

The dynamics of early immigrant integration: Lessons learned from longitudinal research

Mérove Gijsberts & Mieke Maliepaard

Introduction

As the Russian invasion of Ukraine continues, newspapers are once again filled with stories of (forced) migration. Millions of Ukrainians are arriving in European countries, looking for a safe place to stay, and potentially to settle. This is only one of the many migration flows all around the world. The current UN global estimate is that there were 281 million international migrants in the world in 2020, of which an estimated 26.4 million were refugees, while no less than 161 million were migrant workers (McAuliffe & Triandafyllidou, 2021). All these migrants are restarting their life in a new location, often with a different language and customs.

This ‘new beginning’ in a host society, for scholars of migration – and, also, for policy makers –, is often seen as a crucial phase, because of the presumed larger dynamics in this first period: migrants develop a new social network, learn the language, find a first job, and need to more generally find their way in the host society (Jasso & Rosenzweig, 1990; Diehl et al., 2016a). In order to truly understand this first (supposedly) dynamic phase, migration scholars as well as national governments across the globe have started to invest in the collection of longitudinal data among recent (forced as well as voluntary) migrants. In longitudinal survey designs, subjects are interviewed multiple times over the course of time (forming a so-called panel). Longitudinal surveys among recent migrants generally cover the first several years after arrival.

The growing interest in studying mechanisms of immigrants' incorporation in the host country using longitudinal data is understandable, given the fact that questions in this field often revolve around processes of change over time. Until rather recently, assessing integration dynamics was often done by comparing migrants who had been in the host society longer to those who had arrived more recently. Length of stay in the host country has in those instances generally been used as a proxy for what researchers actually want to study, which is intra-individual change over time. In addition, change is often studied by comparing migration generations (foreign-born versus native-born from immigrant parents). Compared to cross-sectional studies comparing cohorts or generations, longitudinal data is often considered far superior, as it allows researchers to draw causal conclusions, and to sketch a more detailed picture of these presumably dynamic early years. At the same time, collecting longitudinal data is very costly and time consuming, and analysing this type of data in the right way can be complex. It is therefore important to assess which insights longitudinal research on the first years after migration has yielded. Is this first period really as dynamic as we think? And, what has the increased availability of longitudinal data so far meant for the key questions in the field of migration studies?

In this contribution we, first of all, provide an overview of the longitudinal surveys that have been executed worldwide to follow new migrants in their first years after migration. Then, we examine the body of knowledge on this first phase, providing a brush-strokes overview on integration dynamics across domains. We focus on three important domains for new immigrants: socio-economic domain, health and wellbeing, and the socio-cultural domain.¹ Did we gain more knowledge into patterns of change? And what challenges still need to be overcome? We conclude this contribution with some lessons learned on the dynamics of early immigrant integration.

Importantly, this study is not meant as a systematic review; rather it brings together studies based on longitudinal surveys among recent migrants, and provides a birds-eye view to insights gleaned from these studies regarding early integration dynamics across domains. We mainly focus on patterns of change in this contribution. The question as to what can be learned about explanations of these individual-level changes certainly deserves attention, but goes beyond the scope of this contribution.

¹ We restrict ourselves to some key elements of these three domains, thereby neglecting some other issues which were studied as well, like housing, educational attainment of children and income position.

Overview of longitudinal surveys of new immigrants

The question as to what happens over an important part of the life course of individual immigrants – namely the first phase after migration – long remained a black box in migration research. Starting with the influential New Immigrant Survey (NIS) in the US this gradually changed. The New Immigrant Survey was a longitudinal survey of new legal immigrants (and their children) to the United States. The first full cohort of immigrants was sampled in 2003, and these individual migrants were reinterviewed within 4 to 6 years after their migration on issues such as migration behaviour, schooling, employment, child rearing, and health (see e.g., Massey, 2011). The NIS survey ended after the second wave in 2009, and to our knowledge, remains the only large-scale longitudinal survey among recent immigrants in the US. This is remarkable considering the large inflow of immigrants into the country. There have been a number of longitudinal surveys among the general population in the US which also address specific immigrant groups, like the Panel Study of Income Dynamics (PSID) with an oversampling of Hispanics and the Children of Immigrant Longitudinal Survey (CILS) aimed at the immigrant second generation.² However, these panel surveys sample among the total group of immigrants or immigrant children and do not aim at *new* – i.e. recently arrived – immigrants specifically and, therefore, fall outside the scope of this contribution (see introduction section).

In the other important Anglo-Saxon immigration countries Canada, Australia and New Zealand, a number of longitudinal surveys among recent immigrants have been carried out. The first of these was already held during the early 1990s in Quebec, Canada: the *Enquête sur l'établissement des nouveaux immigrants* (ENI). The first wave of interviews occurred within the first year of residence in Quebec, with a noticeably low response rate of only 19% (Renaud et al., 1992). The same immigrants were interviewed one, two, three, and ten years after their arrival in Quebec. Like the NIS in the US, the ENI survey asked respondents a number of questions related to their activity in their country of origin and resettlement in the new society (Renaud, 2003). In later years, comprehensive longitudinal surveys were carried out nationwide in Canada (the Longitudinal Survey of Immigrants to Canada (LSIC)) as well as in Australia (the Longitudinal Survey of Immigrants to Australia (LSIA)) and New Zealand (the Longitudinal Immigrant Survey for New Zealand (LisNZ)). These surveys were all carried out by the governments or statistical agencies of these three traditional immigration countries (Statistics Canada, 2003; Department of Immigration and Multicultural Affairs Australia, 2019; Statistics New Zealand, 2008).

² For an overview see: <https://nap.nationalacademies.org/read/4942/chapter/7> Longitudinal Studies of Immigrants | Statistics on U.S. Immigration: An Assessment of Data Needs for Future Research | The National Academies Press (nap.edu)

Longitudinal surveys are not limited to ‘classic’ immigration countries. In Europe from 2010 onwards, increasingly, longitudinal data have been collected among new immigrants. Among the first was the SCIP-survey (Causes and Consequences of Socio-Cultural Integration Processes among New Immigrants in Europe), which is a cross-national survey on new immigrants. In four European countries (Germany, the Netherlands, Ireland, and the UK) selected immigrant groups (see Table 1)³ were followed over time to examine early integration trajectories (See Diehl et al., 2010). This was followed up by new longitudinal surveys in both the Netherlands and Germany. In the Netherlands, four new immigrant groups were followed in the four-wave NIS2NL longitudinal survey to cover their first five years in the destination country (see Lubbers et al., 2018). In Germany, more recently, a new immigrant survey – the ENTRA study – started, also among some specific immigrant groups important in the German context (Kristen & Seuring, 2021). In that same context, the Socio-Economic Panel (SOEP) has followed specific migration samples over time (Brücker et al., 2014). In contrast to the surveys in the classic immigration countries, Western European surveys mostly have been initiated by individual researchers from universities, mostly financed through funds from national or European science foundations.

