		Family motivated		Not family motivated	
	Mean	St error	Mean	St error	Mean	St error
Gender (1 male, 2 female)	1.54	0.50	1.60	0.49	1.54	0.50
Age (at first observation)	42.20	19.07	48.053	18.50	37.99	17.09
Moving distance			148.30	126.38	144.88	130.81
Life Satisfaction (ranging 1 to 7)	4.31	2.36	4.97	1.75	5.05	1.70
Health (1 is highest)	2.59	1.08	2.34	1.022	2.54	1.07
N	400,608		1,860		4,746	

Table 5: descriptives of those who have not migrated, non-family motivated movers, and family motivated movers

	Partnering		Separating		To Move in		To Move Closer		Because partner moved		Other	
	Mean	St error	Mean	St error	Mean	St error	Mean	St error	Mean	St error	Mean	St error
Gender (1 male, 2 female)	1.65	0.48	1.57	0.50	1.51	0.50	1.60	0.49	1.69	0.47	1.55	0.50
Age (at first observation)	36.70	13.41	43.98	13.54	40.1	23.97	54.87	17.99	40.47	14.02	44.77	18.97
Moving distance	104.81	96.60	112.94	120.98	135.64	95.75	175.47	132.49	146.72	123.33	130.78	124.21
Life Satisfaction (ranging 1 to 7)	5.24	1.63	4.35	1.74	4.39	2.20	5.09	1.76	5.24	1.45	4.73	1.92
Health (1 is highest)	2.25	1.08	2.64	1.27	2.11	1.34	2.56	1.19	2.48	1.03	2.61	1.091
N	380		269		87		1302		147		392	

Table 6: descriptives per specific family-related motivation to move

4.1.2 Specific family-related motivations

As the polarization of life satisfaction answers of family motivated movers in the previous section illustrated, it is useful to further explore the differences in happiness and underlying life-course aspects for every specific family-related motive. Firstly, the happiness after moving for every family-related motive with the exception of the “other” motive is depicted in figure 8. Most strikingly, those who moved after separation have more non-satisfied answers, lower than all other family-related motivations, non-family motivated migration, and those who have not migrated yet. Additionally, while highly unstable, those who moved in with family also appear to have more answers in the unsatisfied categories than any other movers or those who have not migrated yet. Indeed, the mean happiness of the separating and moving in motivated movers is considerably lower. This is similar to the previous studies that report lower life satisfaction around divorcing (Soons et al., 2009) and that negative life events often trigger coresidence (Smits et al., 2010).

On the other hand, those who have moved to form a union have the highest proportion of happy answers and the highest mean happiness of all types of movers and non-movers, which can be explained from the aforementioned findings that happiness increases after marrying and finding a partner (Soons et al., 2009). Those who move closer and those who move because their partner moved have similar happiness levels as non-family motivated movers. Unlike non-family motivated movers, it is hard to distinguish a clear trend in happiness over time in any of the moving motives.

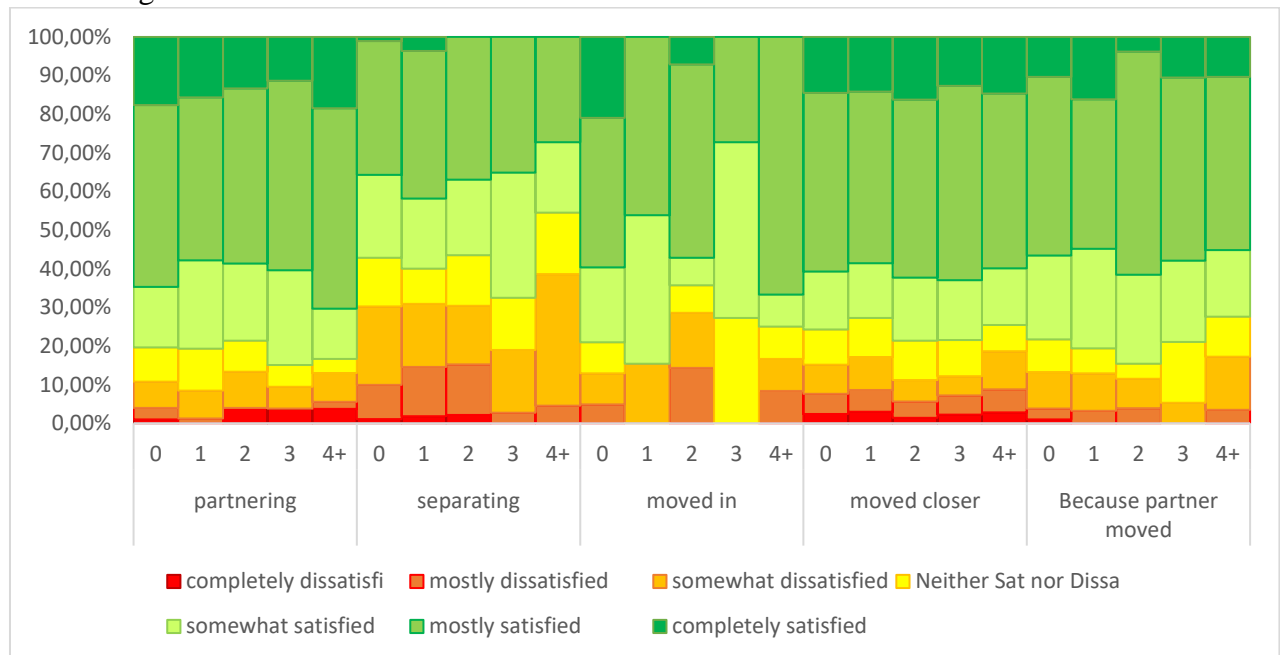


Figure 8: happiness after moving per family-related motivation

The family motivated movers are different in life-course characteristics too. Firstly, there are large differences in mean age as shown in table 6. Those who move closer are the oldest and those who move to form a union are the youngest. Also notable is the young mean age of those who move in with a family member, being only minimally higher than those who start cohabiting but with a high standard error. Indeed, it appears that both relatively older and relatively younger adults move in with family. Furthermore, the gender divides vary per motivation. Indeed, those who move because their partner moved and those who move for partnering are more often women, similar to previous findings (Cooke, 2008b). There is almost a 50/50 gender divide for those who move in.

Once again, this age difference comes with differences in the stages of the labour trajectory, which are shown in table 7. Most family motivated movers have a higher proportion of employed individuals than non-family motivated movers, with the exception of those who move closer and those who move for other family-related motivations. On the other hand, those who move to form a union report even fewer unemployment than all types of movers and those who have not migrated. Most of the other family-related motives show a similar proportion of unemployed individuals as those who have not migrated.

Those who move to separate appear to be in a vulnerable situation more often: they have a higher proportion of unemployed persons, chronically ill persons, and persons active in homemaking. This can be an additional explanation for their lower life satisfaction as well. Furthermore, it might signify a selection into divorce. Those who move with their partner tend to be engaged in family care more often. The lower proportion of employed individuals does fit the reported findings by Cooke (2003) that tied movers often lose income or labour participation status with their move.

Moreover, those who move closer have a larger proportion of retirees. Those who move in and those who move because of other family-related motivations also have a large proportion of retirees, albeit not as big as those who moved closer. The high number of retirees might explain the high life satisfaction of those who want to move closer. Those who have moved to be closer to family also have a relatively high proportion of chronically ill or disabled respondents, which might be a result of their age, but could also reflect a need for instrumental support.

