

Mobility intentions among natives and first-generation immigrants in Australia

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Life Course Theory

Life course theory, more commonly termed the life course perspective, refers to a multidisciplinary paradigm for the study of people's lives, structural contexts, and social change. It directs the attention to the powerful connection between individual lives and the historical and socioeconomic context in which these lives unfold. The family is perceived as a micro social group within a macro social context – a "collection of individuals with shared history who interact within ever-changing contexts across ever increasing time and space" (Bengston and Allen 1993, p. 430).

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Abstract

OBJECTIVE

In this article we address the question whether or not there are differences in mobility intentions between natives and first-generation immigrants in Australia. Furthermore, we look for explanations for these differences in mobility intentions by taking into account, individual characteristics, family composition and contextual factors..

METHODS

We utilize data on Australia from the Generations and Gender Survey (GGS).

We present descriptives on the individual, household and contextual factors of natives and first-generation immigrants. Finally, we undertake four separate ordered logistic regressions which gradually build upon the identified factors.

RESULTS

The results we obtain from the analyses suggest that there are significant differences in mobility intentions between natives and first-generation immigrants in Australia. We show that, controlling for compositional effects on an individual, household and contextual level, immigrants are more likely to form positive mobility intentions. The mechanisms that form mobility intentions do not differ between natives and first-generation immigrants. Rather, there seems to be a unique effect of being a first-generation immigrant in Australia.

CONCLUSIONS

We conclude that inquiring about an individual's intentions holds a promising outlook for future research and encourage researchers to take the opportunity to further delve into the question what an "immigrant effect" may consist of. We therefore call for a multidisciplinary perspective on the conceptualization and measurement of intentions as well as a broadened view on the utilization of explanatory approaches.

1 Introduction

The Australian population is one of the most mobile ones in the world today. Censuses conducted in 2006 and 2011 showed that over 40 percent of the population had changed their dwellings within the last five years (Hugo, Wall & Young, 2016). Findings on the mobility rate of the foreign born population are mixed. Overall, persons who were born overseas showed a higher mobility rate than natives while those who arrived in the country a longer time ago were less likely to be mobile than natives (ABS, 2011). Whether this mobility behavior is actually reflecting also differences in mobility intentions is still unanswered.

This article seeks to understand who intends to move to another dwelling and what mechanisms are behind this mobility intention. We are also in particular interested in how and to what extent there are differences in intentions and their determinants among natives and first-generation immigrants. In order to distinguish between natives and first-generation immigrants, we define natives as being born in Australia, with both parents being born in Australia as well.¹ First-generation immigrants, on the other hand, we define as being born overseas, irrespective of their parents' birthplace.

It is important to bear in mind that staying in a place does not automatically mean an absence of a desire or an intention to relocate. Focusing on international migration, Carling (2002) for example illustrates that an absence of realizing international migration can also signal involuntary immobility: some individuals might intend to migrate but are consequently restrained from doing so - at least for the moment. This means that the actual number of intended moves cannot be captured by event-based datasets like the census. We, however, argue that it is relevant to study mobility intentions in addition to behavior as this may show who is potentially mobile and why. So we explore the process behind the eventual step of

¹ The term native Australian is therefore not to be confused with indigenous Australians. Unfortunately, there was no data available on the distribution of indigenous Australians in our native sample.

migration: the formation of mobility intentions. The two main research questions addressed in this article are therefore: Are there differences in mobility intentions between natives and immigrants? How can we explain differences in mobility intentions?

Analyzing intentions of immigrants and natives can provide valuable insight into the ambitions people have, particularly in a heterogeneous society as Australia is, and how this is shaped by a range of individual, life course and contextual housing factors shedding more light on e.g. housing availability and affordability. Conceptually, it is assumed that the intention to move represents a process that can be presented in several steps. This means that there can be a clear intention to either stay in place or to move, whereas there is also the possibility of not having decided either way. Since the literature has not yet captured and conceptualized mobility intentions in detail, we draw on the demographic literature of fertility intentions and life course framework, with the aim to identify key mechanisms that can explain intentions.

We do so by focusing on Australia. This country is not only one of the most mobile populations in the world but it has a heterogeneous population composition. Today, around 28% of the Australian population was born overseas and an increasing number of individuals from Asia enter the country (ABS, 2017b). For the analysis, we use the Generations and Gender Survey (GGS) data that cover individual intentions as well as a range of background characteristics (United Nations, 2005). Given the fact that sufficient immigrants are included in the data set, it allows for a comparison between those who are born overseas and native Australians. In the entire dataset, 2,982 respondents are classified as natives and 1,074 as first-generation immigrants.

2 The Australian context

Australia has a long-standing history of being a major destination country for migrants from all over the world (Philips & Simon-Davies, 2016). Currently, Australia has a strict immigration scheme which allows the arrival of 190,000 permanent immigrants annually. Two thirds of them belong to the so-called “Skill Stream” (Department of Immigration and Border Protection, 2016). This means, that a majority of new arrivals must fulfill a previously-specified age and skill profile in order to meet the identified demand in the labour market and gain access to the country (Philips & Simon-Davies, 2016). However, we must look beyond the current legislation in order to understand today’s immigrant composition.

From the mid-19th century up until the 1970s, the so-called “White Australia Policy” was in place to restrict the entrance of non-European immigrants. Through publicly assisted immigration, Australia’s population allowed the entry of British nationals, which was extended towards other European nationals over time. The dominating industries, such as the car and sugar industries, and their labour demands played an important part in shaping Australia’s population planning. Others, such as Chinese, Japanese and South Asian individuals that wanted to enter the country remained largely excluded from assisted immigration until the early 1970s (Jupp, 2002). Since the law was disintegrated, Australia has experienced an increasing influx of immigrants from Asia, particularly from China and India – although a revised, but strict immigration policy remains in place even today. This has an effect on the composition of overseas-born residents in that Chinese and Indian residents now make up the third and fourth largest immigrant group in the country, after immigrants from the UK and New Zealand. Together, they account for around four percent of the entire Australian population today (ABS, 2017b).

Besides the change in the immigrants' composition, the age profiles among the overseas-born differ substantially as well. The "White Australia Policy" and its disintegration had the consequence that immigrants from Europe now report the highest median ages. Among those, residents of Italian origin have the highest median age of 67.5 years old. Although they only make up around one percent of the population, this creates a wide age gap in comparison to native Australians' median age of 33.4 years old (ABS, 2017b; ABS, 2011). In contrast, residents who were born in India had a median age of 30.3 years, while this was 33.5 years for Chinese individuals (ABS, 2011). Overall, the median length residency of the overseas-born population is 20 years (ABS, 2014b).

When immigrants newly arrive in Australia, a majority of them choose to live in major urban areas, particularly the capital cities, such as Melbourne and Sydney (ABS, 2017a; Hugo et al., 2015). In this context, we need to consider that the annual number of new arrivals has been the driving force of Australia's population growth over the last 30 years (ABS, 2014a). Hence, over the years, this influx of immigrants into the capital cities has created an imbalance in comparison to the proportion of native-born Australians living there. Today, around 85 percent of the overseas-born residents live in major urban areas, which is far higher than the 64 percent of native Australians (ABS, 2014b). This has led to much debate on housing availability and affordability and makes for a strong point in putting mobility intentions – and exploring potential differences between natives and immigrants – at the core of our investigation (ABS, 2014a; Hugo et. al, 2015).²

Besides mobility behaviour per se, the Australian Bureau of Statistics (2010a) also investigated underlying motives behind moving to another place. Among the 43 percent of

² In terms of internal migration, we note that Australia's states are not affected equally. For example, Queensland has been a net receiver of interstate migration over the last 20 years. New South Wales and South Australia, on the other hand, have been at a net loss during the same period.

Australians that had changed their dwelling within the last five years, the most common reasons were dwelling-related: either there was a desire for a larger or better accommodation, or they had purchased a home. This was followed by family-related reasons and less often for employment reasons. Beyond their motives, different mobility patterns were observed according to tenure type, age, the family composition of the household, educational attainment, employment status and income. Renters were more likely to move than home owners, whereas the age group between 25-34 years old was the most mobile one. Unemployment served as a trigger to find a new dwelling and a university degree increased the chances of having moved. (ABS, 2011).

Next, we provide a summary of the characteristics of individuals and families that move and we therefore examined the composition of Australian households. Most prominently, the proportion of single person households has steadily increased over the last several decades. This type of household now makes up a quarter of the roughly 7 million households and they were shown to be less mobile than others (ABS, 2011; Qu & Weston, 2013). Similarly, the proportion of couple-only households has been on the rise. They now make up around 40 percent of all families and they also exhibit a high rate in their moving behavior: Around 40 percent of them had moved their dwelling three or more times over a time period of five years (ABS, 2010; Qu & Weston, 2013). On the other hand, the proportion of couples with dependent children decreased while lone parent households with dependent children had been on the rise. In terms of mobility behavior, lone parents with dependent children record higher and more frequent mobility rates (Baxter, 2016).