Finally, Japan – a country with a much more recent immigration history – has recently started the Panel Survey of Immigrants to Japan (PSIJ), which is aimed at international students and (highly skilled) labour migrants.⁴ This survey is conducted by the Japanese National Institute of Population and Social Security Research, and fits into the more recent discussion in Japan on labour shortages as a consequence of the massive aging of the population (see Korekawa 2015; Tokudome et al., 2016).

A significant subset of longitudinal research on new immigrant groups is aimed specifically at refugee groups. This started out in the 1980s with the annual survey of refugees in the US. This survey was actually set up as a repeated cross-sectional survey on different groups of recently migrated refugees, which means that every year a fresh sample of new immigrants was questioned (Urban Institute, 2018). More recently in some other countries, refugee groups are followed in “true” longitudinal designs (the same new immigrants are interviewed multiple times) during their first years in several destination countries. Some good examples are the three-wave Survey of New Refugees (SNR) in the United Kingdom (Cebulla et al., 2009), the five-wave survey Building a new life in Australia (BNLA) (see Rioseco et al., 2017), and the multiple-wave IAB-BAMF-SOEP Survey of Refugees

³ The reason for a selection of migrant groups is that in order to minimize selectivity in the response immigrant groups are surveyed in their own specific languages.

⁴ See: https://www.ipss.go.jp/projects/j/PSIJ/index_psiij.html

(see Kroh et al., 2016). These are all large-scale surveys executed by government agencies among a cohort of *all* refugees entering in a particular time span. In addition, in the Netherlands a (planned) four-wave longitudinal survey among *one group* of refugees, i.e. Syrians, is worth mentioning (WODC, 2021). Finally, in Germany and Australia longitudinal surveys among young refugees – especially aimed at educational decisions and developments have been carried out (see Table 1).

A final type of longitudinal data collection among recent immigrants worth mentioning here, is based on censuses or population registers in which specific recently entered immigration cohorts are followed in successive censuses or population registers. Worth noting is the Netherlands, where Statistics Netherlands constructed immigrant cohorts and was able to follow for example the labour market position of recently migrated refugees (CBS, 2018). In this case, registration data could be combined with survey information (and with information on return migration), making it a powerful source of information on longitudinal processes of immigrant settlement processes. Similarly, in Germany occupational records from registers were added to the SOEP migration sample (Brücker et al., 2014).

Table 1 presents an overview of the conducted panel surveys among new immigrants around the world.⁵

Assessing all of these longitudinal surveys, a few things stand out. First, they differ in the groups targeted. While the traditional countries of immigration tend to focus on all (legal) immigrants entering within a certain time period, the European surveys sample a selection of specific immigrant groups. One reason may be that in the traditional migration countries the national statistical agencies mostly executed the surveys (e.g., Canada, Australia, and New Zealand). These organisations have access to population registers and more funds to execute large surveys. Another reason is that language problems are less of an issue in these English-speaking countries, since most migrants speak (a little) English, rendering translations into many different languages less of a prerequisite. A second observation is that most of the existing longitudinal surveys stopped after two or at most three waves. Reasons are high initial non-response, high panel attrition (partly due to return migration), and high financial costs of these kind of surveys. Only a very high initial N or a panel which is continuously refreshed (by sampling new respondents along the way) can provide for a larger time span, and, therefore truly follow migrants during their first years in a destination country. The question is, however, how selective these resulting panels will be

⁵ Our search was restricted to publications and documentations in the English language.

Table 1: Longitudinal surveys of new immigrants, 1980s to present

| Country | Survey | Years ^a | # Waves | Initial N | Sample |
|-----------------------|--|--------------------|-------------------|---|---|
| <i>Outside Europe</i> | | | | | |
| Australia | Longitudinal Survey of Immigrants to Australia (LSIA) ^b | 1994-now | 3 | 5,200-9,800 | All recent immigrants |
| | Building a new life in Australia (BNLA) | 2013-2018 | 5 | 2,399 | All new refugees |
| | Good start for recently arrived youth with refugee background | 2004-2008 | 4 | 120 | Young refugees |
| | Continuous Survey of Australia's Migrants (CSAM) | 2013-present | 2 (since 2019: 3) | Varies by cohort-year; 18,567 in the most recent iteration (2018) | All new regular migrants (Skills and Family), 18+ |
| Canada | Enquête sur l'établissement des nouveaux immigrants (ENI) | 1989 | 5 | 1,000 | All immigrants in Quebec |
| | Longitudinal Survey of Immigrants to Canada (LSIC) | 2000-2005 | 3 | 12,000 | All recent immigrants |
| Japan | Panel survey of immigrants in Japan (PSIJ) ^c | 2017-2025 | 5 | 371-1,103 | New student and labour migrants |
| New Zealand | Longitudinal Immigrant Survey for New Zealand (LisNZ) | 2005-2009 | 3 | 7,137 | All new immigrants (excluding refugees) |
| USA | New Immigrant Survey (NIS) | 2003-2009 | 2 | 8,573 (810 children) | All recent immigrants (including children) |
| | Annual Survey of Refugees (ASR) | 1984-present | 1 | 1,500 | Each year's arrivals of refugees |
| <i>Europe</i> | | | | | |
| Germany | Socio-cultural integration processes among new immigrants in Europe (SCIP) | 2010-2013 | 2 | 2,644 | Poles and Turkish |
| | IAB-SOEP Migration Sample (M2) ^d | 2015-2020 | 6 | 1,096 households | All new immigrants (mainly from Eastern Europe) |

Table 1: Continued

| Country | Survey | Years ^a | # Waves | Initial N | Sample |
|-------------|--|--------------------|---------|-----------|---|
| | Recent immigration processes and early integration trajectories in Germany (ENTRA) | 2019-2021 | 2 | 4,600 | Turkish, Polish, Italian, Syrian young adults |
| | IAB-BAMF-SOEP Survey of Refugees ^e | 2016-2019 | 4 | 4,465 | All new refugees |
| | Refugees and their early integration in Society and Education (RISE) | 2017-2021 | 4 | 600 | Young refugees |
| | Refugees in the German Educational System (ReGES) | 2017-2021 | 2 | 9,600 | All refugee children and adolescents |
| Ireland | Socio-cultural integration processes among new immigrants in Europe (SCIP) | 2010-2013 | 2 | 1,058 | Poles |
| Netherlands | Socio-cultural integration processes among new immigrants in Europe (SCIP) | 2010-2013 | 2 | 3,355 | Poles, Bulgarians, Turkish, Moroccans, Surinamese, Antilleans |
| | New Immigrant Survey to the Netherlands (NIS2NL) | 2013-2018 | 4 | 4,808 | Poles, Bulgarians, Turkish, Spanish |
| | Longitudinal cohort study refugees (LOCS) | 2016-present | 4 | 3,000 | Syrians |
| UK | Socio-cultural integration processes among new immigrants in Europe (SCIP) | 2010-2013 | 2 | 1,529 | Poles and Pakistani |
| | Survey of New Refugees (SNR) | 2005-2009 | 3 | 5,600 | All new refugees |

^a Year of first wave, not year of sampling. Most waves are conducted shortly (within 2 years) after entrance or admission to a country.

^b LSIA contains three panel studies starting in 1996 (two waves, initial N=5,200), in 2000 (three waves, initial N=3,120) and in 2005 (2 waves, initial N=9,800).