	Partnering	separating	To move in	To move closer	Because partner moved	Other
Self employed	8.06%	7.37%	3.45%	9.21%	8.49%	9.72%
Paid employment	66.67%	63.68%	74.14%	32.06%	50.00%	49.31%
Unemployed	2.93%	8.42%	5.17%	4.02%	1.89%	4.51%
Retired	9.16%	8.95%	13.79%	46.35%	9.43%	18.40%
On maternity leave	3.30%	0.53%	0.00%	0.74%	0.94%	0.69%
Family care or home	5.13%	3.68%	0.00%	4.13%	19.81%	6.25%
Full-time student	2.56%	1.05%	3.45%	0.74%	8.49%	5.90%
LT sick or disabled	1.83%	5.26%	0.00%	2.65%	0.94%	2.78%
Other	0.37%	1.05%	0.00%	0.11%	0.00%	2.43%

Table 7: employment status per family-related motivation to move

When looking at the health domain, further differences become clear. The mean health of those who move to form a union and those who move in is close to that of non-family motivated movers. Similarly, their distribution of health is similar to non-family motivated movers as shown in figure 9. However, for the other family-related movers, mean health is lower and the proportion of positive answers in the health category are lower. Those who divorce and move closer report the ill-health the most, similar to their high proportion of chronically ill individuals. This could explain some of the low life satisfaction of divorced movers. However, this explanation does not apply to those who move closer, who are not so unhappy. It could be that they have access to family care or because they are older and therefore, have different health aspirations.



Figure 9: health per specific family-related motivation to move

Thus, upon further inspection of the specific family-related motives to move, a dichotomy becomes apparent. Indeed, it appears that those who move closer and those who move for partnering are happier, while those who move in and move to separate are unhappier. Furthermore, all family-related motives are generally found to be unhealthier than non-family motivated migrants are. These findings for those who move to form a union explains their higher happiness. This increased happiness after marrying is similar to the findings that happy individuals are more likely to marry (Diener et al., 2018). Once again, there appears to be a selection into the specific family-related motives, moving closer is prevalent under older retirees, separating under nonworking unhealthy individuals, and those who move with their partners tend to be active in homemaking.

4.2 Regression results

4.2.1 Non-specified family motivated migration

The results of the two models of non-specific family migrations are shown in table 8. All the models with control variables included are shown in appendix 1. In Model 1, both non-family motivated movers and family motivated movers are happier after moving compared to those who have not migrated. Nevertheless, the coefficients are similar, with a great deal of overlap between their confidence intervals. This finding suggests that while moving does improve happiness, moving out of family motivations does not lead to more happiness than other motivations to move. Furthermore, there is no significant effect for being in the year of the move, which might be due to the fact that the participant needs to readjust to the new environment and, therefore, there is no impact on happiness yet. Alternatively, satisfaction with the move can be undone by the stress of moving.

	Model 1		Model 2	
	B	SE	B	SE
Is in the year of a non-family motivated move	-0.029374	0.038898	-0.02621	0.038752
Has made a non-family motivated move	0.1512826***	0.034013		
Years since a non-family motivated move				
1			0.086705**	0.040093
2			0.173107***	0.042108
3			0.183818***	0.049267
4+			0.222394***	0.051
Is in the year of family motivated move	0.0203511	0.063452	0.026143	0.063259
Has made a family motivated move	0.165098***	0.052092		
Years since making a family motivated move				
1			0.015012	0.064919
2			0.157155**	0.069707
3			0.316551***	0.070296
4+			0.311716***	0.084421
N	409,863		409,863	

Table 8: the effects of family motivated moves and non-family motivated moves pooled (Model 1) and over time (Model 2) (* significant with a 90% confidence interval, ** significant with a 95% confidence interval, *** significant with a 99% confidence interval)

However, when including the years since moving, a difference between the differently motivated moves in patterns after moving becomes clear. In figure 10, the effects over time as specified in Model 2 are depicted, including the year of moving. While the non-family motivated movers report increasing significant positive effects over time from the first year after moving, the family motivated movers are not significantly different for the first year after migrating. Notwithstanding, an increasingly positive effect from the second year onwards is found for family motivated movers. The coefficient of the second year after a family motivated move is nearly identical to the effects of two years after a non-family motivated move, however, becomes much larger than non-family motivated moves after three years or more since moving.

The positive time effects after a non-family motivated move are similar to the findings of Erlinghagen et al. (2019), however, they do not report an increase of the effects over time, but rather a more stable effect. Furthermore, Erlinghagen et al. (2019) do not report such large differences over time between family motivated movers and non-family motivated movers. Contrary to expectations, the significant effects of family motivated movers start a year later than non-family motivated movers. These effects over time might be interpreted as that non-family motivated movers are happier in the short term, while family motivated movers are happier in the long term. The delayed effect could also be caused by a more stressful moving process or a longer time to adjust to their new environment for family motivated movers due to their lower health or older age when they move. While there are controls for age and health in the model, these variables are not measured in relation to moving but rather their general effect on happiness is measured. Therefore, it could be that moving while being in ill-health or of older age leads to a more stressful moving process.

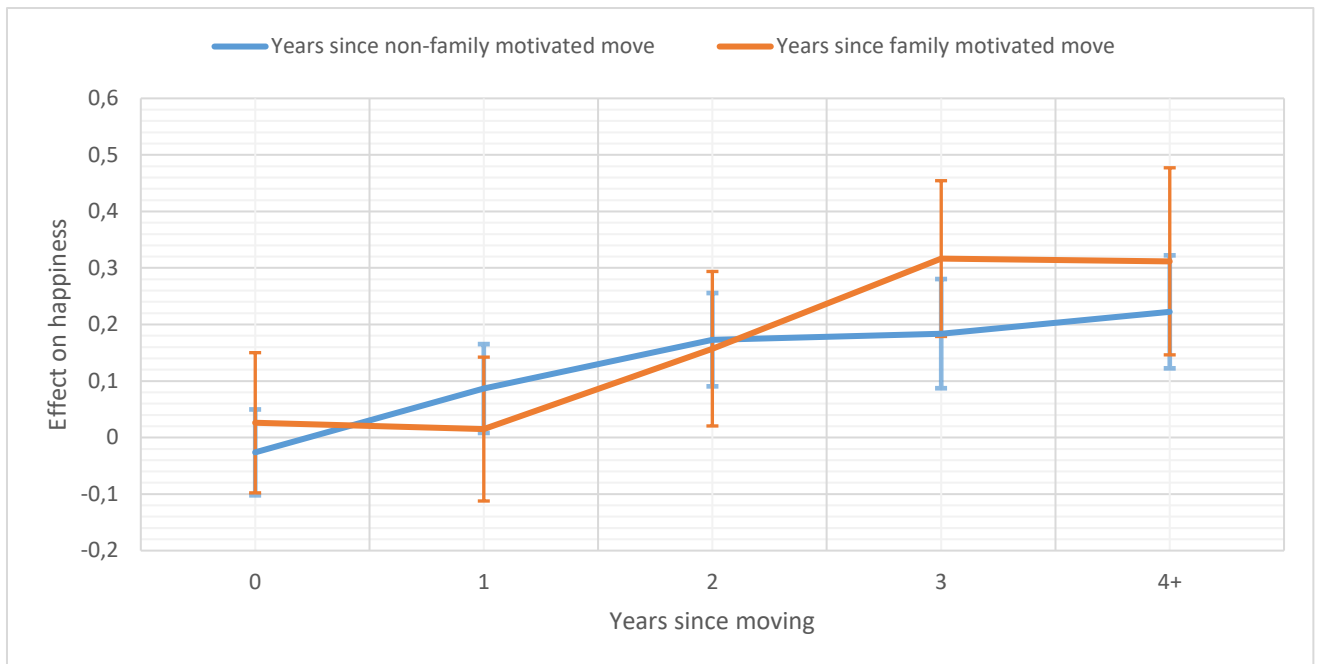


Figure 10: effects of moving through time

4.2.2 Specific family-related motivations

In table 9, the migration effects of Model 3 are shown. While the effects of having made a non-family motivated move have remained the same over models, a new pattern becomes apparent for family motivated moves. Indeed, those who are in the year of a move form a union have a slightly significant positive effect. Furthermore, only those who have moved to form a union and those who have moved to live closer to family or friends are significantly happier than those who have not