3 Theory

3.1 Past research on intentions

According to Miller (1994, p. 227), intentions can be defined as “psychological states that represent what someone actually plans to do”. They represent a condition in which an individual has proceeded from an internal desire, or mere wish, towards more concrete plans. At this second stage, the original internal wishful thinking is extended to include an evaluation of possible constraints, turning them into intentions. For example, it could be that an individual is influenced by financial difficulties or a partner’s desire to stay in place. The intention is therefore more reality-based.

From the perspective of Social Psychology, intentions are seen as an antecedent to actual behaviour. Herein, Ajzen and Fishbein’s (1991) Theory of Planned Behaviour takes a central role. According to this theory, intentions (and eventual behaviour) are formed through three separate components. First, an individual’s personal attitudes towards the behavior has an impact on forming an intention. Secondly, it is thought that an individual’s immediate social environment influences a person’s understanding of what type of behaviour is expected. This is referred to as subjective norms. Finally, the individual is restricted by the resources and opportunities he/she perceives to possess and be in control of. This is referred to as perceived behavioral controls (Ajzen, 1991; Liefbroer et. al, 2015). A variety of studies has made use of this theory and tested the applicability of intentions as predictors of subsequent behavior. Common applications of intentions across the life course refer to the realization of fertility or mobility intentions (Ajzen & Klobas, 2013; Schoen et. al, 1999; Kley, 2011; Kley & Mulder, 2010). However, Philipov (2011), among others, argues that a theory on behavior is not necessarily sufficient to explain intentions per se, although the theory’s three components were found to have predictive power of intentions to a certain extent (Billari, Philipov & Testa,

2009). His main opposition lies in the fact that intentions and behavior are “driven by different sets of factors and relations, although they might have a lot of commonalities”, and he instead argues for a separate theory on intentions (Philipov 2011, p. 39). His criticism is supported by evidence gathered by Armitage and Conner (2001). In their meta-analytic review of almost 200 studies, they point out that the theory’s three components explain the variance in intentions only partially and the authors particularly criticize the weak effect of subjective norms.

In the field of demography, research on fertility intentions has provided the most extensive literature related to intentions (Philipov, 2011). A key result obtained from this area of research is that family intentions are not stable across life. Instead, they are adapted according to biological, structural and age-normative constraints and opportunities (Liefbroer, 2009; Miettinen, 2005).

A large part of research on mobility intentions focuses on the interlinkage between intention and behaviour (Bradely, 2008; Kley 2011). Putting behaviour in the center of investigation of both, international and internal migration, research has mostly applied an economic (Hagen-Zanker, 2008), a micro-level approach of stress-threshold models (Wolpert, 1965), value-expectancy models (Crawford, 1973), and a family-decision making perspective (Sandell, 1977). Whereas these theories on mobility behavior are well-established, the link between these theories and intentions is less understood.

3.2 Theoretical framework

For this article, we utilize three theories – the human capital theory, the life course approach as well as a model on residential satisfaction. The idea behind utilizing these theories is that they encompass the decision-making process on three distinct levels: the individual, the family composition, and the contextual housing level.

In the context of the human capital theory, we focus on an individual's potential utility maximization through moving to another place given his/her educational background and age. We further refer to these factors as individual-level factors. According to the theory, an individual aims to increase one's personal income through completing higher levels of education and obtaining further training (Becker, 1994). After investing into a higher level of education, an individual has the potential to earn a higher income. Over an extended period of time, there is a positive return on this investment, which is why particularly younger individuals invest in this type of human capital (Ben-Porath, 1967). Sjaastad (1962) proposes to also treat mobility as an investment in human capital. This way, mobility is considered a cost-incurring decision, while it also has the potential of providing a return on investment. Considering mobility towards another place then has the effect of maintaining or even increasing one's accumulated human capital. That is, changing one's location in order to pursue a job opportunity is triggered by the perception that this change leads to a higher return on investment in comparison to staying in place. In this sense, the theory assumes a rational decision-making process towards utility maximization: once monetary costs, such as finding a new opportunity and moving expenses, are exceeded by potentially higher income in another location, a positive decision towards mobility is expected. Here, the young are more mobile in the early years of their careers in order to maximize the potential income (Topel & Ward, 1992). With higher age, on the other hand, a worker tends to settle down and remain with one company (Becker, 1994).

However, the human capital theory does not capture so-called "psychic costs" of mobility, as Sjaastad (1962) noted himself. "Psychic costs" refer to the immediate social environment of family and friends that individuals are used to and that they are reluctant to leave behind. This notion was supported by others, such as Mulder and Malmberg (2014), Ferro (2006) and

Harbison (1981). In her qualitative work on desired mobility and immobility, Ferro (2006) found that non-monetary elements, such as family and friends in place, can alter the decision-making process. In interviews with highly-skilled Romanian workers, she noted that workers had turned down offers that would have substantially altered their general living conditions due to an emotional attachment to family, friends and their general surrounding.

In order to take into account the interconnectedness between individuals, we make use of the life course approach. Huinink and Kohli (2014) describe the goal of an individual in the life course in terms of striving for subjective well-being. Over one's life, subjective well-being is achieved through decision-making and acting upon these decisions in several life domains. These domains may encompass fertility- and career-related decisions, as well as mobility decisions. The approach presents decision-making from a temporal perspective of anticipated and past life events and extends the influential forces on the decision-making process from the individual to the household level and beyond. The other lives that an individual is connected to and the influence they exert on a person is referred to as "linked lives" (Cooke, 2008; Elder, 1994). In our article, we focus on the interconnectedness with other family members that share the same household. We further refer to this as the "family composition". Research on the family composition show that varying types of household constellations have different effects on mobility behaviour. For one, individuals living alone have been shown to be more mobile than individuals that share an accommodation with a partner or that live with children (De Jong, 1985; Geist & McManus, 2008; Silvestre & Reher, 2014). Furthermore, there is a significant difference in internal mobility behaviour between couples that live without children in comparison to couples that live with children in that couple-only families show higher mobility rates (Long, 1972). With the diversification of family households, the mobility patterns of single parents have become subject of research as well. Herein, it was

found that single parent households have a higher likelihood of moving than households with two biological parents (Astone & McLanahan, 1994; Tucker, Marx & Long, 1998). We therefore conclude that the family composition forms an integral part in the decision-making process to move to another place.

Lastly, both, the individual and the family composition, are embedded in a physical environment, namely the current dwelling. Here, we draw on Speare's (1974) theory on residential satisfaction. The theory states that if a certain threshold of dissatisfaction with the current dwelling is exceeded, an individual will consider to moving to another residence. He argues that residential satisfaction can serve as an intervening variable because it is an accumulation of dissatisfaction in other life domains, for example when having too little living space due to a change in household size. Also, attachment to the current location, the neighbourhood, and the job find their way into the subjective evaluation of residential satisfaction. Speare's (1974) own investigation on Rhode Island residents and their wish to move showed that residential satisfaction was a powerful predictor of the wish to move and acts as an intervening variable to individual characteristics, such as the household head's age. However, Speare's (1974) results also suggest the level of residential satisfaction does not serve as an intervening variable in the case of home ownership status. Here, the home ownership status is the only factor that directly affects the wish to move. Other research supports the notion that the satisfaction with one's residence as well as the ownership status influences the formation of mobility intentions (Landale & Guest, 1985; Simmons, 1985; Wolpert, 1965). Similarly, research consistently finds that home ownership is associated with a lower likelihood of moving the residence (Dielemann, 2001; Helderma, Van Ham & Mulder, 2004; Rossi, 1955). Therefore, we include both, the level of residential satisfaction as well as

the tenure status, into our theoretical framework. We further refer to these two factors as the “housing situation”.

Finally, research on mobility has shown that past mobility experiences serve as a facilitator for future movement (Boyd, 1989; De Jong, 2000). Boyd (1989), for example, finds that migrants were more internally mobile than natives, particularly with an increase in educational attainment. Similarly, Belanger and Rogers (1992) note that immigrants with higher education are more internally mobile than their native counterparts. However, Noggle (1994) reports that with increased duration of stay in the destination country, differences between the migrant and native population in their internal mobility behaviour begin to diminish. Hugo, Wall and Young (2016) find this to also be the case for immigrants to Australia. Since Australia’s overseas-born population has a median length of stay of 20 years in the country, we expect that there will be no differences between natives and immigrants in our analysis when it comes to their mobility intentions.

Besides the expectation that there will be no differences between natives and immigrants, we summarize that our analysis consists of factors derived from three separate approaches that entail the individual level, the family composition and the housing situation. On the individual level, we consider age and educational attainment as important explanatory variables. Here, we expect that an increase in age will lead to a decreased likelihood of forming mobility intentions. On the other hand, a higher level of education is expected to yield an increase in the likelihood of having mobility intentions. In terms of the family composition, we expect to find singles to have higher mobility intentions than household structures with more family members. On the one hand, couple-only families are expected to have a higher likelihood of forming mobility intentions in contrast to couples with children. On the other hand, couple-only families are expected to have a lower likelihood of intending to

move than lone parent families. When it comes to the housing situation, we consider the level of satisfaction with the current dwelling as well as the home ownership status. Here, we expect that a higher level of satisfaction with the dwelling is reflected in an individual's intention to stay. Lastly, we expect that being a homeowner has a strong effect in that individuals have a lower likelihood of intending to move. In sum, we do not expect the mechanisms of individual characteristics, the family composition and the housing situation to differ between natives and first-generation immigrants.