^c PSIJ contains yearly samples in which respondents are followed over time in yearly waves: in 2017 (N=371), in 2018 (N=533), in 2019 (N=1,270), in 2020 (N=1,286) and in 2021 (N=1,103). Four more samples are planned. For the 2017 data 5 waves are available, and 4 more are planned, etc. as long as the N permits new waves.

^d This is a series of specific samples of new immigrant households within the German Socio-Economic Panel (SOEP). The first wave of the first sample (M1) was conducted in 2013 among 2,723 households (4,964 adults and 2,481 children).

^e This is a series of specific samples of new refugee households within the German Socio-Economic Panel (SOEP).

(see later on in this contribution). A final observation, as mentioned above, is the relatively large amount of longitudinal studies specifically aimed at refugee groups (more than a third of the worldwide number of longitudinal surveys among new immigrants).

For the aim of this contribution, it is important to note that the longitudinal surveys being held worldwide among new immigrants differ in many respects: in terms of the country of destination, reasons for migration (asylum, work or family reasons), countries of settlement, and thematic focus. This makes it quite challenging to compare their results. Nevertheless, in the following section, we attempt to sketch some general trends.

Early integration dynamics across domains

The literature offers several explanations for why especially the first phase after migration should be more volatile than later periods. In short, this has to do with the breaking of routines and with the context-dependent nature of human capital (see Esser, 2009; Diehl et al., 2016a). Migrants have to do a lot in these first years. They have to learn the language, to find a house and a job, to interact with receiving-country nationals, and to deal with the dominant values in their new countries. Much of what happens later on can be expected to be shaped by these early experiences. For example, the first job may affect later opportunities on the labour market, the new housing situation may influence later social contacts, and the (high) expectations on arrival – sometimes labelled as ‘immigrant optimism’ – may influence later feelings of in- and exclusion (Kao & Tienda, 1995). These are all important reasons why migration scholars started to focus on these early dynamics.

Now, what have longitudinal studies among recent migrants taught us about the first years after migration? Is this first period really as dynamic as we think? We focus on three important domains for new immigrants: the socio-economic domain (work and language⁶), health and wellbeing, and the socio-cultural domain.⁷ Do we see different developments in these different domains? Outcomes like the labour market position may change faster than for example values. Immigrants simply need to find a job to be able to survive in their new country, while values are deeply engrained during primary socialisation and can be expected to change more slowly (see e.g., Alwin & Krosnick, 1991).

⁶ Language attainment can of course also be seen as part of sociocultural integration.

⁷ Of course the dynamics in educational attainment after migration are also important, but this is particularly relevant for children of immigrants or study-migrants. Both groups certainly deserve more attention in research on the dynamics of immigrant integration, but are not the topic of this contribution.

It is important to note that the number of countries in which longitudinal data are available is still relatively limited, and that the same goes for the number of origin groups studied. We should therefore be careful to extrapolate findings beyond the context in which they were studied.

Dynamics in socio-economic position

The most well-researched factor in immigrants' integration is the *labour market position*. According to general assimilation theories, one would expect immigrants' position on the labour market to gradually improve with longer length of stay. But what happens in this first critical phase just around migration? A first important indicator is whether immigrants find a job right after migration. Of course an important factor here is the reason for migration. Migrant workers will more often have a job right after migration, since this is the reason they moved, while for other types of migrants the picture will be different. However, also for migrant workers, obtaining and keeping a job will depend on supply side factors like regulations and restrictions on the labour market, as well as cyclical economic circumstances (e.g. Engbersen et al., 2013). For labour migrants moving to the Netherlands, an increase in labour participation rates is found when comparing the situation before and right after migration (Lubbers & Gijsberts, 2016) and this either remained stable or further increased – in an economically difficult situation – several years later (Gijsberts & Lubbers, 2015). Across receiving societies, cohorts of refugee groups also show increases in labour market participation with enduring length of stay, though at much lower levels (Brücker et al., 2019; Bakker, 2015; Dieleman et al., 2021; Ruiz & Vargas-Silva, 2017).

Since migration is often associated with occupational downgrading, another important labour market indicator to study is the level of job status. According to Chiswick et al. (2005) the occupational status follows a U-curved shape. Shortly after migration, migrants are expected to experience downward mobility, whereby the status of their last job before migration was higher compared to their job shortly after migration. The main reasons for this loss of status lie in the fact that human capital acquired abroad (for instance in terms of educational qualifications) is generally valued less in new host societies (e.g., Friedman, 2000), and the initial mismatch between the skills of recent immigrants versus the skills required on the yet unfamiliar labour market in the destination country (e.g., language skills). Investing in capital that is specific to the destination country, is thought to elevate migrants' occupational status to the level immediately prior to migration. Longitudinal studies among new immigrants find strong support for the U-curved trend in occupational status, across host societies ranging from Australia (Chiswick et al., 2005; Mahuteau & Junankar, 2008) and the US

(Akresh, 2006, 2008), to the Netherlands (Lubbers & Gijsberts, 2016) and Spain (Simon et al., 2011).

Most evidence on the development of host country *language proficiency* based on cross-sectional research indicates that the longer migrants have lived in the host country, the stronger their language proficiency (see e.g., Van Tubergen & Kalmijn, 2009). Longitudinal research on language proficiency – not surprisingly – reaches similar conclusions, among a range of origin groups in Australia (Chiswick & Miller, 2004, 2007), The Netherlands (WODC, 2021; Gijsberts & Lubbers 2015; Gijsberts et al., 2016), Germany (Kirsten & Seuring, 2021), and other European countries (Kirsten et al., 2016). Longitudinal studies do point to differential rates of language acquisition across origin groups. For instance, in the Netherlands, language proficiency clearly improved among new Polish, Bulgarian, and Spanish migrants that were followed over time, but less so among recent Turkish immigrants (Gijsberts & Lubbers, 2015; Gijsberts et al., 2016). In Germany, a comparison of refugees from Syria with new arrivals from Italy, Poland, and Turkey also reveals that Syrians experience a faster learning curve than other immigrant groups (Kirsten & Seuring, 2021). Though the pace of improvement differs across groups and contexts, the general conclusion seems to be that most immigrant groups gradually improve their destination language proficiency with longer stay.

To conclude, and in line with classic assimilation theories, developments in socio-economic position seem to follow an upward trajectory in the first period after migration. Regarding occupational status, the longitudinal evidence confirms the importance of the first period after migration, since the occupational status increases after initial downgrading: Human capital investments in this first phase seem to pay off. Also, language proficiency (which in turn positively affects the labour market position) clearly increases among most immigrant groups. All in all, longitudinal studies on socio-economic changes among new immigrants provide a strong empirical base for long-standing hypotheses in the field of migration research.