	Model 3	
	B	SE
Is in the year of a non-family motivated move	-0.02933	0.038899
Has made a non-family motivated move	0.15138***	0.034013
Is in the year of a move with the motivation to		
Partnering	0.261585*	0.139149
Separate	-0.02134	0.185902
Move in	-0.16202	0.301029
Move closer	0.033583	0.085002
Because their partner moved	0.013219	0.19992
Other	-0.18843	0.17496
Has made a family motivated move to		
Partnering	0.318947***	0.096224
Separate	0.018856	0.126394
Move in	-0.19224	0.224351
Move closer	0.16227**	0.068524
Because their partner moved	0.141515	0.166839
Other	0.226699*	0.133135
N	409,863	

Table 9: migration effects of Model 3

(* significant with a 90% confidence interval, ** significant with a 95% confidence interval, *** significant with a 99% confidence interval)

migrated. While the effect of having moved closer is similar to that of being a non-family motivated migrant, the effects of having migrated for partnering are much larger than that of non-family motivated migrants. Strikingly, the effects of having moved to separate are non-

significant. This non-significance might be because the negative impacts of separation are fully captured by the marital status variable. Those who moved because their partner moved and those who moved in might have too little cases to have significant effects. However, descriptive evidence showed that they are quite similar to those who have not migrated as well.

In Model 4, the time since moving is incorporated for every motivation, which is shown in table 10. Time effects are often not significant and when they are the pattern is irregular. It might be that family motivated moves are indeed very similar to those who have not migrated, or that splitting up into separate motivations by year leaves too few cases to find a significant result. In fact, especially those who move in and those who move with their partner have few cases per year.

Two motivations, besides the ambiguous “other”, have clear significant effects in Model 4: moving closer and forming a union. Their time effects are shown in figure 11. Interestingly, the effects of the year of a move to form a union are no longer significant in model 4. Furthermore, only the first and third year after moving for partnering are significant, albeit with a much larger effect than the first and the third year after a non-family motivated move. This can indicate that happiness only increases after moving to form a union in the short term. However, the insignificant effects for having moved for partnering two years ago casts doubt on that explanation. There is a significant effect of those who moved closer as well, but only for three years after moving and for four years or more after moving. The effects of having moved closer are larger than those of non-family motivated movers in both instances. Interestingly, the effects of a move to move closer only start two years after moving. As there is a large age difference between those who move to form a union and those who move to be closer to their family, this delayed start of effects can be seen as an indication that the higher age at moving leads to a longer adjustment period as mentioned in the previous section.

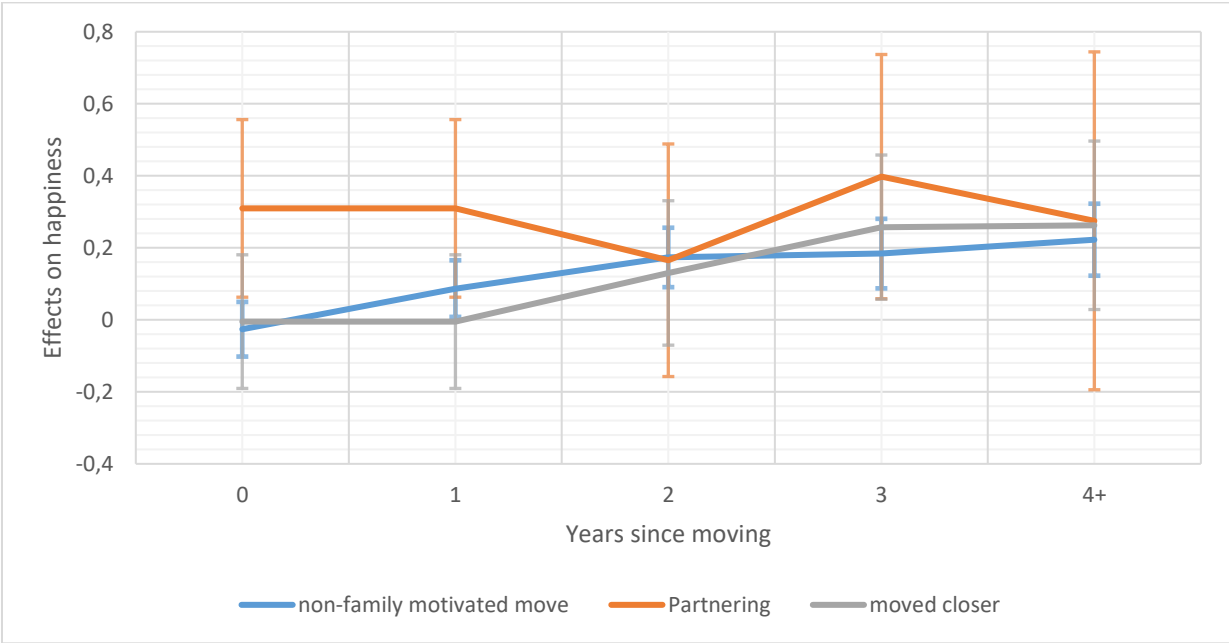


Figure 11: migration effects of non-family motivated movers, those who move to form a union, and those who move closer

MOTIVE	Non-family motivated		Partnering		To separate		To move in		To move closer	
	B	SE	B	SE	B	SE	B	SE	B	SE
In the year of moving with motive:	-0.02614	0.038753	0.230665	0.148892	0.053599	0.189288	-0.21812	0.313377	0.018665	0.08637
1	0.086792**	0.040095	0.309473**	0.125834	-0.02141	0.21134	-0.60835**	0.31019	-0.00491	0.094685
2	0.173216***	0.04211	0.165437	0.16477	0.046162	0.229272	-0.07107	0.348387	0.130194	0.102338
3	0.183945***	0.04927	0.397756**	0.173034	0.499343***	0.170292	-0.11184	0.217633	0.257448**	0.102189
4+	0.22253***	0.051003	0.274976	0.239367	0.136523	0.241329	-0.17921	0.453769	0.26253**	0.119354
MOTIVE	Because their partner moved		Other							
	B	SE	B	SE						
In the year of moving with motive	-0.04716	0.209547	-0.11198	0.179068						
1	-0.12925	0.228214	-0.02155	0.174111						
2	0.098458	0.240308	0.364356**	0.165817						
3	0.262838	0.23614	0.403061*	0.208061						
4+	0.118561	0.310956	0.76576**	0.192382						

Table 10: effects of migration over time in Model 4

(* significant with a 90% confidence interval, ** significant with a 95% confidence interval, significant with a 99% confidence interval)