4 Methodology

4.1 Data source

The micro-level data that is used for this article is the Gender and Generations Survey (GGS). This longitudinal survey is collected by a consortium of research institutes, universities and statistical offices in around 20 countries. The multidisciplinary survey covers topics ranging from the household and housing, fertility, partnership, to health and attitudes, among others (Gauthier & Emery, 2016). For Australia, we utilize the first wave, which was collected over a six-month period between 2005 and 2006. The survey was administered to individuals of the age range 16 to 99 belonging to the birth cohorts 1906 to 1990 (Vergauwen et. al, 2015). However, we note that the youngest age group of 18-34 is underrepresented in the case of Australia (Fokkema et. al, 2016). The survey was added as a supplementary form to the recurring HILDA Survey on housing and income and over 90 percent of the forms were filled in through face-to-face interviews. The other ten percent were completed through telephone interviews (Wooden & McDonald, 2015).

4.2 Operationalization

We restrict the sample for the analyses to those between the ages of 18 and 65 years old as during this time, most decisions on the life course have to be made – in terms of fertility,

employment and mobility. Consequently, 1,325 respondents are excluded. In order to distinguish between natives and first-generation immigrants, we define natives as being born in Australia, with both parents being born in Australia as well. Here, the term native Australian is not to be confused with indigenous Australians. Unfortunately, there was no data available on the distribution of indigenous Australians in our native sample. First-generation immigrants, on the other hand, we define as being born overseas, irrespective of their parents' birthplace. One consideration that we take into account is the possibility that one or both parents of an overseas-born respondent are native Australians. To ensure that this number is not too large, we first analyzed the parents' background. Among individuals that we categorized as first-generation immigrants, 15 had parents that were both born in Australia. 47 more had one native-born parent. Consequently, over a thousand overseas-born respondents also had parents that were both born abroad.

In order to analyze mobility intentions, we extract the survey question "Do you intend to move within the next 3 years?". This serves as the dependent variable. Possible answer categories to this question include "No", "Maybe", "Yes". The dependent variable of interest includes three answer categories ranging from "No", "Maybe" to "Yes". For this setup, ordered logistic regression presents a suitable approach to the analysis as it takes into account the underlying ordinal structure in the answer possibilities (Norusis, 2008). Using this method, only one single model is estimated. Herein, the data is partitioned so that the likelihood of being in the first category, namely "No" is estimated in comparison to being in any of the higher categories of "Maybe" and "Yes". The effects of the independent variables underlie the assumption of proportional odds. This means that the estimated effect on the odds is expected to be same for each category (O'Connell, 2006).

We base the selection of our explanatory variables on the three presented theoretical approaches on the individual, family and housing level.

On an individual level, we utilize the GGS questions on education and age. In the GGS, respondents answer the question “What is the highest level of education you have successfully completed?”. The answer categories consist of the ISCED levels 0 to 6. We regroup these levels into four separate categories. First and foremost, we made this decision in order to create large enough cell counts, but we do maintain the following underlying logical structure: For one, we group pre-primary and primary level education in order to reflect a basic educational level. Next, we place the upper secondary level and post-secondary non-tertiary level of education (ISCED 3 and 4) into a common category. This way, we can clearly separate between university-level education and non-university-level education. Finally, we create a common category for university-level education by putting the first and second stage tertiary level of education into one category. The upper secondary level education serves as our reference category. We add age-squared in a later step in order to correct for a violation in the parallel regression assumption.

The family composition is derived from the respondents’ information on the number of household members and relationship with each of them. We apply six separate categories: Living alone, as a couple without children, couples with one child, two children, three or more children and lone parents with children. We determine couples without children to be the reference category. When it comes to children, we do not differentiate between biological, stepchildren and adopted children. We do not include respondents that live in other types households, such as living with ex-partners, (non-)relatives or other family members. This way, we exclude 446 respondents.

Finally, the housing situation consists of two indicators. For one, we include the satisfaction with the current dwelling. In the GGS, respondents are asked “How satisfied are you with your dwelling?” and they can rate their satisfaction from zero (“Not at all satisfied”) to ten (“Completely satisfied”). Furthermore, respondents provide information on home ownership status towards the current dwelling, with the possibilities of being an owner, a tenant, living rent-free and other. Here, we regroup living rent-free and other into the common category “Other” and in consequence obtain a categorical variable with three categories: owner, tenant and other. Being a homeowner is our reference category.

4.3 Sample selection and methods

While the dependent variable did not have any missing respondent information, we excluded 36 respondents through missing information on their highest obtained education level, as well as two. Taking into account all relevant independent variables, we obtain a final sample size of 4,093 respondents. In Table 1, we present descriptives of this sample selection. When it comes to the respondents’ individual characteristics, the mean age of natives is around 42 years old. Immigrants, on the other hand, are somewhat older at 46 years of median age. This can be traced back to the composition of the immigrant sample as half of the respondents were born in Europe. As described earlier, Australian residents that were born in European countries constitute the oldest age group among any of the Australian subpopulations (ABS, 2011).³

Approximately eight percent of the natives respondents and six percent of the immigrant respondents belong to this category. Similar to the (pre-) primary level of education, a higher percentage of natives (23.33 percent) have completed the lower secondary education level in comparison to immigrants (17.04 percent). About the same proportion of natives and

³ We also conducted a separate analysis based on immigrants’ region of birth. The results can be found in the supplementary reflections, found later in this document.

immigrants, namely around 36 percent, hold educational qualifications on the upper secondary and post-secondary non-tertiary level. Finally, the category of first and second stage of tertiary education refers to university-level education. Here, a larger share of immigrants (41.81 percent) hold a university degree than natives (31.87 percent). This can be traced back to Australia's immigration policy that requires higher educational qualification for visa applicants in the Skilled Migration Stream.

When it comes to the family composition, we created six different categories which reflect different household sizes and simultaneously identifies its household members. The largest share of native respondents, almost 30 percent, lived in single person⁴ households. This is followed by living as a couple without children (25.12 percent) and living as a couple with two children (15.68 percent). Having one child, three or more children as well as living without a partner but with children were the least common family compositions. Only around five percent of the respondents lived without a partner but with children. This is almost identical to the respondents that were born overseas. However, their most common family composition consisted of living as a couple without children (27.75 percent) first, and then in a single person household (22.35 percent).

The housing situation for natives and immigrants are relatively similar at around 7.7 in terms of their satisfaction with the current dwelling. The share of homeowners among the two groups varies by a small degree. Almost 70 percent of immigrants are homeowners, whereas this is the case for around 62 percent of natives. Therefore, the proportion of tenants and other living arrangements are slightly higher in natives as in immigrants.

⁴ We refer to a one-person household when using the term "single person". The respondents may still have a non-resident partner living elsewhere. This is the case for 205 of the native respondents and 68 of the immigrant respondents.

In the results section, we present four separate ordered logistic regression models. We begin the first regression model with only taking into account the respondents' native or immigrant background. The results therefore do not take into account any compositional differences. In the following models, we add explanatory variables in several steps as they pertain to each conceptual level: In model 2, the explanatory variables age, age-squared and the highest education level are included as individual characteristics. In model 3, we include the family composition with its six different categories. We distinguish between individuals living alone, couple-only households, partnered households with one, two as well as three or more children, and lone-parent households with children. Lastly, we include the current housing situation as measured by the satisfaction with the dwelling and the home ownership status in model 4.

Table 1. Descriptives of the sample selection

Variables	Natives		1st generation immigrants		
	n	%	n	%	
Highest education level	(Pre-)primary level	250	8.27	60	5.59
	Lower secondary level	705	23.33	183	17.04
	Upper secondary level & non-tertiary post-secondary level	1,104	36.33	382	35.57
	First and second stage tertiary level	963	31.87	449	41.81
Family composition	Single person	861	28.49	240	22.35
	Couple without children	759	25.12	298	27.75
	Couple with 1 child	383	12.67	181	16.85
	Couple with 2 children	474	15.68	194	18.06
	Couple with 3+ children	385	12.74	105	9.78
	Without partner but with children	160	5.29	56	5.21
Home ownership	Homeowner	1,868	61.81	743	69.18
	Tenant	1,052	34.81	314	29.24
	Other (rent-free, other)	102	3.38	17	1.58
Continuous variables					
Variable	Range	Mean (s.d.)	Range	Mean (s.d.)	
Age	18-65	42.06 (12.27)	19-65	45.67 (11.29)	
Satisfaction with the dwelling (0 = not at all satisfied, 10 = completely satisfied)	0-10	7.62 (1.96)	0-10	7.78 (1.86)	
N	3,022		1,074		

Source: United Nations (2005).