Changes in health and wellbeing after migration

Health and wellbeing are important prerequisites for structural factors like participation on the labour market. There have been quite some studies on immigrant *health* after migration.⁸ An important hypothesis in this field is the

⁸ In this contribution, we restrict ourselves to the general measure of self-reported health; particular types of health (such as mental health) are beyond the scope of this article. For example, for longitudinal studies on mental health among refugees in the UK see for example Campbell et al., 2018 and James et al., 2019. For Australia see Chen et al., 2019.

healthy immigrant effect. As a consequence of selection effects, i.e. more healthy immigrants are more likely to migrate, migrants who enter a country (irrespective of their sometimes lower socio-economic position on arrival) will rate their health better than the native population does (e.g. Kennedy et al., 2015). The health decline hypothesis consequently predicts that this initially strong health will deteriorate after longer stay, which is sometimes explained by the notion of acculturation to an unhealthy lifestyle (Antecol & Bedard, 2006). Another explanation may be that immigrants rate their health less positively after longer stay, because they start to compare their health with native residents instead of with people from their home country. Longitudinal evidence for this decline has been found in the US, in Canada and in the Netherlands: Self-rated health declines with longer stay (Antecol & Bedard, 2006; McDonald & Kennedy, 2004; Lubbers & Gijsberts, 2019). However, other longitudinal studies refute a decline in reported health among immigrants to the US and Australia (Lu et al., 2017; Jatrana et al., 2018) and for refugees in Germany (Ambrosetti et al., 2021). So, evidence is mixed and may depend on destination country, immigrant group, and time of entry.

Not only health but also health-related factors pertaining to subjective wellbeing, such as life satisfaction, feeling at home, and perceptions of discrimination are important for new immigrants. Theories of immigrant optimism predict initially high levels of well-being, and low levels of perceived discrimination shortly after migration, as optimism about the new surroundings and the opportunities it might bring is high (Kao & Tienda, 1995). As time progresses, negative experiences on, for example, the housing market and the labour market, and with the majority population may dampen this optimism. Longitudinal studies seem to by and large support this idea. For example, initially high satisfaction with living in the Netherlands has been found to decline with length of stay, for Bulgarians, Poles, Turks, and Spaniards (Gijsberts & Lubbers, 2015) as well as for Syrians (Maliapaard & Noyon, 2020). At the same time, there are some anomalies. Feeling at home in the destination country, for instance, stays rather stable both among the European migrants and the Syrian refugees. And patterns of perceived discrimination differ across groups and contexts, with some immigrant groups showing an increase over time, and some a decrease (McGinnity & Gijsberts 2016; Diehl et al., 2021).

It is clear though that well-being and health tend not to increase over time, but rather stay stable or decline. It seems unlikely that these trends are due to the ageing of the population, as the timespan of most studies is under five years and recent immigrants tend to be younger than the average population. Negative experiences in the host country may account for (part of) this downward trend

(McGinnity & Gijsberts, 2016; Diehl et al., 2021). This confirms the importance of the context of the receiving country: The attitudinal climate and national discourses may also play an important role in understanding different patterns of subjective wellbeing among immigrants in different receiving countries.

Sociocultural change

Most if not all surveys among recent migrants include sections on labour market participation and language acquisition. This is indicative of the importance attached to (studying) changes in the structural position of migrants after migration. Health is an additional factor that is frequently included. Far fewer studies address (changes in) the socio-cultural domain. Quantitative, longitudinal studies we have found that do include socio-cultural factors are mostly Western European (particularly Dutch and German). In this paragraph, we will focus on social contacts, host country identification, value orientation, and religion.

Following migration to a new country, migrants develop new *social contacts* or networks. To what extent these social networks involve ties to host-society natives, is a question that has historically interested migration scholars. Interethnic ties are deemed important, as they are thought to enhance the opportunities migrants have in the host society (gaining access to the labour market, acquiring the language of the host society, see e.g. Kanas et al., 2012); but (positive) interethnic contacts are also thought to be beneficial to society as a whole, as they reduce prejudice and conflict (see Pettigrew & Tropp, 2006). Based on cross-sectional studies, longer stay is generally associated with more interethnic ties, although some groups have more interethnic contacts than others (see for instance Martinovic et al., 2009). Findings from longitudinal studies tell a slightly less straightforward story. In the Netherlands, for instance, there does not seem to be a uniform upward trend in interethnic social contacts in the first years after arrival. Across a host of different groups, the overall trend seems to be ranging from no change (Gijsberts et al., 2016) to a (slight) decrease in contacts over time (Rijk & Lubbers, 2020; Damen & Huijnk, 2020c). In Canada, a study on interethnic friendships shows a slight increase in the very first period, followed by stability in the relative number of cross-ethnic friendships (Martinovic et al., 2011). The development of interethnic social ties seems to be a rather slow-going process, which is not adequately captured in the short time-span of these longitudinal studies. Alternatively, cross-sectional studies might have (partly) captured period or cohort effects, rather than intra-individual change.

Cross-sectional studies comparing migrants that have been in (European) host societies longer to those who arrived more recently, or comparing migrants to those who did not migrate (e.g. Norris & Inglehart, 2012) suggest by and large that, with

time and across generations, *value orientations* of immigrants move closer to the orientations held in the host society. However, these ‘changes’ may to some extent reflect selection effects (migrants are more liberal than those who remained in the country of origin), or cohort effects (migrants who arrived earlier were more liberal to begin with), rather than change at the individual level. Longitudinal studies might solve this issue. Two domains that are frequently studied are attitudes toward gender roles, and attitudes toward homosexuality; both domains in which there are generally large discrepancies between (Western European) host and (Non-Western or Eastern European) immigrant origin countries. Looking at the early years after migration, existing studies based on longitudinal data provide a nuanced view of changes in values. Attitudes toward homosexuality, for instance, seem to be relatively stable in the first years after migration (Damen & Huijnk, 2020a; Röder & Lubbers, 2016; Gijsberts et al., 2016), with some groups becoming more negative over time (Rijk & Lubbers, 2020). A similar view of relative stability arises from the limited number of studies into gender role attitudes (Gijsberts et al., 2016); although there are also examples of groups which became more egalitarian in their gender-role attitudes in the first period (Damen & Huijnk, 2020a). Although the number of studies is relatively limited, it seems that in the first years after migration, attitudes remain relatively stable, overall. As values are deeply engrained during primary socialisation, it might not be surprising to see little change (see e.g., Alwin & Krosnick, 1991). Though exposure to gender-egalitarian settings may result in shifting value attitudes (e.g., Davis & Greenstein, 2009), it seems safe to conclude that these values shifts may take some time.

A small number of surveys have assessed *host country identification* among recent migrants over time, mostly measured by single items such as “to what extent do you feel [Dutch]” or “I feel that I belong to [host society]”. Interestingly, host country identification starts out relatively high among various recent immigrant groups (Rijk & Lubbers, 2020; Diehl et al., 2016b; Maliepaard & Noyon, 2020). This is striking, given that first waves of these surveys are often collected within the first two years after arrival. Trends in host country identification seem to differ quite strongly across ethnic groups. For some groups, host country identification is stable (Gijsberts et al., 2016), among others host country identification decreases (Rijk & Lubbers, 2020; Diehl et al., 2016), but there are also groups which show increasingly high levels of identification over time (Maliepaard & Noyon 2020; Diehl et al., 2016b). Clearly, there is no linear trend towards increasing host country identification across origin groups in the first years after migration. Theories on ethno-religious boundaries and perceived exclusion have sometimes been used to explain these differential trends. However, the existing evidence is limited.