	Model 1		Model 2		Model 3		Model 4		Additional model	
	B	SE	B	SE	B	SE	B	SE	B	SE
Marital status										
Single/never married	Ref.		Ref.		Ref.		Ref.		Ref.	
Missing	-2.25397***	0.016176	-2.25373***	0.016176	-2.25401***	0.016177	-2.25369***	0.016178	-2.25334***	0.01618
Official partner	0.0946107***	0.013613	0.094298***	0.013614	0.094256***	0.013613	0.094064***	0.013614	0.091966***	0.013606
Separated	-0.203151***	0.020153	-0.20326***	0.020158	-0.20272***	0.020155	-0.20265***	0.020159	-0.20614***	0.020147
Widowed	-0.272446***	0.029053	-0.27253***	0.029052	-0.27264***	0.029046	-0.27262***	0.029046	-0.27015***	0.029035
Partnering	0.0202716	0.020206	0.020486	0.020205	0.019693	0.020208	0.019795	0.020206	0.022016	0.020196
Separating	-0.427773***	0.035508	-0.42719***	0.035505	-0.42852***	0.035545	-0.42641***	0.035544	-0.42695***	0.035478
N	409,863		409,863		409,863		409,863		409,863	

Table 11: effects of marital status per model, including a model to control for bias in the family motivated migration variable due to the marital status variable

(* significant with a 90% confidence interval, ** significant with a 95% confidence interval, significant with a 99% confidence interval)

Those who have moved to move in or have moved to separate have one significant time effect after moving. Otherwise, they are not significantly different from those who have not migrated. Those who have moved in with their family are significantly unhappier in the first year after moving than those who have not migrated. This might be the result of the stress of having to share living space with family members, having to provide care to family members, or a result of preceding negative life events, which often happen before coresidence (Smits et al., 2010). Those who have moved after separating have a large significant positive effect in the third year after moving, for which a clear-cut explanation is lacking. Lastly, those who have moved because their partner moved are not found to be significantly different from those who have not migrated. Once again, this might be due to their similarity to those who have not migrated or because of a lack of cases. Alternatively, as those who have moved because their partner moved are more often retired or engaged in homemaking or family care, it might be that the move has a smaller impact on their lives. Nonetheless, the fact that being a tied mover does not have a significant impact on happiness in both Model 3 and Model 4 is interesting. In fact, the partner, who is the reason why the respondent is a tied mover, might be a non-family motivated mover, who are significantly happier after moving. Therefore, the partner's happiness might have increased after moving, while the tied mover's happiness has not significantly changed. These different processes create a disparity in happiness similar to income disparities after tied moves (Cooke, 2003). It cannot be assessed if this disparity is the result of specific gender roles or difference in human capital between partners.

4.2.3 Control variables

Importantly, as two of the family motivations are related to partnership formation and separation, it necessary to inspect the marital status control variable further. Furthermore, an additional analysis was done without a special family-related motivation to move variable in order to control if the family motivation variables do not simply measure the effect of partnership formation and dissolution. Instead of distinguishing between differently motivated movers, all motivations to move are pooled compared to those who have not migrated. The additional model was further constructed the same way as Model 1. The effects of the marital status of this model are shown in table 11, together with the effects of the marital status of the other models. As can be seen, the impact of marital status is rather robust, with very similar coefficients across all models. In addition, the p-value does not vary much over models. Therefore, it appears that the effects found by the family motivation variable are not marital effects, but rather the effect of a family motivated migration.

The found effects of marital status are similar to the previously reported results of the relationship career: positive effects for partnership; negative effects for separation and widowhood. Similar to what Diener et al. (2018) and Plagnol (2010) report, the period after divorce has a smaller negative impact than the period of divorce itself. Interestingly, being in the process of forming a union does not have a significant effect. These findings correspond with the descriptive evidence shown in figure 6, as the respondents have a similar distribution of happiness in the year in which they enter a union as the years that they are in a union. Furthermore, the non-significance might be due to the fact that the marital status only includes registered relationships, namely marriage and civil unions, and therefore does not necessarily measure the impact of finding a new partner.

Furthermore, other control variables show effects similar to previous findings. Unemployment leads to a large decrease in wellbeing, while retirement leads to an increase, similar to previous findings (Ballas, 2013; Clark, 2003; Frey & Stutzer, 2002; Plagnol, 2010).

Furthermore, health and wellbeing are strongly positively correlated as found in most studies (Ballas, 2013; Diener et al., 2018; Frey & Stutzer, 2002; Plagnol, 2010). Moreover, female happiness is found to be significantly higher, but the effect is small, similar to what some previous literature has found (Ballas, 2013; Frey & Stutzer, 2002). Lastly, the income variable shows relatively large positive impacts. However, the impact is far from linear, some of the lower-income classes have a larger positive effect than the higher income classes. Furthermore, having an income above £3,000 annually does not have significance anymore. These two categories have a significant negative effect. However, it should be stated that the income variables in the UKHLS have a lot of missing answers. Education, which to some extent also gives information about the socio-economic class, has some significant effects as well. Namely, being lower educated has a negative effect compared to having a degree. Age is the only variable that has a different impact than previous literature has found. The coefficient of age is negative, but the coefficient of age is positive when squared. However, the peak of the parabola is outside of the range ages in the survey. Thus, contrary to previous findings, age has a negative effect on happiness (Blanchflower & Oswald, 2004).

4.2.4 Between-effects and heterogeneity

As aforementioned, this model has included a variable measuring the difference between the within-effect and the between-effects. If these are significant, there is a difference between these two effects, signifying that a time-variant variable also has an impact between identities. For the effects of migration, the difference between the within-effect and the between-effects of having made a non-family motivated move is significant in model 1 and 3. Furthermore, the difference between the within-effects and the between-effects of years since moving is marginally significant. As gender is the main time-invariant covariate, this could indicate that there are gender differences in the happiness outcomes of non-family motivated moves. Interestingly, the difference between the within-effects and the between-effects is not significant for family motivated moves. Only in model 4, the differences between the within-effects and the between-effects for years since moving to separate are significant. In addition, all control variables have significant differences between the within and the between effects. This means that the effects of all control variables and having migration do differ between identity level factors, such as gender.

5.0 Conclusions and discussion

5.1 Conclusion

The goal of this research is to gain insight into how family motivated migration affects happiness. In fact, it is the first study to explicitly study the impact of social motivations for migration on happiness. In addition, this paper contributes to the understanding of family motivated migration by studying the specific family-related motivations to migrate to large detail. Furthermore, the study has been the first to incorporate a Mundlak approach to studying happiness after moving over time. The empirical approach has been different from two of the recent publications regarding happiness and migration, with a comparison to those who have not migrated instead of the period before migrating.

Firstly, it has been found that family motivated migration has a long-lasting positive impact on happiness, lasting for more than four years after moving. Notably, it appears that the long-term increase after making a family motivated move is larger than the long-term increase after a non-family motivated move. This increase is similar to what was expected based on the assumptions that family can provide support and are important social relations (Mulder, 2018),

which will lead to increased happiness after moving towards them. Crucially, the positive effects of family motivated movers start later after moving than non-family motivated movers, contrary to the idea that family ties reduce the costs and stress of moving.

Moreover, it has been found that the positive effects of family motivated moves are mostly experienced by those who move to form a union and move to be closer to family. The effects of the former are only on the short-term, similar to findings that the increase in happiness after marrying is only short-term (Ballas, 2013; Frey & Stutzer, 2002; Plagnol, 2013). Therefore, it is likely a time-effect of the marriage and not purely the effect of the move. The positive effects of moving closer are long-term but start only three years after moving. Again, these positive effects are a further corroboration of the expectation that close non-residence ties increase happiness. However, those who have not migrated tend to live closer to family, casting doubt on the effect purely stemming from proximity to family. There are almost no significant effects for migrating upon separation, while a negative effect was expected as a result of the negative circumstances around the move.

Those who move with their partner show no significant difference to people who have not migrated. This non-significance indicates that their happiness is not affected by the move, while their partner's happiness is likely to increase. Consequently, a disparity in happiness between partners appears similar to the income differences found in previous studies of tied movers (Cooke, 2003; 2008a). Those who move in with family have short negative effects after moving, which was expected based on previous studies that negative life events often lead to coresidence (Smits et al., 2011; Stone et al., 2014).