5 Results

5.1 Descriptive results

Table 2 describes the dependent variable of having the intention to move in the upcoming three years and its distribution across natives and first-generation immigrants. It shows that both groups have a similar distribution of their intention to move. Around 32 and 29 percent of natives and immigrants, respectively, have firm mobility intentions. On the other hand, kittle more than half of the respondents have no intention to move. Only a small margin of 14 and 17 percent for natives and immigrants, respectively, are still unsure in their decision.

Table 2. Intention to move within the next 3 years by natives and immigrants (in %)

	Natives	1st generation immigrants	Total
No	53.94	54.56	54.10
Maybe	14.06	16.76	14.77
Yes	32.00	28.68	31.13
N	3,022	1,074	4,096

Source: United Nations (2005).

Note: Percentages in parentheses.

5.2 Results from ordered logistic regression on the intention to move

In Model 1 (“Migration background”), we begin with entering the respondents’ immigrant background. The results suggest that there is no significant difference between natives and first-generation immigrants in their likelihood to have formed mobility intentions. The chi-squared test is insignificant, meaning that the null hypothesis that the obtained coefficient is zero cannot be rejected. The log likelihood is -4005.84.

Next, the individual characteristics are included in Model 2 (“+ Individual characteristics”). Correcting for the compositional differences in age and education, first-generation immigrants show a significant difference to natives at the five percent level of significance. They have a slightly higher likelihood of being in the categories “maybe” or “yes” of having

mobility intentions than natives (odds 1.2086). Among all respondents, the odds of having mobility intentions decreases by 0.0810 times the odds for natives with a one-year increase in age. The result is significant at the one percent level of significance. In comparison to respondents that have upper secondary level education, individuals with a (pre-)primary and lower secondary level have lower likelihood of having mobility intention with odds of 0.63392 and 0.8462 respectively. Consequently, both educational groups have a lower likelihood to have formed mobility intentions, but it is particularly dominant among the lowest-educated. For individuals that have obtained a (pre-)primary level of education, the result is significant at the one percent level of significance. In the context of lower secondary education, the result is significant at the ten percent level of significance. The overall model-fit has improved as the chi-squared test indicates significance at the one percent level of significance. It can therefore be concluded that at least one of the coefficients is not equal to zero. Furthermore, the log likelihood decreases to -3660.77.

In Model 3 (“+ Family composition”), we add the family composition of the existing household. In terms of immigrant background, the difference between natives and first-generation immigrants is amplified. The odds of having mobility intention for immigrants are 1.2086 times the odds for natives at the five percent level of significance. In contrast, the effect of age is reduced at the one percent level of significance (odds 0.8629). In terms of educational attainment, (pre-) primary level education has a stronger effect of having mobility intention (odds 0.5297) in comparison to upper secondary education. Controlling for the family composition, there now is a small positive effect for university-educated individuals at the ten percent level of significance. Higher levels of education are therefore associated with a higher likelihood of forming mobility intentions. When it comes to the family composition, couples do not show any significant difference to couples living with one child. However, the

likelihood of forming mobility intentions is much lower for couple with two and three or more children living in a two-parent household in comparison to couple-only households. Especially for couples with two children the odds is 0.6160 times the odds in comparison to couple-only families. For couples with three or more children the effect is a little weaker at the five percent level of significance (odds 0.7559). In contrast to couples with children, individuals that live alone and lone parents that live with children show a higher likelihood of having mobility intentions. Individuals without partners but living with children show the strongest effect in that the likelihood of having mobility intention is more than double than that of couple-only families (odds 2.2063). This is slightly more than for respondents that live in one-person households (odds 1.8124). The overall model-fit improved slightly, with the log likelihood slightly decreasing to -3582.90.

In the final model (“+ Housing situation”), we take into account the respondents’ housing situation. Here, we include the variables “satisfaction with the current dwelling” as well as the home ownership status. The home ownership status shows the strongest effect on the likelihood of forming mobility intentions across all models. Tenants have a higher likelihood of having mobility intention (odds 4.3967) in comparison to home owners. Similarly, individuals that live rent-free have a higher likelihood of having mobility intention compared to homeowners (odds 2.8853). Both results are significant at the one percent level of significance. Not owning a home therefore increases the chance of considering mobility. On the other hand, higher residential satisfaction is associated with a decreased likelihood of having mobility intentions. A one-point increase on the satisfaction scale will decrease the likelihood of having mobility intentions (odds 0.711). Taking into account the housing situation, the difference between natives and first-generation immigrants diverges even further. Keeping all other variables constant, being a first-generation immigrant increases the

likelihood of having mobility intentions (odds 1.2221) in comparison to being a native at the five percent level of significance. When it comes to individual characteristics, the completed level of education shows significant differences in every category. Individuals with (pre-)primary education have a lower likelihood (odds 0.3949) in comparison to upper secondary level respondents. Likewise, individuals with university education have a lower likelihood of having mobility intentions (odds 0.8111). This highlights the result obtained from the previous model in that higher education is associated with a higher likelihood in forming mobility intentions. In terms of the family composition, having two as well as three or more children remains significant at the one percent level of significance. Both constellations have a lower likelihood of having mobility intentions with odds of 0.6331 and 0.7098 times the odds for couple-only households, respectively. On the other hand, living in a one-person household without children is shown to not be significantly different from living as a childless couple. Living without a partner but with children increases the likelihood of having mobility intentions (odds 1.3262) and this result is still slightly significant at the ten percent level of significance. The effect was therefore reduced immensely in contrast to model 3. The log likelihood decreases to -3198.21. The results obtained from the four different models are summarized in Table 3.

Table 3. Results obtained from the four ordered logistic regression models (Odds Ratios)

	Model 1 (Migration background)	Model 2 (+ Individual characteristics)	Model 3 (+ Family composition)	Model 4 (+ Housing situation)
1st generation immigrant (Reference: Native)	0.9306 (0.0635)	1.1682** (0.0852)	1.2086** (0.0896)	1.2221** (0.0970)
Individual characteristics				
Age		0.0810*** (0.0156)	0.8629*** (0.186)	0.8758*** (0.0201)
Age ²		1.0017*** (0.0002)	1.0010*** (0.0003)	1.0011*** (0.0003)
Highest education level (Reference: Upper secondary level)				
(Pre-) primary level		0.63392*** (0.0810)	0.5927*** (0.0853)	0.3949*** (0.0619)
Lower secondary level		0.8462* (0.0741)	0.8837 (0.0784)	0.8111** (0.0777)
First and second stage tertiary level		1.1293 (0.0847)	1.1348* (0.0868)	1.2587*** (0.1028)
Family composition (Reference: Couple without children)				
Single person			1.8124 *** (0.1640)	1.1409 (0.1126)
Couple with 1 child			0.9352 (0.1042)	0.8478 (0.1007)
Couple with 2 children			0.6160*** (0.0689)	0.6331*** (0.1007)
Couple with 3+ children			0.7559** (0.0915)	0.7098*** (0.0925)
Without partner but with children			2.2063*** (0.3333)	1.3262* (0.2178)
Housing situation				
Satisfaction with the dwelling				0.7113*** (0.0139)
Home ownership (Reference: Homeowner)				
Tenant				4.3967*** (0.3647)
Other (rent-free, other)				2.8853*** (0.5818)
Constant	0.1453	5.4471	4.149	5.542
Number of observations	4,096	4,096	4,096	4,096
Log likelihood	-4005.8412	-3660.7747	-3582.8957	-3198.3129
LR Chi ²	0.2916	691.25***	847.00***	1616.17***
Pseudo R ²	0.0001	0.0863	0.1057	0.2017

Source: United Nations (2005).

Note: Standard error in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Across all four models, the log likelihood decreases the most with the addition of the housing situation in model 4. Next, individual characteristics accounted for a decrease in the log likelihood. The family composition did not have as strong an effect.

We undertook a separate analysis only pertaining to the immigrant sample. The results showed the same direction and almost identical effects as in the models we present here. Furthermore, the explained variance between the two analyses is almost identical. Hence, we do not include any interactions in the models. Interaction results are available from the authors upon request.

6 Discussion and conclusion

In this article, we addressed two research questions: First, we were interested in potential differences in mobility intentions among natives and first-generation immigrants in Australia. We investigated this by undertaking four separate ordered logistic regression models that we gradually built up with explanatory variables from the individual level, the family composition and the housing situation. At first glance, we did not find significant variations between the two groups. However, once we controlled for compositional effects on the individual level, the family composition, and the housing situation, we indeed discovered significant differences. These differences became more prominent with each model and showed that first-generation immigrants were more likely to have mobility intentions than natives. This stands in contrast to existing findings on mobility *behaviour*, where an extended duration of residence in the destination country diminishes differences between natives and immigrants (Hugo, Wall & Young, 2016; Nogle, 1994).