Finally, does religiosity change as a result of migration? This is a question that has been addressed by a host of studies in the last decade (for an overview, see Fleischmann, 2022). Unfortunately, most studies focusing on religious change among immigrants, particularly Muslim immigrants, have had to rely on data not ideal for studying change, such as (repeated) cross-sections used to compare cohorts, or parent-child dyads. As a result, most studies have assessed change through the lens of inter-generational shifts in levels of religiosity. Results from these studies have been somewhat mixed, with most studies showing stability, some showing decline, and a few noting higher levels of religiosity among the second generation. Part of the reason for the mixed results might be the differential composition of groups that are compared, in terms of age, origin country, and differential selection bias into survey research (Fleischmann, 2022). How individual religiosity changes after migration is a question that could not be conclusively answered by these studies. Findings from studies based on longitudinal data show that religious membership (or self-identification) is largely stable. There is more variation when it comes to the way religion is expressed. However, the trend seems to vary across dimensions of religiosity, as well as across groups. For instance, attendance seems to decline in the early years after migration, particularly when compared to levels prior to migration, as is evidenced by multiple studies (Connor, 2009; Diehl & Koenig, 2013; Damen & Huijnk 2020b; Gijsberts & Lubbers 2015; Gijsberts et al., 2016; van Tubergen, 2013). However, in some groups this initial decline is followed by an increase, whereas in others it continues to further decline or stabilizes. Thus, it seems that moving from one country to another causes a rupture in attendance, from which not everyone recovers. Based on these studies following migrants in the early years, there is no clear uniform trend towards either secularization or religious revival.

It is clear that the rather uniform, linear upward trend in socio-economic attainment reported in the previous paragraph, is not mirrored when it comes to socio-cultural characteristics. There is far less change, and a clear trend that holds across groups and contexts is lacking. One explanation may be that language acquisition and labour market participation are seen as prerequisites for participation in the host society and crucial to this first period, and it is likely that recent migrants (as well as policy makers) mostly invest in these domains. Secondly, for social contacts, it takes two to tango (cf., Kalmijn, 1998). Preferences of immigrants for interethnic contacts may not always align with their contacts in practice – increasing contacts over time may be hampered by (homogamy) preferences of the majority population. Finally, cultural preferences and behaviours may by their very nature be expected to change far more slowly

and gradually than the structural factors, and these changes are therefore less likely to be detected in the short timespans of most longitudinal surveys.

Longitudinal studies among recent immigrants: benefits and challenges

The previous section has shown that longitudinal data have the potential to provide important descriptive knowledge on the first steps on the path of integration among recent immigrants. However, these type of data also have the potential to answer explanatory questions on dynamics. What individual-level changes determine dynamics in different domains of integration? Why do some immigrants follow different integration paths than others? Do changes in the first phase of migration speed up changes later on in life? Longitudinal data can answer these kind of questions and have been heralded as the solution to methodological problems faced by studies based on cross-sectional data. However, they bring with them their own unique set of challenges. In this section, we address both benefits and challenges of the existing longitudinal research among new immigrants. We focus on two issues: Firstly, the question as to what can be learned regarding causal mechanisms in these early years, and secondly, the issue of panel attrition.

Making causal claims

One of the main benefits of having longitudinal data is, of course, overcoming issues of causality that haunt research based on cross-sectional data. Based on longitudinal data in which individuals are followed over time, statements about individual change can be made, the temporal order of things can be more easily disentangled, and conclusions can be drawn as to which factors are causing changes in the outcomes under study. These benefits are an important reason why the cost and hassle associated with collecting panel data are deemed worth it for researchers. In the section above, we have mainly focused on (gross) trends, but longitudinal studies of course also allow for mapping individual trends and, importantly, explaining these individual trends. Some of the studies mentioned above focus on finding causal relations between different domains of integration. For instance, some people become more liberal, others more conservative over time, what explains these diverging individual trends? Or why do some people learn the language faster than others? Longitudinal data have the potential to answer these questions. Longitudinal data collected among new migrants in recent years have allowed researchers to study, for instance, the differential impact of language courses on language learning among different groups (Kirsten & Seuring, 2021), of host country media exposure on attitudes toward

homosexuality (Röder & Lubbers, 2016), and of negative experiences in the host country on perceptions of group discrimination (McGinnity & Gijsberts, 2016). Cross-sectional studies had already given us some idea of these relations, but had been unable to disentangle cause and effect. Particularly in cases where the influence may be bidirectional (or the direction is disputed), longitudinal data may provide a solution. For instance, do people with more native friends learn the language better as a consequence, or does speaking the language facilitate interethnic friendships?

These are undisputable benefits of longitudinal data. However, longitudinal surveys among recent migrants generally consist of few waves (see Table 1). This has two important consequences. Firstly, in order to strictly test for causal relations in longitudinal data with a low number of waves, only models can be used that can take into account cases in which there actually is change.⁹ This means that we can only study variables in which there is sufficient dynamics in these first years. As we have seen above, this is not the case for all domains of integration. Secondly, the limited number of waves severely limits the timeframe. Changes that occurred before the first wave or after the last are not considered. It is therefore quite a strict test of causes of change (change may take longer, or effects may become visible after a longer period). The longer the timeframe, the smaller of course this problem. However, unfortunately, the timeframe (particularly the number of waves one is able to collect) is frequently restricted by the limited availability of funding. Nevertheless, these methods do have the potential to (dis)confirm longstanding hypotheses on the mechanisms behind integration trajectories.

Panel attrition

One of the main challenges facing migration research is the fact that migrants, by definition, are a mobile population. A study in the Netherlands showed that among student-, labour- and family migrants, the majority had left the Netherlands again within ten years (78%, 70%, and 51% resp.); and that even among refugees one third no longer lived in the Netherlands after a decade (Maliepaard et al., 2018). In longitudinal studies among recent migrants, this results in (high) attrition rates. Attrition is an issue in longitudinal surveys in general, but seems to be a particular challenge for surveys among migrants. Attrition is due to both return/onward migration as well as to other reasons like the unwillingness to

⁹ When testing models with two waves, causal relations can be established by using *fixed effects* models (Allison, 2009). Of course, other models can be tested, such as *hybrid* or *random effects* models, but in doing so we lose the benefits of being able to strictly test for causality. As the number of waves increase, so do the modelling options. It is outside the scope of this paper to go into the different approaches.

cooperate or the fact that new migrants often move within the country in the first years after migration.

The longer the time span migrants are followed, the higher attrition rates. This is a catch 22 of sorts: Either the research has a short time span (lower number of waves or having waves in a short time period) with its own attendant issues (e.g. insufficient change), or the research has a longer time span of multiple years but potentially high attrition levels. Depending on the type of migrant, this can be a larger or smaller issue. Surveys among refugees with residence permits generally report lower attrition rates than surveys among labour migrants, as labour migration is more often temporary in nature. In the Netherlands, the NIS2NL survey among migrants from Spain, Poland and Bulgaria dealt with attrition of 80% between waves 1 and 4 (Rijk & Lubbers, 2020). Attrition is also likely to be selective on the topics under study; for instance, it is likely that when labour migrants are unable to support themselves, they are more likely to re-migrate (or otherwise move on).