A key aspect to explain the differences in happiness between non-family motivated movers and family motivated movers is that the types of movers are made up of very different individuals. In fact, family motivated movers are more often older, unhealthy, and non-working compared to non-family motivated movers. Interestingly, family motivated movers are more similar to those who have not migrated in these aspects.

While not the main goal of the study, there are some additional findings. Firstly, it has been found that family motivated migration is a common motivation over long-distance migration. The assumption that migration is an economically motivated phenomenon is found to be not true, similar to what Nedomysl (2011) has found. However, the very different life-courses of family motivated moves and non-family motivated movers could indicate that this assumption holds true for younger individuals. Later in the life-course, the family might become more important for wellbeing and family motivated moves happen more often for older individuals. Furthermore, the paper has reproduced the findings by Erlinghagen (2019) that long-distance moving leads to a long-term increase in happiness and the more general finding that migration leads to increased happiness (Nowok et al., 2018; Switek, 2012). Lastly, the finding that moving closer to the family might indicate that living close to non-resident family increases happiness.

5.2 Discussion

Some further notes can be made about these findings. This research has been novel in its approach. In fact, all previous studies (to the best of my knowledge) have adopted a fixed-effects approach. There are two reasons why the Mundlak approach has strengthened the findings. Firstly, for multiple variables the difference between the within-effects and the between-effects was significant, indicating that occasion level variables also vary between identities. It can be argued that this heterogeneity is a characteristic of the data and, therefore, of the phenomenon that is studied: happiness. Consequently, rather than removing this

heterogeneity, it is more appropriate to give it its place within the model (Bell & Jones, 2015). Secondly, the individual error term of random effects modelling, which becomes viable with the Mundlak approach, controls for unobserved individual-level section bias.

Furthermore, the approach in this paper incorporates a different reference category than those of Nowok et al. (2013) and Erlinghagen et al., (2019): they use the migrants five years before their move as opposed to the reference of anyone who has not migrated yet used in this research. The approach in this paper allows for a larger reference category and does not simply compare different types of movers with each other but also compares movers to non-migrants. Lastly, the longitudinal approach has been proven appropriate. Indeed, the differences between family motivated movers and non-family motivated movers only became clear when considering time since moving, which would not have been possible in a cross-sectional approach. However, a drawback is that the number of cases becomes very spread out and some family-related motives become hard to study. Therefore, the model that pools all years after migrating together has been included too.

However, some critical notes can also be made about the robustness of the findings in this paper. Firstly, despite the large dataset, there are relatively few cases of long-distance family motivated movers. Especially for the specific family-related motivations, there are few cases, making the findings hard to interpret and not very robust. Secondly, the way the family-related motivations were collected, respondents could not have multiple family motivations. For example, apart from moving to form a union, one could also move closer to the family who could provide support with childcare. In fact, it is unclear how family motivated movers who have multiple family-related motivations have been treated during the data collection. Furthermore, no further analysis was done about additional motives apart from family-related motivations. Indeed, it is unlikely that people move just towards family alone, as some might move for employment-related reasons as well but also use the opportunity to move closer to family. This co-occurrence of motives could have quite an impact, as Gillespie and Mulder (2020) note that family motivations to move are often secondary.

Additionally, the “other” motivation category does create some unfortunate unclarity. In fact, it is the third most mentioned family-related motivation and several significant effects are found for such movers in the regressions. However, there is no clear documentation which motives are considered “other”. Hence, it becomes impossible to draw any conclusion out of this. Lastly, it was not possible to know whether the family motivations were primary or secondary. To deal with this, family motivated movers were simply identified if they had mentioned having these motivations. However, it can be that for some family motivated movers the family motives are less important than for other family motivated movers.

While the operationalization provided some advantages, it also had some drawbacks. Indeed, control variables were estimated independent of moving behaviour. However, it can be imagined that being an unhealthy mover leads to a different migrating process and, therefore, different outcomes in terms of happiness. Similarly, being female and family motivated moving might lead to different outcomes in happiness. For example, women tend to lose income more often after moving with their spouse (Cooke, 2003) and tend to be the financial loser of a divorce (Feijten & Mulder, 2005). In fact, some models which were specified to measure gendered migration outcomes were constructed, but not included in the main text for technical reasons. A short discussion of this model can be found in appendix 2.

These drawbacks of the data and operationalization create a need for further research. Indeed, the low number of cases leads to the need to replicate the findings with different datasets in different contexts. Secondly, more research can be done to gain insight into the co-occurrence

and hierarchy of motives. Thirdly, more research can be done about the relationship between specific characteristics of the mover and their motivation to move, such as age at moving, health at moving, and gender of the mover. For example, incorporating gender into outcomes of a move can be done with a similar methodology as this paper, but separate models for the different genders or different ages. Alternatively, interactions terms could be employed to explore this relation. A short reflection on a model with an interaction term for gender can be found in appendix 2.

Apart from those opportunities, the research has revealed further avenues for research regarding happiness, migration, and family motivations to move. Firstly, as this research has shown that the specific motivation to move does influence wellbeing outcomes of a move, further studies of specific motivations could be done in order to gain a deeper understanding of the relation between happiness and migration. For instance, there are several different specific types of motivation to move for employment, housing, and area as well. For example, it can be expected that a move stemming from eviction has different happiness outcomes than a move for a larger house. Studies similar in structure to this research can be done in order to gain a deeper understanding of the nexus between motivations to move and wellbeing. Another interesting new angle might be around the motivation to move to either form a union or dissolve it. Indeed, it can be researched whether there are differences between when one stays and the other moves (either towards their partner or away) or when both move towards a new residence. Furthermore, if only one member of the couple stays put while the other moves towards or away from them, it can be studied whether this situation creates unequal levels of wellbeing. Lastly, given the finding that those who move closer to the family are happier, a deeper study into proximity to non-resident family members affects happiness can be done, especially in relation to receiving and giving support.

In conclusion, this research has found evidence indicating that family motivated moves do increase happiness as opposed to not moving and has a bigger impact on happiness than non-family motivated moves. Furthermore, only those who move to form a union and those who move to be closer to family appear to be happy family motivated movers. For other family motivated movers, no significance or negative effects have been found. Those who move in with family being unhappier on the short term and tied movers having no significant increase after moving. This study has illustrated that migration motivations shift over the life-course. Furthermore, it has shown that in terms of wellbeing, motivation does matter as a selection into family migration and different levels of happiness have been found. Indeed, for further research and policy regarding migration and happiness, pooling all long-distance movers should be reconsidered, as their happiness, albeit ostensibly on similar levels, is the result of quite different processes.