Furthermore, we examined what mechanisms could explain differences in mobility intentions. For this, we made use of three separate theoretical approaches. The results

indicated that all of the obtained coefficients on the individual level, the family composition, and the housing situation, are similar for natives and first-generation immigrants. On the individual level, we confirmed the expectation that mobility intentions decrease with age, while they increase with higher levels of education. Next, we compared the effects of different family compositions on the intention to move. In comparison to couple-only families, we confirmed our predictions that singles and lone parents have a higher likelihood to have mobility intentions. This is in line with earlier findings on mobility behaviour, where singles are found to be more mobile than other family types (De Jong, 1985; Geist & McManus, 2008; Silvestre & Reher, 2014) and lone parents are more mobile than households with two biological parents (Astone & McLanahan, 1994; Tucker, Marx & Long, 1998). However, it was surprising to find that the likelihood of having mobility intentions was stronger for lone parents than for singles. This stands in opposition to our assumption and previous research which indicates that singles are the most mobile group among all family compositions (De Jong, 1985; Geist & McManus, 2008; Silvestre & Reher, 2014). When it comes to couples with children, the results were not as clear-cut as we had expected. Although we were able to confirm that children decrease the likelihood of having mobility intentions, this was only true for couples with two or more children. In contrast, there were no significant differences between couple-only families and couples living with one child. We suspect that this is the case because the flexibility of moving with one child is greater than with two children. Having multiple children increases the likelihood that least one of them is of school-age, which serves as a tie to the local community (Long, 1972; Mulder & Malmberg, 2011). Lastly, we included two factors that reflect the respondents' current housing situation. Here, we confirmed that an increasing satisfaction with the dwelling decreases the likelihood to have an intention to move. On the other hand, we showed that being a tenant increases mobility intentions in

comparison to homeowners. Both results support existing findings on residential satisfaction and tenure status (Dielemann, 2001; Helderma, Van Ham & Mulder, 2004; Rossi, 1955).

The findings of our study have implications for both, research and society. First, we argue that inquiring about an individual's intentions holds a promising outlook for future research. In contrast to existing literature on assimilation theory as well as research findings that highlight the convergence in behaviour among natives and immigrants over time, we find that differences between these two groups are retained on the level of intentions. This holds true despite an extended passage of time that immigrants have spent in the destination country. When we look at the link between intentions and behaviour, literature by Ajzen and Fishbein (1991) and Miller (1994) suggest that intentions should already capture existing constraints to behaviour, as an individual has moved from a mere wish to more concrete plans where he/she identifies possible barriers. When we compare this assumption with our results and the knowledge that immigrants do not differ in their mobility behaviour in comparison to natives, it seems that immigrants face unexpected obstacles along the way of actualizing the intention to move. One such starting point of investigation could be derived from fertility literature, Liefbroer (2009) suggests that the actualization of intentions is dependent on events – or their absence – in other life course domains. We continue this approach by suggesting that not only events, but that other life course intentions may exert an influence on each other through overlapping with each other. Besides overlapping, they may also differ in their sequence that are shaped through an immigrant background. Of course, these life course intentions hold different values for each individual, but we argue that they are also

shaped through the society that one grows up in and that other lives that we are interlinked with during our life course can reinforce or alter our initial intentions.⁵

Coming back to our analysis of having the intention to move, we were able to demonstrate that the specified mechanisms do not differ between natives and immigrants. However, through the inclusion of various suspected mechanisms, we show that being a first-generation immigrant has a unique effect in that it increases the likelihood of having moving intentions. This opens a window of opportunity to further delve into the question what this immigrant effect may consist of, particularly since most immigrants have already resided in Australia for decades. We therefore call for a multidisciplinary perspective on the conceptualization and measurement of intentions as well as a broadened view on the utilization of explanatory approaches. This is in line with earlier appeals by other researchers (Bernardi, 2015; Carling, 2014; De Jong et. al, 1996; Gardner et. al, 1986).⁶ We expand on these notions by arguing that traditional indicators which have largely captured moving *behaviour*, particularly the level of satisfaction with the dwelling or tenure status, do not seem to serve their intended purpose when we try to explain intention differentials among natives and immigrants.⁷ It can also be argued that the response style to these traditional indicators may differ for first-generation immigrants when we undertake comparisons with natives. Drawing on Hofstede's cultural dimensions and the big-five personality characteristics applied in the field of Psychology, Harzing (2006) shows that the communication style found in a country has a major effect on the response style in surveys.

⁵ In chapter 11.3 of the supplementary reflections, we briefly analyze different types of life course intentions that overlap in their timing and point out differences among natives and first-generation immigrants. Here, intentions related to the family life seem to be of special importance. Immigrants seem have less of a desire to make change to their existing family situation in comparison to natives.

⁶ A detailed discussion of the issue of conceptualization and measurement of intentions can be found in Chapter 10 "Conceptualizing and measuring intentions" in the supplementary reflections.

⁷ As mentioned earlier, we performed a separate analysis on the migrant sample only. The results are not presented here, but indicate similar coefficients in comparison to our final model. More information can be obtained from the authors upon request.

Undertaking cross-national studies therefore requires thorough consideration of cultural differences. For a country such as Australia, with the overseas-born population contributing almost 30 percent to the total population, the question remains to what extent current surveys, such as the GGS, are avoiding a possible response bias.

We outlined earlier that a majority of immigrants that newly arrive in Australia choose to live in major urban areas, particularly the capital cities (ABS, 2017a; Hugo et al., 2015). At the same time, 64 percent of Australia's total population resides in the capital cities, while their mobility behaviour is concentrated therein as well (Hugo, Wall & Young, 2016). We therefore have a highly mobile population that prefers to remain within the same municipality when moving. Hugo, Wall and Young (2016, p. 359) describe this as "a striking paradox of mobility and stability". On a societal level, our results therefore have implications for urban planning policies, particularly when it comes to Australia's capital cities. As the Australian government put forward in its Sustainable Population Strategy (2011, p.2), "[a] sustainable Australia is a nation of sustainable communities which have the right mix of services, job and education opportunities, affordable housing, amenity and natural environment that make them places where people want to live, work and build a future". Thus, it is in the interest for the government to create livable communities in which residents not only have access to all types of financial, social and environmental resources but also feel attached and are willing to engage within the neighbourhood. This way, residents can contribute to and benefit from social ties that share trust, social norms and exchange support in form of goods or services. This is often referred to as "social capital" (Kan, 2007; Kleinhans, Priemus & Engbersen, 2006). Based on our results, we therefore put forward the question to what extent immigrants' increased likelihood to have mobility intentions may have an effect on local social capital and the sustainability of the community, particularly if it is indeed the case the these intentions

cannot be actualized. We hereby highlight that forced immobility harbours the risk of diminishing existing social capital if the intention to move is associated with the level of engagement in the neighbourhood. In this context, both, policy-makers and researchers alike, should pay more attention to the desires and intentions of the increasing number of first-generation immigrants in Australia's capital cities. We conclude that taking into consideration cultural variations that may be less observable and that may persist over decades - as we have shown with our results - will become evermore important, not only in Australia but also in a globalized world, where people from all cultural and socioeconomic backgrounds become more intertwined through living in geographic proximity to each other.

Supplementary reflections

7 Structure of the reflection section

The reflection piece commences with briefly summarizing the relevance of studying mobility intentions and the importance that the Theory of Planned Behaviour (TPB) has played therein so far. This is followed by a discussion of the shortcomings of the theory as well as the development of own theoretical considerations for the article. In the methodology section, the measurement and operationalization of intentions is discussed. The outcome of this first part can be summarized as follows: Whereas the TPB has played a central role in intention-behaviour research so far, a broader scope should be applied that acknowledges intentions as a stand-alone component worthy of investigation. Following these theoretical considerations, a more practical approach is taken. An emphasis is placed on alternative results that would have been obtained if the respondents that were labelled first-generation immigrants had been categorized according to their region of birth. Also, a short overview will illustrate the overlapping tendencies of several life course intentions.

8 From studying actual behavior to mobility intentions

Internal as well as international mobility behaviour have been subject of study for decades and a broad range of theories has since emerged. One starting point are rational choice models such as the neoclassical theory arguing that economic development in a specific region will attract workers from another place. In the 1950s, these economic models were at the center of explaining mobility (Hagen-Zanker, 2008). However, the sole focus on macro variables such as economic development to explain mobility behaviour was soon criticized and new approaches were set up. This was achieved by utilizing indicators situated on the meso and micro level, going beyond economic reasoning (Massey et al., 1998). More specifically, it now included individual and family-related factors that complemented the existing research body and mobility behaviour was redefined as a more complex decision-making process (Kley & Mulder, 2010; Mincer, 1978; Mulder, 2007; Stark & Bloom, 1985).

One of the dominating theories originating from the field of social psychology is Ajzen's (1988) Theory of Planned Behavior (TPB). Based on this understanding, behaviour is preceded by an intention. Herein, intentions are said to be the most important variable to predict subsequent behaviour (Sheeran, 2002). An intention, on the other hand, is subject to the influence of an individual's attitude toward the behaviour, subjective norms and perceived behavioural control. Besides the individual's attitudes, subjective norms allow to incorporate the influence that key figures – such as the respondent's family – exert on the individual's decision-making process. Perceived behavioural control refers to the respondent's conviction that the behaviour can actually be controlled and that external factors do not disrupt the intended behaviour (Ajzen, 1988).