In cases where there is reliable information regarding re- and onward migration within the panel, the problem of attrition can be turned into a source of valuable information. It allows researchers to study in a better way than previously possible, which characteristics are associated with certain migration patterns, and which characteristics are associated with permanent settlement. However, when attempting to chart early integration patterns, selective attrition does form a problem that needs to be acknowledged and addressed in research.

To conclude, a final note on the way dynamics after migration are studied: To truly benefit from the longitudinal character of these type of data, researchers should focus even more on individual change, on the temporal order of things, and on the factors that determine change – or even speed up change – in the outcomes under study. This is where longitudinal data can really yield new insights compared to cross-sectional work. However, when studying all documentation and literature on these surveys we observe a relatively low number of publications on these important questions. This especially holds for some surveys executed by national statistical agencies or government institutions. A lot of effort and budget seems to be put into gathering these data repeatedly over time, and reporting on descriptive gross trends. Though this has resulted in a rich body of information, the mapping and, importantly, explaining of individual trends deserves more attention in future research.

Conclusions: lessons learned from longitudinal research

We started out with the notion, underlying most of the initiated longitudinal studies on new immigrants, that longitudinal studies are crucial in understanding the first dynamic process of adaptation. Based on the longitudinal surveys that have been held worldwide to follow new migrants in their first years after migration, we examined the body of knowledge on this first presumed dynamic phase. What can be learned from this exercise? We come up with five lessons.

1. Differential dynamics in the first phase after migration

Theories of assimilation assume a gradual increase in adaptation to the host country over time across different dimensions. Of course developments differ between different origin groups, different destination countries, and possibilities and restrictions of individual migrants, but overall the evidence based on the longitudinal surveys among new immigrants seems to point to differential trajectories across domains, with a clear increase in the socio-economic position with longer stay, but a relatively stable or even reverse trend for the socio-cultural domain, health and well-being.

2. More grip on causal mechanisms is needed

An important argument for longitudinal surveys is that they enable to truly study causal mechanisms in explaining immigrant adaptation from dynamics in presumed explanatory factors. Of course, this argument is a general one, pertaining to the explanation of all sorts of individual-level changes. However, the argument is that it is especially relevant to study changes in the first phase after migration, since this is a rather dynamic phase with many changes for individual migrants. As we have shown, dynamics in some domains may however be more limited than previously assumed. In addition, the question remains whether the first period after migration is inherently different than other phases in the lives of migrants. This expectation is often used to legitimize longitudinal studies among recent migrants but has not been convincingly empirically established (see Diehl et al., 2016a). In terms of disentangling cause and effect in different integration domains, to our knowledge, no attempt has yet been made to compare results from longitudinal surveys among settled migrants to those among recent migrants. We suggest that such an effort might benefit to our understanding of immigrant integration trajectories.

3. Longitudinal immigrant surveys face many difficulties

An important lesson from all longitudinal surveys on new immigrants is that it is a very difficult exercise. Though all longitudinal surveys suffer from (selective)

panel dropout, this is particularly problematic in surveys among recently arrived immigrants. In the first phase after migration many immigrants move around in the host country, move on to another country or return. This makes it hard to maintain adequate response rates. Because of the high panel attrition, it is almost impossible to follow the recently migrated individuals over a longer period of time. The resulting group is mostly very small and highly selective. The only way to (partly) overcome these problems is to start with a very high initial sample (preferably with continuous refreshment samples, including new respondents over time), like the longitudinal immigrant surveys in Canada, New Zealand, and Australia did. This makes it a very costly matter, and not surprisingly, in these traditional migration countries the surveys are financed by government and executed by the national statistical agencies. Preferably, population registers should be used as well, either as standalone longitudinal studies or combined with the survey data. Examples can be found in the Netherlands, Germany, and Canada.¹⁰

4. What policy makers need

In many countries with a large inflow of immigrants (both refugees and other migrants) policy makers are keen on receiving information based on longitudinal studies. This explains the funding and efforts made by national governments and statistical agencies. Considering the high costs of these surveys, the question seems legitimate as to what knowledge is most valuable or needed by governments or policy makers. All things considered, a repeated baseline measure on all immigrants entering the country may in some cases be more important for policy makers than a longitudinal survey among one or few specific groups entering at that specific moment in time. For designing policies governments need to know on a regular base which type of migrants enter the country. A good example is the *Annual Survey of Refugees* (ASR) in the US, which is a cross-sectional yearly survey of (a sample of) all refugees entering. Based on the characteristics of the new immigrants policies can be designed. Following the same migrants longitudinally may, however, be particularly relevant for governments to examine whether policy interventions work. In that instance longitudinal surveys should be designed as impact evaluation studies.

¹⁰ For the Netherlands, *Cohortstudy Refugees*, see CBS, 2018; for Germany, see Brücker et al., 2014; for Canada see the *Longitudinal Immigration Database (IMDB)*, see <https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=5057>.

5. *There is a wealth of data out there*

As we conclude this overview of existing longitudinal data collected among recent immigrants, we end with a final ‘lesson’, and that is the realisation that a lot of effort and budget is put into gathering longitudinal data all over the world, resulting in a rich body of information. As researchers who have worked on the topic of recent immigrant integration for many years, in writing this contribution we found a number of datasets that we had never encountered previously. We hope that our overview of these existing datasets will work towards increasing awareness of research taking place across the globe on this topic, and that this might result in increased use of these data. Of course, the longitudinal surveys being held worldwide among new immigrants differ in many aspects: In terms of countries of destination, reasons for migration (asylum, work, or family reasons), countries of settlement, and thematic focus. This makes them a priori difficult to compare. However, the body of knowledge on the dynamics of early immigrant integration would benefit from more exchange of knowledge between statistical agencies and research groups (and countries), and, perhaps even, from pooling resources. One large-scale and long-lasting longitudinal survey among all immigrant groups may yield more knowledge on immigrants’ adaptation than several smaller-scale surveys among specific groups, thereby better contributing to the important question why some migrants succeed while other migrants face many difficulties in building a new life in the host society.

References

- Akresh, I. R. (2006). Occupational mobility among legal immigrants to the United States. *International Migration Review*, 40(4), 854-884. <https://doi.org/10.1111%2Fj.1747-7379.2006.00046.x>
- Akresh, I. R. (2008). Occupational trajectories of legal US immigrants: Downgrading and recovery. *Population and Development Review*, 34(3), 435-456. <https://doi.org/10.1111/j.1728-4457.2008.00231.x>
- Allison, P. D. (2009). *Fixed effects regression models*. SAGE publications.
- Alwin, D. F., & Krosnick, J. A. (1991). Aging, cohorts, and the stability of sociopolitical orientations over the life span. *American Journal of Sociology*, 97(1), 169-195. <https://doi.org/10.1086/229744>
- Ambrosetti, E., Dietrich, H., Kosyakova, Y., & Patzina, A. (2021). The impact of pre- and postarrival mechanisms on self-rated health and life satisfaction among refugees in Germany. *Frontiers in Sociology*, 6, 693518. <https://doi.org/10.3389/fsoc.2021.693518>
- Antecol, H., & Bedard, K. (2006). Unhealthy assimilation: why do immigrants converge to American health status levels? *Demography*, 43(2), 337-360. <https://doi.org/10.1353/dem.2006.0011>
- Bakker, L. (2015). *Seeking sanctuary in the Netherlands. Opportunities and obstacles to refugee integration*. Erasmus University Rotterdam.