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7.0 Appendix 1: Full regression models

Variable	Model 1		Model 2		Model 3		Model 4	
	B	SE	B	SE	B	SE	B	SE
Is in the year of a non-family motivated move	-0.029374	0.038898	-0.02621	0.038752	-0.02933	0.038899	-0.02614	0.038753
Has made a non-family motivated move	0.1512826***	0.034013			0.15138***	0.034013		
Is in the year of family motivated move	0.0203511	0.063452	0.026143	0.063259				
Has made a family motivated move	0.165098***	0.052092						
Years since making a non-family motived move								
1			0.086705**	0.040093			0.086792**	0.040095
2			0.173107***	0.042108			0.173216***	0.04211
3			0.183818***	0.049267			0.183945***	0.04927
4+			0.222394***	0.051			0.22253***	0.051003
Years since making a family motived move								
1			0.015012	0.064919				
2			0.157155**	0.069707				
3			0.316551***	0.070296				
4+			0.311716***	0.084421				
Is in the year of a move with the motivation to								
Partnering					0.261585*	0.139149	0.230665	0.148892
Separate					-0.02134	0.185902	0.053599	0.189288
Move in					-0.16202	0.301029	-0.21812	0.313377
Move closer					0.033583	0.085002	0.018665	0.08637
Move with partner					0.013219	0.19992	-0.04716	0.209547
Other					-0.18843	0.17496	-0.11198	0.179068
Has made a move to:								
Partnering					0.318947***	0.096224		
Separate					0.018856	0.126394		
Move in					-0.19224	0.224351		

Move closer	0.16227**	0.068524
Move with partner	0.141515	0.166839
Other	0.226699*	0.133135
Years since family motivated move to form union		
1		0.309473** 0.125834
2		0.165437 0.16477
3		0.397756** 0.173034
4+		0.274976 0.239367
Years since family motivated move to separate		
1		-0.02141 0.21134
2		0.046162 0.229272
3		0.499343*** 0.170292
4+		0.136523 0.241329
Years since family motivated move to move in		
1		-0.60835** 0.31019
2		-0.07107 0.348387
3		-0.11184 0.217633
4+		-0.17921 0.453769
Years since family motivated move to move closer		
1		-0.00491 0.094685
2		0.130194 0.102338
3		0.257448** 0.102189
4+		0.26253** 0.119354
Years since family motivated move because partner moved		
1		-0.12925 0.228214
2		0.098458 0.240308
3		0.262838 0.23614
4+		0.118561 0.310956
Years since family motivated move out of other family motivations		

1								-0.02155	0.174111
2								0.364356**	0.165817
3								0.403061*	0.208061
4+								0.76576**	0.192382
Gender									
Ref. male									
Inconsistent	-1.00631*	0.604465	-1.00641*	0.604455	-1.00643*	0.604396	-1.00656*	0.604381	
Female	0.0846276***	0.008934	0.084619***	0.008934	0.084557***	0.008934	0.084357***	0.008934	
Marital status									
Ref. single (never married)									
missing	-2.25397***	0.016176	-2.25373***	0.016176	-2.25401***	0.016177	-2.25369***	0.016178	
official partner	0.0946107***	0.013613	0.094298***	0.013614	0.094256***	0.013613	0.094064***	0.013614	
separated	-0.203151***	0.020153	-0.20326***	0.020158	-0.20272***	0.020155	-0.20265***	0.020159	
widowed	-0.272446***	0.029053	-0.27253***	0.029052	-0.27264***	0.029046	-0.27262***	0.029046	
partnering	0.0202716	0.020206	0.020486	0.020205	0.019693	0.020208	0.019795	0.020206	
separating	-0.427773***	0.035508	-0.42719***	0.035505	-0.42852***	0.035545	-0.42641***	0.035544	
Number of children									
Ref. 0									
1	-0.014293	0.011396	-0.01443	0.011395	-0.01424	0.011396	-0.0141	0.011396	
2	-0.069977***	0.013015	-0.07034***	0.013016	-0.06986***	0.013014	-0.06993***	0.013015	
3	-0.127765***	0.020026	-0.12798***	0.020026	-0.12758***	0.020026	-0.12734***	0.020025	
4+	-0.385859***	0.031661	-0.38587***	0.031665	-0.38579***	0.031664	-0.38563***	0.031673	
Health									
Ref. excellent									
Missing	-2.53400***	0.014181	-2.53472***	0.014185	-2.534***	0.014181	-2.53454***	0.014186	
very good	-0.074281***	0.009748	-0.07447***	0.00975	-0.07428***	0.009747	-0.07445***	0.009751	
good	-0.275002***	0.011426	-0.27524***	0.011428	-0.27498***	0.011426	-0.27521***	0.011428	
fair	-0.553151***	0.0145	-0.55343***	0.014502	-0.55313***	0.0145	-0.55332***	0.014501	
poor	-1.09420***	0.021355	-1.0945***	0.021356	-1.0941***	0.021356	-1.09427***	0.021359	

Employment status								
Ref. Employed								
missing	-1.12071***	0.144879	-1.12029***	0.144898	-1.12077***	0.144879	-1.12013***	0.144906
self-employed	-0.055421***	0.014194	-0.05552***	0.014196	-0.0554***	0.014195	-0.05552***	0.014197
unemployed	-0.318591***	0.016111	-0.31825***	0.016112	-0.31862***	0.016111	-0.31813***	0.01611
retired	0.2011596***	0.01585	0.201398***	0.01585	0.201079***	0.015851	0.201355***	0.015852
family care or homemaking	-0.07419***	0.017091	-0.07391***	0.017091	-0.07445***	0.01709	-0.07399***	0.017093
student	0.1633509***	0.01819	0.163916***	0.018193	0.163171***	0.018188	0.163955***	0.018191
other	-0.418833***	0.020631	-0.4186***	0.020631	-0.41898***	0.020631	-0.41866***	0.020632
Highest finished education								
Ref. Higher degree								
missing	-0.682913***	0.019423	-0.68299***	0.019425	-0.68309***	0.019423	-0.68323***	0.019428
A-levels or equivalent	-0.016095	0.011175	-0.01583	0.011176	-0.01621	0.011176	-0.01577	0.011177
GCSE or equivalent	0.0018455	0.023998	0.001897	0.023998	0.001814	0.023999	0.002013	0.023999
Elementary educations	-0.190312***	0.018959	-0.19018***	0.018959	-0.19029***	0.018961	-0.19004***	0.018963
Yearly income (derived)								
Ref. £1 - £3,599								
no income at all	0.5126075***	0.070279	0.512411***	0.07021	0.512686***	0.070231	0.513566***	0.070445
£3,600-£6,599	0.2099275***	0.079509	0.210039***	0.079462	0.209969***	0.079468	0.211126***	0.079663
£6,600-£9,599	0.2743021***	0.082223	0.27408***	0.082161	0.274238***	0.082182	0.275213***	0.082358
£9,600-£12,599	0.1843343**	0.078085	0.184167**	0.078031	0.184356**	0.078042	0.185288**	0.078238
£12,600-£15,599	0.2343915***	0.077009	0.234513***	0.076952	0.234232***	0.07697	0.235686***	0.077165
£15,600-£19,199	0.2352652***	0.077739	0.235004***	0.077679	0.235222***	0.077696	0.236084***	0.077889
£19,200-£23,999	0.1757597**	0.076313	0.175865**	0.076246	0.175937**	0.076267	0.177051**	0.076459
£24,000-£29,999	0.1697976**	0.075244	0.169395**	0.07518	0.16974**	0.075198	0.170135**	0.075392
£30,000-£35,999	0.0890622	0.07625	0.088924	0.076187	0.089039	0.076204	0.089995	0.0764
£36,000 -£42,999	-0.062324	0.076306	-0.06271	0.076245	-0.06238	0.076259	-0.06154	0.076456
£43,000 – 49,999	-0.144655	0.096067	-0.14563	0.096024	-0.14483	0.096016	-0.14463	0.09621
£50,000 or more	-0.123443	0.085985	-0.12343	0.085934	-0.12346	0.085944	-0.12232	0.086123