In the context of mobility studies, the TPB has taken a central role in explaining the linkages between intending to move to another place and actually moving. A range of studies

has since confirmed that the intention to move to another locality is a good predictor of actual behaviour (Bradley et al. 2008; Kley 2011). However, using the intention as a single determinant is not suitable to explain behaviour completely (Creighton, 2013; De Jong et al., 1985; Lu, 1999). In studying the behaviour of movers and non-movers, Lu (1999) found that moving to a different housing unit can be a sudden, unexpected event that was not preceded by the formulation of a moving intention. Thus, from the perspective of planned behaviour, the subsequent action may not have a concrete, measurable intention beforehand. Adding to this discussion, De Jong (1999; 2000) further argues that other factors play a role in the migration decision-making process. He thereby proposed a general model of migration decision-making that included seven additional concepts made up of migrant networks and family ties, family migration norms, gender roles, values and expectancies, residential satisfaction as well as behavioural constraints and facilitators. A similar argument was brought forward by Gardner et. al (1985, p. 76) who argued that including factors beyond attitudes and subjective norms “seems to be closer to reality, incorporating both the individual’s attitudes and desires and the effects of the external world on the individual’s behavior”.

9 The TPB and its operationalization in the Generations and Gender Survey

The survey used for the article, the Generations and Gender Survey (GGS), is constructed in a way that it includes the main elements of the TPB, meaning attitudes, subjective norms and perceived behavioural controls (GGP, 2016). Within the survey, they are incorporated in the context of family relationships, marriage formation and fertility. For example, subjective norms are inquired about with questions such as “Does your partner think that you should start living together?” or “Does your partner/spouse want to have a/nother baby now?” (United Nations, 2005). A number of research papers that utilizes the Generations and

Gender Survey (GGS) focuses on family relationships, well-being and childbearing behavior (Dystra et. al, 2016; Moor & Komter, 2012; Spéder, 2006; Vikat et. al, 2007). Research that puts intentions at the center of investigation, on the other hand, is limited and mostly make fertility intentions the subject of discussion (Ajzen & Klobas, 2013; Caplescu, 2014; Tanskanen & Rotkirch, 2014).

In the context of mobility intentions, Dommermuth and Klüsener (2017) initiated a working paper that discusses both, mobility intentions as well as their actualization, utilizing the Generations and Gender Survey. The authors' theoretical approach is grounded in the TPB, as others did in the context of fertility intentions (Ajzen and Klobas, 2013; Caplescu, 2014). Based on three life phases, namely young adulthood, the family phase and the retirement phase, they find a weak association between the two concepts of intentions and subsequent behaviour. However, a closer examination shows that the operationalization of the TPB for mobility intentions in the GGS is not a straight-forward one. The main issue is that the three elements of the TPB are not directly represented in the questionnaire and therefore proxies have to be chosen. Dommermuth and Klüsener (2017) choose fertility intentions to be a proxy for perceived behavioural control. Socio-demographic information on age and sex as well as housing satisfaction serve as a proxy for attitudes. Yet, concrete information on the operationalization of subjective norms is missing.

The operationalization of the TPB is generally an. As Liefbroer (2011) points out, the elements of the TPB are generic in a sense that their operationalization depends on the user's interpretation of attitudes, social norms and behavioural controls. However, one cannot be certain that all required information has been identified and categorized according to these three elements. Furthermore, it has been pointed out on numerous occasions that the theory requires careful conceptualization and measurement, as it is otherwise at risk of predicting

behaviour inaccurately (De Jong et. al, 1985; Liefbroer, 2011).⁸ Sheeran (2002) even points to past findings and discussions on whether or not there is a direct linkage between intentions and behaviour. The main argument is that people may attribute behaviour as the result of a previous intentions, when this in fact does not have to be the case. This was exemplified in a study conducted by Wegner and Wheatley (1999). Herein, participants reported having had intentions to perform a certain action when in reality they did not have any control over it. Similarly, Norman and Smith (1995) find that desires have better predictive power of behavior than intentions. In the general understanding as put forward by Miller (1994), this should not be the case. Rather, desires ought to be preceding intentions which in turn lead to behaviour.

This leaves room for debate on the currently applied frameworks on studying intentions in the field of demography. Although demographic approaches are concerned with (predicting and explaining) behavior in fertility, migration and mortality, the question remains if a viewpoint on intention-behaviour alone may be too restrictive? Rather, a more encompassing approach would acknowledge two points: First, that intentions as a stand-alone component may be worthy further investigation. And second, that life domains may overlap, and in consequence, several intentions compete or complement each other. For this, it may be necessary to take a different approach and carefully conceptualize intentions as a stand-alone component of a broader decision-making process that is utilized during the life course. Next, an expanded view on what factors may play an influential role in forming intentions should be applied, going beyond the three components of the TPB. This was also noted by De Jong (1985) by pointing out that some determinants are applicable for intentions but not behaviour. A first stepping-stone could be to utilize existing theories on mobility behaviour and to test their applicability in the context of mobility intentions, similar to what

⁸ Adding to this, Sniehotta, Pesseau and Araújo-Soares (2014) recently brought up a more general discussion on the validity and utility of the Theory of Planned Behaviour.

has been proposed by others, such as De Jong (2000) and Carling (2014). In the context of this article, this has been done by incorporating three approaches: the human capital theory, the life course approach focusing on so-called 'linked lives', as well as Speare's (1974) residential satisfaction model. Through this, elements across three levels are represented: the human capital theory provided individual-level variables on age and education; the focus on 'linked lives' takes into account the existing family composition living in the household; and finally, the residential satisfaction model acknowledges that mobility is also related to a physical place and a potential change in location.

The main difference in this approach in comparison to the TPB is, that the identified factors are not required to be in the center of the respondent's awareness. More precisely, the TPB concentrates on factors that are vocalized by the respondent in terms of one's own attitude, the perceived family's influence as well as subjectively identified constraints and beliefs. However, the eventual list of factors that the respondent provides does not necessarily need to be exhaustive. Rather, the given setting that the respondent navigates in may exert an influence on mobility intentions without the respondent's concrete awareness. Capturing this setting and its influence was attempted in the article. The next step then consisted of considering different possibilities of conceptualizing and measuring intentions.

10 Conceptualizing and measuring intentions

The conceptualization and focal point of research into intentions seems to be placed on the linkage between intention and behaviour (Bagozzi & Yi, 1989; Kley, 2011; Lee, 1999; Manski, 1999; Sheeran, 2002). The following discussion will therefore mostly draw upon this literature but puts intentions in the center of the inquiry, whereas behaviour itself will not be examined in detail.

One key aspect in the intention-behaviour analysis is the role of intentions as a predictor for subsequent behaviour. This idea has been researched over decades and the general consensus is that an intention is indeed a good, although imperfect, predictor for future action-taking (De Jong et al., 1985; Kley 2011; Kley & Mulder, 2010; Lu 1998; McHugh, 1984; Van Dalen & Henkens 2008). However, others have also voiced concern about the way that respondents answer to inquiries about intentions. For example, Manski (1990) finds that information on intentions is only suitable to predict future behaviour in the context of a “best-case hypothesis”, which refers to the underlying assumption that all respondents have rational expectations. Since this does not have to be true, this approach leads some to the conclusion that inquiries into intentions are, at worst, not useful at all (Manski, 1990).

One of the question that arises from these findings is: do we ask the correct question(s) when inquiring about intentions, and, do we provide the respondents with sufficient answer possibilities? Looking back, a number of past surveys has drawn upon the binary answer scheme of “yes” and “no”, which either occurs due to the survey’s initial setup, or through the researcher’s approach to recoding several categories into a binary variable (De Groot et. al, 2011; Kley, 2010; Manski, 1990). This can be referred to as “forced-choice” answer styles. In this case, it remains unclear how strong or weak each answer actually is when the respondent is forced to choose. What is clear, however, is that the strength of an intention actually has implications. In the context of the TPB, Bagozzi and Yi (1989) were able to show that well-formed intentions had a strong effect on subsequent behaviour. The intensity of an intention should therefore not be underestimated. In the case of the GGS, the answer possibilities are extended to include a category of “maybe” as well, which we made use of in this article (United Nations, 2005). Still, the question remains if a differentiation of three categories in intention research is sufficient and if it actually captures the strength of an intention. Both,

Manski (1990) and Carling (2014) draw on similar conceptualizations when proposing that the respondent should either provide a probability for a certain action to occur, or, in the case of Carling (2014), to see intentions as a continuum. Furthermore, in future research designs, it could be helpful to inquire about the actions that a respondent has undertaken so far in order to realize his or her moving intention.

11 Results obtained from other approaches

11.1 Detailing first-generation immigrants' region of birth

The results reported in the article consist of detailed descriptives of the natives and first-generation immigrant population samples as well as four ordered logistic regression models on their likelihood to have mobility intentions. Instead of comparing natives with first-generation immigrants, the immigrant population could have been investigated in more detail. This is of interest as different immigrant groups have been shown to exhibit different mobility patterns than natives, at least in the beginning of living in the destination country (Bartel & Koch, 1991; Gurak & Kritz, 2000; Nogle, 1994). In the case of Australia, the change in the composition of the overseas-born population underpins the attractiveness of further investigating mobility intentions among immigrants and natives in detail. However, this was not possible in the main article due to data limitations.