- Brücker, H., Kroh, M., Bartsch, S., Goebel, J., Kühne, S., Liebau, E., ... Schupp, J. (2014). *The new IAB-SOEP Migration Sample: an introduction into the methodology and the contents* (No. 216). SOEP Survey Papers.
- Brücker, H., Croisier, J., Kosyakova, Y., Kröger, H., Pietrantuono, G., Rother, N., & Schupp, J. (2019). *Second wave of the IAB-BAMF-SOEP Survey: Language skills and employment rate of refugees improving with time*. IAB-Kurzbericht 201903, Institut für Arbeitsmarkt- und Berufsforschung (IAB).
- Campbell, M. R., Mann, K. D., Moffatt, S., Dave, M., & Pearce, M. S. (2018). Social determinants of emotional well-being in new refugees in the UK. *Public Health*, 164, 72-81. <https://doi.org/10.1016/j.puhe.2018.07.022>
- CBS (2018). *Uit de startblokken. Cohortstudie naar recente asielmigratie*. Statistics Netherlands/CBS.
- Cebulla, A., Daniel, M., & Zurawan, A. (2010). Spotlight on refugee integration: findings from the Survey of New Refugees in the United Kingdom. *Research report 37*. Home office.
- Chen, W., Wu, S., Ling, L., & Renzaho, A. M. (2019). Impacts of social integration and loneliness on mental health of humanitarian migrants in Australia: evidence from a longitudinal study. *Australian and New Zealand Journal of Public Health*, 43(1), 46-55. <https://doi.org/10.1111/1753-6405.12856>
- Chiswick, B. R., & Miller, P. W. (2007). *The economics of language: International analyses*. Routledge.
- Chiswick, B. R., Lee, Y. L., & Miller, P. W. (2004). Immigrants' language skills: the Australian experience in a longitudinal survey. *International Migration Review*, 38(2), 611-654. <https://doi.org/10.1111%2Fj.1747-7379.2004.tb00211.x>
- Chiswick, B. R., Lee, Y. L., & Miller, P. W. (2005). A longitudinal analysis of immigrant occupational mobility: A test of the immigrant assimilation hypothesis. *International Migration Review*, 39(2), 332-353. <https://doi.org/10.1111%2Fj.1747-7379.2005.tb00269.x>
- Connor, P. (2009). Immigrant religiosity in Canada: multiple trajectories. *Journal of International Migration and Integration/Revue de l'integration et de la migration internationale*, 10(2), 159-175. <https://doi.org/10.1007/s12134-009-0097-9>
- Damen, R., & Huijnk, W. (2020a). Waardeoriëntaties. In *Syrische statushouders op weg in Nederland: de ontwikkeling van hun positie en leefsituatie*. Sociaal en Cultureel Planbureau.
- Damen, R., & Huijnk, W. (2020b). Religie. In *Syrische statushouders op weg in Nederland: de ontwikkeling van hun positie en leefsituatie*. Sociaal en Cultureel Planbureau.
- Damen, R., & Huijnk, W. (2020c). Sociale Contacten. In *Syrische statushouders op weg in Nederland: de ontwikkeling van hun positie en leefsituatie*. Sociaal en Cultureel Planbureau.
- Davis, S. N., & Greenstein, T. N. (2009). Gender ideology: Components, predictors, and consequences. *Annual Review of Sociology*, 35, 87-105. <https://doi.org/10.1146/annurev-soc-070308-115920>
- Department of Immigration and Multicultural Affairs (2019). *Longitudinal survey of immigrants to Australia: phase 1*. <https://doi.org/10.26193/AW20XB>
- Diehl, C., Gijsberts, M., Güveli, A., Koenig, M., Kristen, C., Lubbers, M., ... Van Tubergen, F. (2016a). Causes and consequences of socio-cultural integration processes among new immigrants in Europe (SCIP). *GESIS Data Archive, Cologne. ZA5956 Data file Version*. <https://doi.org/10.4232/1.12341>
- Diehl, C., Liebau, E., & Mühlau, P. (2021). How often have you felt disadvantaged? Explaining perceived discrimination. *KZfJSS Kölner Zeitschrift Für Soziologie Und Sozialpsychologie*, 73(1), 1-24. <https://doi.org/10.1007/s11577-021-00738-y>

- Diehl, C., Lubbers, M., Mühlau, P., & Platt, L. (2016b). Starting out: New migrants' socio-cultural integration trajectories in four European destinations. *Ethnicities*, 16(2), 157-179. <https://doi.org/10.1177%2F1468796815616158>
- Diehl, C., & Koenig, M. (2013). God can wait—New migrants in Germany between early adaptation and religious reorganization. *International Migration*, 51(3), 8-22. <https://doi.org/10.1111/imig.12093>
- Diehl, C., Fischer-Neumann, M., & Mühlau, P. (2016). Between ethnic options and ethnic boundaries—Recent Polish and Turkish migrants' identification with Germany. *Ethnicities*, 16(2), 236-260. <https://doi.org/10.1111/imig.12093>
- Dieleman, D., Huisman, C., & Verschuren, S. (2021) Arbeidsdeelname van statushouders en hun dynamiek op de arbeidsmarkt. In W. Huijnk et al. (Eds.), *Met Beleid van Start* (pp. 67-92). Sociaal en Cultureel Planbureau.
- DiPrete, T. A., & Eirich, G. M. (2006). Cumulative advantage as a mechanism for inequality: A review of theoretical and empirical developments. *Annual Review of Sociology*, 32(1), 271-297. <https://doi.org/10.1146/annurev.soc.32.061604.123127>
- Engbersen, G., Leerkes, A., Grabowska-Lusinka, L., Snel, E., & Burgers, J. (2013). On the differential attachment of migrants from Central and Eastern Europe: a typology of labour migration. *Journal of Ethnic and Migration Studies*, 39(6), 959-981. <https://doi.org/10.1080/1369183X.2013.765663>
- Esser, H. (2009). Pluralisierung oder Assimilation? Effekte der multiplen Inklusion auf die Integration von Migranten. *Zeitschrift für Soziologie*, 38(5), 358-378.
- Fleischmann, F. (2022). Researching religion and migration 20 years after '9/11': Taking stock and looking ahead. *Zeitschrift für Religion, Gesellschaft und Politik*, 1-26. <https://doi.org/10.1007/s41682-022-00103-6>
- Friedberg, R. M. (2000). You can't take it with you? Immigrant assimilation and the portability of human capital. *Journal of Labor Economics*, 18(2), 221-251. <https://doi.org/10.1086/209957>
- Gijsberts, M., & Lubbers, M. (2015). *Langer in Nederland. Ontwikkelingen in de leefsituatie van Poolse en Bulgaarse migranten*. Sociaal en Cultureel Planbureau.
- Gijsberts, M., Lubbers, M., Fleischmann, F., Maliepaard, M., & Schmeets, H. (2016). *Nieuwe Spaanse migranten in Nederland*. Sociaal en Cultureel Planbureau.
- James, P., Iyer, A., & Webb, T. L. (2019). The impact of postmigration stressors on refugees' emotional distress and health: A longitudinal analysis. *European Journal of Social Psychology*, 49(7), 1359-1367. <https://doi.org/10.1002/ejsp.2589>
- Jasso, G., & Rosenzweig, M. R. (1990). *The new chosen people: Immigrants in the United States*. Russell Sage Foundation.
- Jatrana, S., Richardson, K., & Pasupuleti, S. S. R. (2018). Investigating the dynamics of migration and health in Australia: a longitudinal study. *European Journal of Population*, 34(4), 519-565. <https://doi.org/10.1007/s10680-017-9439-z>
- Kalmijn, M. (1998). Inter-marriage and homogamy: Causes, patterns, trends. *Annual Review of Sociology*, 24(1), 395-421. <https://doi.org/10.1146/annurev.soc.24.1.395>
- Kanas, A., Chiswick, B. R., Van Der Lippe, T., & Van Tubergen, F. (2012). Social contacts and the economic performance of immigrants: A panel study of immigrants in Germany. *International Migration Review*, 46(3), 680-709. <https://doi.org/10.1111%2Fj.1747-7379.2012.00901.x>
- Kao, G., & Tienda, M. (1995). Optimism and achievement: The educational performance of immigrant youth. *Social Science Quarterly*, 76(1), 1-19.