Age	-0.083109***	0.004157	-0.08367***	0.004168	-0.08319***	0.004159	-0.08377***	0.004171
Age Squared	0.0001052***	4.01E-05	0.000108***	4.02E-05	0.000106***	4.02E-05	0.000109***	4.02E-05
Difference between-effects and within-effect of:								
Has made a non-family motivated move	0.1943275	0.194652	0.279809	0.180735	0.194192	0.194655	0.280287	0.180745
Is in the year of a non-family motivated move	0.153937*	0.08094			0.153865*	0.080942		
Has made a family motivated move	0.0077678	0.136789						
Is in the year of family motivated move	0.0322177	0.34852	0.102991	0.324454			0.062615	0.079153
Years since making a non-family motivated move			0.041997	0.028771			0.042037	0.028773
Years since making family motivated move			-0.01938	0.048798				
Having moved for a specific family related motivation					-0.01344	0.034252		
Making a move for a specific family related motivation					0.041093	0.084325		
Years since family motivated move to form a union							0.10883	0.114104
Years since family motivated move to separate							-0.30528***	0.101226
Years since family motivated move to move in							0.186252	0.177209
Years since family motivated move to move closer							0.02441	0.061565
Years since family motivated move with partner							0.174888	0.138326
Years since family motivated move because other family related motivation							-0.27915**	0.130017
Marital Status	0.0892759***	0.007648	0.089292***	0.007649	0.089309***	0.007647	0.089302***	0.007648
Health	-0.013712***	0.004714	-0.01375***	0.004714	-0.0137***	0.004714	-0.01373***	0.004714
Job status	-0.061772***	0.004175	-0.06184***	0.004175	-0.06173***	0.004175	-0.0618***	0.004175
Income	-0.026972***	0.003313	-0.02695***	0.003313	-0.02697***	0.003313	-0.02694***	0.003313
Highest finished education	-0.021058***	0.008354	-0.02108**	0.008354	-0.02109**	0.008354	-0.0212**	0.008355

Age	0.07376***	0.004256	0.074369***	0.004267	0.073838***	0.004257	0.074475***	0.004271
Age squared	0.0000287	4.13E-05	2.56E-05	4.14E-05	0.000028	4.13E-05	2.45E-05	4.14E-05
Marital Status								
Constant	5.03883***	0.082033	5.038654***	0.081971	5.038794***	0.081996	5.037233***	0.082167
N	409,863		409,863		409,863			409,863

8.0 Appendix 2: Additional Reflections

8.1 Modelling

8.1.1 An alternative approach

Initially, a different modelling approach was taken, more similar to Nowok et al. (2013) and Erlinghagen et al. (2019), but with a Mundlak modelling approach whereas they used a fixed-effects approach. For adaption of this method for this research, only long-distance movers were included in the dataset. The reference category for the effects of moving in this model was the period of more than four years before moving. This approach would utilize a dummy for every year related to the year of moving and an interaction effect with a variable indicating whether someone was a family motivated mover. First, a model to estimate happiness that controls for hierarchy and the resulting heterogeneity was created, the same as shown in equation 3. Subsequently, migrating was modelled in. The effects of migration were specified as follows:

$$8. \quad LM_{it}^k = \sum_{k=T-1}^{T_2} \theta_k M_{it}^k \delta_k F_{zit}^k$$

In this model, LM_{it}^k stands for the effects of moving over time for any motivation. M_{it}^k refers to a binary variable signify whether a respondent moves in period $t-k$. k signifies the effects starting at T1 years before moving and ending at T2 after moving. A dummy is created for every value of k . For example, there is a dummy for if k is equal to 2, which means that the observation is 2 years after moving. F_{zit} is a dummy variable whether a person moves for a certain family reason z . In this model then, θ_k denotes the effect of being a migrant on happiness, and δ_k the effect of moving for a certain family-related reason. The total effect of a family motivated move at moment k will be $\theta_k + \delta_k$. The complete model was then combined into:

$$9. \quad LS_{it} = \beta_0 + \beta_1 X_{it} + \beta_3 \bar{X}_i + \beta_2 Y_i + \sum_{k=T-1}^{T_2} \theta_k M_{it}^k \delta_k F_{zit}^k + (\sigma_i + \epsilon_{it})$$

The key difference between this modelling approach and the approach in the paper is that the reference is different. Instead of comparing to those who have not migrated (yet) a comparison is made with a period before moving. Furthermore, whereas in the modelling approach discussed in the paper all types of movers are in separate categories, this model would utilize interactions to explore whether family motivated movers are happier than non-family motivated movers. This modelling approach did not yield any significant effect of family motivated migration but did find negative effects the years before moving and no significant effect for the period after.

A disadvantage of this modelling approach is that the years before moving are depicted as relative to the event of moving, while the respondent actually might not have realized that they want to move or not planned on it yet. Furthermore, this model does not allow for better inclusion of those who do not move. In fact, Nowok et al. (2013) exclude stayers from their analysis. Erlinghagen et al. (2019) include stayers but use the same method utilizing dummies relative to migrating. In their approach, the stayers are always in the zero category of the dummies. They claim their reference is those who are five or more years before moving, however, stayers are also a zero in this category. Therefore, the inclusion of stayers seems odd as it is unclear whom they are compared to. The latter approach seems inappropriate to me, as this obscures the reference category.

8.1.2 Comparing the two approaches

As the results are quite different, it is useful to further explore where this difference comes from and what model is more appropriate. Firstly, the differences in the results are a consequence of the different reference categories: the period before moving versus everyone who has not migrated (yet). To some extent, the same logic as for the model in the appendix, but more rigorous, is used to create the reference category in the paper. Furthermore, in the models in the paper, the effects of time since a family motivated move were independently estimated from non-family motivated migration. On the other hand, in the model presented in this appendix, the time effects of a family motivated move are included as an interaction between the dummies signifying the moment relative to the move and the variable identifying family motivated movers. Lastly, time is differently framed between the two modelling approaches. In fact, in the model presented in the appendix all time, including the time preceding a move, is framed relatively to the event of migration. In the paper, time is only included in the model after a move.

Estimating the effects of the differently motivated moves without an interaction term adds some advantages: firstly, by estimating the two differently motivated types of migration separately, comparisons become more straightforward. By expanding the models in the papers with the specific family-related motivations and years since moving, framing family motivations as an added effect on motivation would entail multiple interaction terms or separate estimates, which would in the former case mean that interpretation of the variable indicating that one has made a family motivated move becomes nearly impossible. With separate models it would mean a large number of models and the of specific family-motivated moves would be estimated separately from each other. Alternatively, in the models presented in the paper, the effects of control variables are estimated more co-currently with the effects of migration and, therefore, are easier to connect with literature and to interpret.

However, one advantage of the model presented in the appendix is that it is possible to model the time before moving more specifically. In fact, this methodology reveals negative effects before moving and a restoration to previous levels afterwards. That non-family motivated moves have a significant positive impact in the models of the paper is unsurprising, based on that finding. The findings of the paper and the findings of this the model in this appendix, while not contradictory, do lead to different conclusions. The model presented in the appendix leads to a reaffirmation of housing stress and a disequilibrium approach to moving and the models presented in the paper do not necessarily do so.

Conclusively, both models have their advantages and drawbacks. While the model presented in this model might estimate the similarity between motivations better and has a more detailed representation of the effects of migration over time, the models in the paper are more flexible, have a more rigorous reference category, and estimate control variables in a broader context. Furthermore, a strong counterargument against estimating family motivations as an interaction effect of migration, in general, can be made.

8.1.3 Reflection on Mundlak's approach

The models in this paper have taken a relatively innovative approach, that is not often used within social sciences (Bell & Jones, 2015) and, to the best of my knowledge, has never been applied to happiness. Therefore, it might be useful to reflect somewhat more of the added value of adding this approach to this strand of research. In fact, as the hierarchy between individual and occasion needs to be controlled for, some random effects or fixed effects specification is necessary to procure unbiased estimates. As discussed in the text, using a basic random-effects approach instead of a Mundlak approach leads to bias.