As of 2016, Australia's population reached the size of 24.2 million inhabitants (ABS, 2017a). 28.5 percent of them had been born overseas (ABS, 2017b). In Table 4, we present the ten most common countries of birth and their changing composition between 2006 and 2016. The resident population originating from European countries continued to be on the decline between 2006 and 2016. Nevertheless, residents that were born in the United Kingdom still constitute the highest proportion of overseas-born among the Australian

population, namely five percent. On the other hand, the percentage of the overseas-born population that was born in (South-)East Asia has been on the rise. This is particularly apparent in the case of India and China. The proportion of Australian residents that were born in China more than doubled to around two percent over the last ten years. Correspondingly, the percentage of individuals that were born in India climbed from 0.7 to 1.9 percent over the same period (ABS, 2017; ABS, 2007).

Table 4. Estimated resident population, top 10 countries of birth in 2006 and 2016

Country of birth	Percentage of Australian population (2006)	Percentage of Australian population (2016)
United Kingdom	5.6	5.0
New Zealand	2.3	2.5
Italy	1.1	0.8
China	1.0	2.2
Vietnam	0.9	1.0
India	0.7	1.9
Philippines	0.7	1.0
South Africa	0.6	0.8
Malaysia	0.5	0.7
Germany	0.6	0.5

Sources: ABS (2007); ABS (2017b).

Consequently, we repeated the initial analysis and modified the variable on immigrant status to include several regions of birth. We chose regions of birth as the unit of analysis in order to accommodate the relatively small sample sizes. For this, we obtained information on the respondents' country of birth and categorized each country into a region according to the numeric ISO 3166 standard. Respondents born in Africa or Americas were grouped together as "Other" due to the few numbers in observations. Our final categories of regions of birth therefore consist of Europe, Asia, Oceania and Other.

First, we analyzed the distribution of mobility intentions. Differentiating among the first-generation immigrants seems to reveal slight deviations depending on the region of birth, as presented in Table 5. When it comes to clear mobility intentions, Australian natives and

respondents from Oceania were most similar, with around 32 percent answering “yes”. Respondents from Asia and Europe on the other hand were less likely to have formulated positive mobility intentions, around 27 and 24 percent respectively. Individuals that were categorized as “other” had the highest share of intentions, amounting to around 45 percent. On the other hand, around 54 percent of natives did not have any mobility intentions. This stands in contrast to respondents that were born in Europe as they had the highest percentage in answering “No” to having intentions to move, amounting to around 61 percent. Respondents from Oceania and the grouped regions of Americas and Africa had the lowest percentages, 45.81 and 39.57 percent respectively.

Table 5. Distribution of mobility intentions by region of birth (%)

	Australian natives	Europe	Asia	Oceania	Other	Total
No	53.94	60.52	55.56	45.81	39.57	54.10
Maybe	14.06	15.27	17.70	21.94	15.11	14.77
Yes	32.00	24.21	26.75	32.26	45.32	31.13
N	3,022	537	243	155	139	4,096

Source: United Nations (2005).

Note: Percentages in parentheses.

Next, we obtained summary statistics on the chosen groups, as detailed in Table 6. Respondents that had been born in Europe had a mean age of 49 years which is around six years more than natives and any other first-generation immigrant group.⁹ Other divergences among the immigrant groups included differences in educational attainment, the family composition and home ownership status. However, the sample sizes within these categorical variables were rather small. In terms of education, more than half of the respondents that were born in Asia had obtained a university degree. This stands in contrast to around a third

⁹ However, it needs to be considered that the mean age for natives and all first-generation immigrant groups in the survey deviates from the median ages estimated by the Australian Bureau of Statistics (2017): For example, residents that were born in North-West or Southern and Eastern Europe had a median age of 54.30 and 59.20 years, respectively, in 2006. The resident population that was born in North-East Asia as well as Southern and Central Asia had a median age of around 35 years.

of native respondents and respondents from other immigrant groups. At the same time, Asian-born residents recorded the shortest time period that they had spent living in Australia, amounting to a median of 16 years. In terms of the family composition, they also had the highest proportions of family households that include one or two children. In the context of the current housing situation, they did not differ greatly in their satisfaction with the dwelling or the home ownership status. Overall, we did not observe large differences for the satisfaction with the current dwelling. However, almost 80 percent of residents with European backgrounds were homeowners, which differed to the approximately 60 percent of natives and other immigrant groups.

Table 6. Descriptives by region of birth in comparison to Australian natives

Variables		Natives		Europe		Asia		Oceania		Other	
		n	%	n	%	n	%	n	%	n	%
Highest education level	(Pre-)primary level	250	8.27	36	6.70	13	5.35	8	5.16	3	2.16
	Lower secondary level	705	23.33	110	20.48	30	12.35	32	20.65	11	7.91
	Upper secondary level & non-tertiary post-secondary level	1,104	36.33	199	37.06	73	30.04	63	40.65	47	33.81
	First and second stage tertiary level	963	31.87	192	35.75	127	52.26	52	33.55	78	56.12
Family composition	Single person	861	28.49	120	22.35	45	18.52	40	25.81	35	25.18
	Couple without children	759	25.12	173	32.22	41	16.87	46	29.68	38	27.34
	Couple with 1 child	383	12.67	86	16.01	58	23.87	21	13.55	16	11.51
	Couple with 2 children	474	15.68	94	17.50	54	22.22	21	13.55	25	17.99
	Couple with 3+ children	385	12.74	34	6.33	34	13.99	17	10.97	20	14.39
	Without partner but with children	160	5.29	30	5.59	11	4.53	10	6.45	5	3.60
Home ownership	Homeowner	1,868	61.81	419	78.03	157	64.61	91	58.71	76	54.68
	Tenant	1,052	34.81	110	20.48	82	33.74	59	38.06	63	45.32
	Other (rent-free, other)	102	3.38	8	1.49	4	1.65	5	3.23	0	0.00

Table 6. (Continued)

Continuous variables	Natives		Europe		Asia		Oceania		Other	
Variable	Range	Mean (s.d.)	Range	Mean (s.d.)	Range	Mean (s.d.)	Range	Mean (s.d.)	Range	Mean (s.d.)
Age	18-65	42.06 (12.27)	19-65	48.99 (10.68)	19-65	42.38 (10.81)	19-65	42.51 (11.10)	20-63	42.11 (10.94)
Satisfaction with the dwelling (0 = not at all satisfied, 10 = completely satisfied)	0-10	7.62 (1.96)	1-10	7.92 (1.72)	1-10	7.63 (1.96)	0-10	7.57 (1.92)	1-10	7.71 (2.07)
N	3,022		537		243		155		139	

Source: United Nations (2005).

Note: Percentages in parentheses. For age, median number of years lived in Australia and satisfaction with the dwelling: standard deviation in parentheses.

When it comes to the four ordered logistic regression models, we found several significant results depending on the respondents' region of birth, which we present in Table 8. Most dominantly, Model 1 ("Migration background") shows significant differences between two of the immigrant groups in comparison to natives. On the one hand, first-generation immigrants with a European background had a lower likelihood of having mobility intentions (odds 0.7359) at the five percent level of significance. On the other hand, immigrants that were categorized as "Other" have a higher likelihood (odds 1.8675) at the one percent level of significance. However, this model does not take into account compositional effects, such as age and education yet. Model 2 ("+ Individual characteristics") includes individual characteristics, whereas the family composition is added in Model 3 ("+ Family composition"). Individuals with European backgrounds now do not show any significant difference anymore. Nevertheless, and maybe surprisingly, a significant difference between natives and European first-generation immigrants reappears in the final Model 4 ("+ Housing situation"). In contrast to Model 1, the direction of the odds of having mobility intentions is now reversed, in that European immigrants have a higher likelihood of wanting to change the dwelling (odds 1.2619) on a five percent level of significance. Referencing back to the descriptives in Table 7, it was clear that the housing situation is quite different for Europeans and other groups of respondents in that Europeans had the highest share of homeowners. Thus, when we controlled for homeownership, the results actually suggest an increased likelihood of having mobility intentions among first-generation immigrants with European backgrounds. When we compared the new coefficients to those of the article, we found them to be robust.

Table 7. Results obtained from the four ordered logistic regression models (Odds Ratios)

	Model 1 (Migration background)	Model 2 (+ Individual characteristics)	Model 3 (+ Family composition)	Model 4 (+ Housing situation)
Region of birth (Reference: Australia)				
Europe	0.7359** (0.0680)	1.1165 (0.1095)	1.1417 (0.1136)	1.2619** (0.1332)
Asia	0.8789 (0.1127)	0.8928 (0.1210)	0.9682 (0.1340)	0.8861 (0.1319)
Oceania	1.2168 (0.1853)	1.3467 (0.2156)	1.3141 (0.2121)	1.2494 (0.2168)
Other	1.7850*** (0.2930)	1.8675*** (0.3237)	1.9797*** (0.3496)	1.8450** (0.3476)
Individual characteristics				
Age		0.8099*** (0.0156)	0.8618*** (0.0186)	0.8741*** (0.0201)
Age ²		1.0017*** (0.0002)	1.0099*** (0.0003)	1.0011*** (0.0003)
Highest education level (Reference: Upper secondary level)				
(Pre-) primary level		0.6400** (0.0909)	0.5962*** (0.0859)	0.3984*** (0.0624)
Lower secondary level		0.8495* (0.0745)	0.8877 (0.0789)	0.8129** (0.0779)
First and second stage tertiary level		1.1286 (0.0850)	1.1315 (0.0869)	1.2634*** (0.1036)
Family composition (Reference: Couple without children)				
Single person			1.8213*** (0.1650)	1.1466 (0.1130)
Couple with 1 child			0.9565 (0.1070)	0.8697 (0.1038)
Couple with 2 children			0.6230*** (0.1070)	0.6412*** (0.0764)
Couple with 3+ children			0.7601 (0.0922)	0.7192** (0.0939)
Without partner but with children			2.2324*** (0.3373)	1.3412* (0.2203)

Table 7 (continued)

Housing situation				
Satisfaction with the dwelling		0.7099*** (0.0140)		
Home ownership (Reference: Homeowner)				
Tenant		4.3819*** (0.3651)		
Other (rent-free, other)		2.8896*** (0.5822)		
Constant	0.1438	5.4470	4.1623	5.5912
Number of observations	4,096	4,096	4,096	4,096
Log likelihood	-3992.071	-3654.1542	-3577.0085	-3193.1103
Chi ²	28.65***	704.49***	858.78***	1626.57***
Pseudo R ²	0.0036	0.0879	0.1072	0.2030

Source: United Nations (2005).

Note: Standard error in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

11.2 Discussion of the detailed migrant models

The main result obtained from the detailed analysis is the significant difference in mobility intentions among first-generation immigrants from Europe in comparison to natives. Here, we find that immigrants have a higher likelihood to have the intention to move. This is surprising in so far that the descriptives of their housing situation is most favorable to assume an intention to stay in place. For one, they had the highest average satisfaction with the dwelling among all immigrant groups and in comparison to natives. Second, almost 80 percent own their current dwelling. Future research may benefit from an inquiry into the direction that immigrants intend to move.

11.3 Results and discussion for intentions across the life course

Up to this point, we explored mobility intentions in isolation. However, the intention to move to another dwelling is only one consideration among many that individuals have to take across their life course. Between the age of 18 to 65, decisions about education, fertility, marriage and careers have to be taken and they may overlap in their timing. In this context,

we need to consider that it is not only events that shape intentions but that several intentions across the life course can be intertwined, and, depending on the context, are either complementing or competing with each other (Huinink & Kohli, 2014; Philipov, Testa & Jaschinski, 2016). For example, a couple can face a dilemma if having a child would increase their financial constraints to such an extent that their intention to become homeowners needs to be postponed, and vice versa (Mulder, 2006). On the other hand, an anticipated job change can go hand-in hand with the intention to move to another dwelling. Herein, the decision to migrate needs to be distinguished from decisions on family size and job opportunities. It can be argued that an intention to migrate has an instrumental value for other life course domains (Huinink & Kohli, 2014). Similarly, marriage formation and the intention to marry is associated with residential relocation (Mulder and Wagner, 1993). Mulder and Wagner's (1993) results indicate that movement occurs on average one year prior to two years after getting married. This means that not only the life event itself is a trigger to move, but also the anticipation of the event can bring about changes in the housing unit.

Based on these research results, we initiate an analysis of intentions across several life course domains by utilizing the initial sample selection of natives and first-generation immigrants. Here, we are interested in the distribution of having only one type of intention or several overlapping intentions at the same time. The GGS provides a range of questions on intentions that all relate to the respondents' plans for the next three years. We pool all job- and study-related intentions together into a variable we refer to as "job-related intentions". Intentions that involve the interlinkage with other individuals, such as family formation, marriage and planning to have a child, are combined into a variable called "family-related

intentions". The "mobility-related intention" is identical to the dependent variable we have used throughout the article and the reflection piece.

Unfortunately, the questions on family-related intentions differ in their answer possibilities in the GGS: For the question "Do you intend to start living with a/your partner/spouse during the next 3 years?" and "In what month and year did you last use or do anything to prevent pregnancy?" a binary answer scheme of "yes" and "no" is applied. For the question "Do you intend to marry somebody / your partner during the next 3 years?", respondents could choose between four answers, namely "definitely not", "probably not", "probably yes" and "definitely yes". For all other questions, the three categories of "no", "maybe" and "yes" are available. Although not ideal, we therefore recode all variables of interest according to a binary scheme of "yes" and "no". The answer possibility of "maybe" is herein coded as "no", in order to distinguish between strong intentions and weak intentions. In terms of the intention to marry, we pool the answers "probably yes" and "definitely yes" together to indicate a strong intention, while the answers "probably not" and "definitely not" are defined as having no intention. In Table 8, we present an overview of the GGS questions that were used to create job-related, family-related and mobility-related intentions as well as the initial answer design.

Table 8. Overview of GGS questions on life course intentions

Type of intention	Question asked in the GGS	Answer design
Job-related intentions	Do you intend to take a job or start a business within the next three years?	No, Maybe, Yes
	Do you intend to finish education within the next three years?	No, Maybe, Yes
	Do you intend to take a job or start a business within the next three years?	No, Maybe, Yes
	Do you intend to take a job or start a business within the next three years?	No, Maybe, Yes
	Do you intend to take a job or start a business within the next three years?	No, Maybe, Yes
	Do you intend to change company or start a business within the next three years?	No, Maybe, Yes
	Do you intend to give up paid work within the next three years?	No, Maybe, Yes
	Do you intend to start a new business or take a job during the next three years?	No, Maybe, Yes
	Do you intend to give up paid work during the next three years?	No, Maybe, Yes
	Intention to take a job within the next three years Respondent	No, Maybe, Yes
	Do you intend to resume your education within the next three years?	No, Maybe, Yes
Family-related intentions	Do you intend to start living with a/your partner/spouse during the next 3 years?	Yes, No
	Do you intend to marry somebody/ your partner during the next 3 years?	Definitely not Probably not Probably Yes Definitely Yes
	In what month and year did you last use or do anything to prevent pregnancy?	Yes, No
Mobility-related intention	Do you intend to move within the next three years?	No, Maybe Yes

Source: United Nations (2005).

Note: The GGS data set contains more questions on job- and family-related intentions. However, in the case of Australia, these variables have only missing values. Table 8 therefore only includes questions that the Australian respondents answered.

Subsequently, we obtain information on seven different combinations of intentions: first, it is possible that the respondents do not have any life course intentions at all. The next three categories refer to having only one type of intention, namely having only job-related

intentions, only family-intentions or only moving intentions. In terms of overlapping life course intentions, the remaining categories consist of all possible combinations: having job and family intentions; family and moving intentions; job and moving intentions; as well as job, family and moving intentions at the same time. In Table 9, we present the distribution of intentions across these domains according to natives and first-generation immigrants and test for significant differences between their intentions.

Table 9. Distribution of intentions across several life course domains (%)

Intention type	Natives	1 st generation immigrants	Total	Pearson Chi-Square
No intentions	42.72	45.07	43.33	1.7747
Job-related intentions only	13.57	17.04	14.48	0.1369
Family-related intentions only	6.78	5.40	6.42	18.959***
Mobility-related intention only	7.84	8.94	8.13	6.7644**
Job- & family-related intentions	4.93	3.82	4.64	10.319**
Family- & mobility-related intentions	5.43	4.00	5.05	3.3446*
Job- & mobility-related intentions	9.46	9.22	9.40	0.0563
Job-, family- and mobility-related intentions	9.27	6.42	8.54	7.6553***
N	3,022	1,074	4,096	

Source: United Nations (2005).

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Over 40 percent of natives and first-generation immigrants have no life course intentions at all. Here, natives and immigrants do not differ significantly from each other. Similarly, they do not differ in terms of job-related as well as having overlapping job-related and mobility-related intentions. These job-related intentions have the second and third largest share in intentions, namely 14.48 percent and 9.40 percent, respectively. Surprisingly, we find significant differences as soon as we introduce family-related intentions. Here, first-generation immigrants have significantly lower shares in family-related as well as overlapping intentions that involve the family sphere. Most significantly, at the one percent level of significance, first generation immigrants have a lower share of only family-related intentions,

as well as overlapping job-, family- and mobility-related intentions. In the context of our study on mobility intentions, we find two aspects to be of importance: first, natives and first-generation immigrants differ significantly at the five percent level of significance when it comes to having mobility intentions only. Herein, immigrants have a higher propensity to have mobility intentions in comparison to natives. However, as we introduce family-related intentions that overlap with mobility intentions, this trend is reversed. Natives now have a higher share when it comes to overlapping family- and mobility-related intentions as well as overlapping family-, job- and mobility-related intentions.

The family component therefore plays a significant role in the intended life course trajectories of first-generation immigrants, particularly when it comes to planning a move to another dwelling. Although we are not able to determine any causality between these types of intentions, this initial analysis provides a first insight into the importance of overlapping intentions that go across several life course domains.

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