The approach taken in this paper is the original approach as formulated by Mundlak (1978). Nevertheless, Bell and Jones (2015) suggest a reformulation that clearly contains a

coefficient for the between-effects and a coefficient for the within-effects. In fact, equation 3 could be reformulated into:

$$10. LS_{it} = \beta_0 + \beta_1(X_{it} - \bar{X}_i) + \beta_4\bar{X}_i + \beta_2Y_i + (\sigma_i + \varepsilon_{it})$$

Here, β_1 is the estimator of the between effects and β_4 the estimator of the within effects. The reason why this modelling approach was not incorporated this way is that grouped means often have numbers behind the decimal dot. As a result, subtracting them would lead to numbers that are meaningless in a categorical variable. These values beyond the decimal dot would especially affect the between-effects. Apart from making interpretation hard, that would also make the result incomparable with previous studies. Therefore, the original Mundlak approach was adopted.

Secondly, the fixed-effects approach is a much more known alternative to the random effects approach. As aforementioned, this approach undoes the within-effects but can, consequently, not model in individual time-invariant level covariates. Nevertheless, it can be argued that this would not greatly affect the results as most of the analysis focuses on the between-effects and there are not many time-invariant variables. However, as mentioned in the discussion, the heterogeneity is an aspect of the data. Consequently, it is more appropriate to give heterogeneity its place in the model rather than create a model to ignore it. Furthermore, the individual-level error term is a useful correction for unobserved selection bias. Lastly, this modelling approach is more flexible as more types of variables can be added (Bell & Jones, 2015).

8.2 Excluded variables and excluded models

8.2.1 Proximity to family and frequency of contact

There were some additional variables and models that have not been discussed in the main text. In this section, I will highlight one variable that was excluded from the descriptive analysis and as a control variable and will explain additional models that were not included.

Firstly, there is a set of variables in the UKHLS that measure the distance to the family and the frequency of contact with the family. In fact, there are six variables measuring the distance to a respondent's father, mother, and the closest living child in hours and the frequency of contact with a respondent's, father, mother and children. These variables could have been added to the descriptive analysis and as control variables to control for family proximity of non-movers.

There are some reasons to not include it. Firstly, it could lead to overcontrolling in the model. In fact, if the distance to the family would be included after moving, this would likely take away the effects of moving closer to family. Furthermore, the variable was only collected every two years (Institute for Social and Economic Research, 2019). Therefore, the variables have not been included in the regression as there would be too many gaps in the data. In principle, the missing could be replaced by an extrapolated previous entry, but this would be distorted if a respondent moved in the year data on the proximity of family was not collected. Therefore, it is excluded from the analysis.

However, a descriptive analysis yields interesting results, as shown in table 12. For example, those who have not migrated tend to live closer to the family than both non-family motivated movers and family motivated movers after moving. Non-family motivated movers, somewhat unsurprisingly, live the least close to their family after moving. This finding does cast some doubt on the discussion whether the found effects were, in fact, not caused by the migration but because of the proximity of family.

Distance to father	Has not migrated	Non-family motivated mover	Family motivated mover
Less than 15 minutes	27.24%	6.4%	11.3%
Between 15-30 mins	18.89%	8.05%	13.48%
Between 30 mins - 1hour	12.71%	11.66%	16.96%
Between 1 and 2 hours	10.23%	23.97%	14.35%
More than 2 hours	18.9%	39.24%	31.3%
Lives/works abroad	12.03%	10.67%	12.61%
Distance to mother	Has not migrated	Non-family motivated mover	Family motivated mover
Less than 15 minutes	36.6%	8.37%	16.57%
Between 15-30 mins	17.12%	7.21%	15.44%
Between 30 mins - 1hour	9.98%	12.93%	15.63%
Between 1 and 2 hours	8.41%	20.91%	15.25%
More than 2 hours	14.87%	41.72%	30.13%
Lives/works abroad	13.02%	8.86%	6.97%
Distance to closest children	Has not migrated	Non-family motivated mover	Family motivated mover
Less than 15 minutes	41.98%	11.18%	34.2%
Between 15-30 mins	20.74%	9.06%	17.1%
Between 30 mins - 1hour	11.06%	14.64%	10.21%
Between 1 and 2 hours	9.08%	21.39%	12.11%
More than 2 hours	13.56%	37.38%	22.8%
Lives/works abroad	3.58%	6.36%	3.56%

Table 12: distance to family of those who have not migrated, family motivated movers, and non-family motivated movers

8.2.2 Additional regression models

Aside from variables that could have been included, some further preliminary modelling was in fact done but decided not to be included in the main text. In fact, in the discussion, it is shortly mentioned that a model with an interaction variable with gender has been estimated. This model is depicted in table 13.

There are reasons to make such a model, as it can be expected that some family motivated migrations are different for women than for men. For example, it has been discussed how women tend to not benefit from a household migration (Cooke, 2003; 2008a; 2008b) and tend to be the financial loser of a divorce (Feijten & Mulder, 2005). Hence, as stated in the discussion, it would be interesting to explore the gender aspect of family motivated migration. This can be done by either adding an interaction term to the models between the variable signifying a family motivated move or by running all models for both genders separately.

In table 13, a model based on Model 3 with an interaction between gender and family motivated migration is shown. There is a significant interaction between being female and moving in, moving closer, and moving with a partner. Furthermore, a new significant effect is found for those who have moved in. For example, the effect of having moved in has been found to be significantly negative, unless the respondent is female, in which the interaction effect undoes the negative effect and becomes positive. Similarly, having moved closer is insignificant now, whereas it was significant in the original Model. However, there is an interaction effect positively for women that is similar in size to the initially found positive impact in Model 3. In other words: it appears to be women who are happier after moving in and moving closer, not men.

Notwithstanding, this model also illustrates why gender was not explored more specifically. Firstly, there was no interaction term included between gender and non-family motivated movers, those making a non-family motivated move, and those making a family motivated move. Nevertheless, also for non-family motivated migration gender might shape the outcomes. For example, the labour market and, therefore, employment motivated migration can be expected to have different outcomes for different genders as well. Therefore, comparing the outcomes of family motivated migration by gender to non-family motivated migration with results not specified towards gender might be misleading. However, including multiple interactions would make the model hard to calculate and the gender variable almost impossible to interpret. Alternatively, separate regression models were deemed unviable as they would spread the low number of cases even thinner and would double the number of models in the paper.

	B	SE
Is in the year of a non-family motivated move	-0,02616	0,038909
Has made a non-family motivated move	0,150604***	0,034054
Is in the year of a family motivated move to		
form a union	0,272392**	0,138863
separate	-0,01191	0,18553
move in	-0,16968	0,305373
move closer	0,039421	0,085125
move with partner	0,032294	0,201531
other	-0,19172	0,175783
Has made a family motivated move to		
form a union	0,23612**	0,104516
separate	0,024939	0,180569
move in	-0,55697**	0,27337
move closer	0,031872	0,094433
move with partner	-0,30639	0,260223
other	0,212536	0,13132
Is female and made a family motivated move to		
form a union	0,135899	0,158456
separate	-0,00416	0,240746
move in	0,767798**	0,379724
move closer	0,232661**	0,118632
move with partner	0,658047**	0,317565
other	0,005806	0,231212
Gender		
inconsistent	-1,00165*	0,59762
Female	0,071852**	0,008953
N	409,863	

Table 13: a preliminary model with gender effects of moving (* significant with a 90% confidence interval, ** significant with a 95% confidence interval, significant with a 99% confidence interval)