- Kennedy, S., Kidd, M. P., McDonald, J. T., & Biddle, N. (2015). The healthy immigrant effect: patterns and evidence from four countries. *Journal of International Migration and Integration*, 16(2), 317-332. <https://doi.org/10.1007/s12134-014-0340-x>
- Igarashi, A., Miwa, H., & Ono, Y. (2022). Why do citizens prefer high-skilled immigrants to low-skilled immigrants? Identifying causal mechanisms of immigration preferences with a survey experiment. *Research & Politics*, 9(2), 20531680221091439. <https://doi.org/10.1177%2F20531680221091439>
- Kristen, C., & Seuring, J. (2021). Destination-language acquisition of recently arrived immigrants. Do refugees differ from other immigrants? *Journal for Educational Research Online*, 13(1), 128-156. <https://doi.org/10.25656/01:22068>
- Kristen, C., Mühlau, P., & Schacht, D. (2016). Language acquisition of recently arrived immigrants in England, Germany, Ireland, and the Netherlands. *Ethnicities*, 16(2), 180-212. <https://doi.org/10.1177%2F1468796815616157>
- Kroh, M., Brücker, H., Kühne, S., Liebau, E., Schupp, J., Siegert, M., & Trübswetter, P. (2017). *Das Studiendesign der IAB-BAMF-SOEP-Befragung von Geflüchteten*. SOEP Survey Papers 365: Series C. DIW/SOEP.
- Lu, Y., Denier, N., Wang, J. S. H., & Kaushal, N. (2017). Unhealthy assimilation or persistent health advantage? A longitudinal analysis of immigrant health in the United States. *Social Science & Medicine*, 195, 105-114. <https://doi.org/10.1016/j.socscimed.2017.11.019>
- Lubbers, M., & Gijsberts, M. (2016). Comparing the labour market position of Poles and Bulgarians before and after migration to the Netherlands. *Comparative Migration Studies*, 4(1), 1-18. <https://doi.org/10.1186/s40878-016-0043-x>
- Lubbers, M., Gijsberts, M., Fleischmann, F., & Maliepaard, M. (2018). *The New Immigrant Survey – The Netherlands (NIS2NL). A four wave panel study*. NWO-Middengroot, file number 420-004. DANS/EASY archive.
- Lubbers, M., & Gijsberts, M. (2019). Changes in self-rated health right after immigration: A panel study of economic, social, cultural, and emotional explanations of self-rated health among immigrants in the Netherlands. *Frontiers in Sociology*, 4, 45. <https://doi.org/10.3389/fsoc.2019.00045>
- Maliepaard, M., van der Meer, M., Noyon, S., & Schans, D. (2018). *Migratie in Beeld*. WODC.
- Maliepaard, M., & Noyon, S. (2020) Thuis in Nederland?. In: *Syrische statushouders op weg in Nederland: de ontwikkeling van hun positie en leefsituatie*. Sociaal en Cultureel Planbureau.
- Martinovic, B., Van Tubergen, F., & Maas, I. (2009). Changes in immigrants' social integration during the stay in the host country: The case of non-western immigrants in the Netherlands. *Social Science Research*, 38(4), 870-882. <https://doi.org/10.1016/j.ssresearch.2009.06.001>
- Martinovic, B., Van Tubergen, F., & Maas, I. (2011). Acquisition of cross-ethnic friends by recent immigrants in Canada: A longitudinal approach. *International Migration Review*, 45(2), 460-488. <https://doi.org/10.1111%2Fj.1747-7379.2011.00854.x>
- Masgoret, A. M., & Ward, C. (2006). Culture learning approach to acculturation. In: Sam, D. L., & Berry, J. W., *The Cambridge handbook of acculturation psychology* (pp. 58-77). Cambridge. <http://dx.doi.org/10.1017/CBO9780511489891>
- Massey, D. S. (2011). The new immigrant survey and research on American stratification. *Social Science Research*, 40(5), 1287. <https://doi.org/10.1016%2Fj.ssresearch.2011.06.001>
- Mahuteau, S., & Junankar, P. N. (2008). Do migrants get good jobs in Australia? The role of ethnic networks in job search. *Economic Record*, 84(s1), S115-S130. <https://doi.org/10.1111/j.1475-4932.2008.00488.x>

- McAuliffe, M., & Triandafyllidou, A. (Eds.) (2021). *World Migration Report 2022*. International Organization for Migration (IOM).
- McDonald, J. T., & Kennedy, S. (2004). Insights into the 'healthy immigrant effect': health status and health service use of immigrants to Canada. *Social Science & Medicine*, 59(8), 1613-1627. <https://doi.org/10.1016/j.socscimed.2004.02.004>
- McGinnity, F., & Gijsberts, M. (2016). A threat in the air? Perceptions of group discrimination in the first years after migration: Comparing Polish Migrants in Germany, the Netherlands, the UK and Ireland. *Ethnicities*, 16(2), 290-315. <https://doi.org/10.1177%2F1468796815616154>
- Norris, P., & Inglehart, R. F. (2012). Muslim integration into Western cultures: Between origins and destinations. *Political Studies*, 60(2), 228-251. <https://doi.org/10.1111%2Fj.1467-9248.2012.00951.x>
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90(5), 751-783. <https://psycnet.apa.org/doi/10.1037/0022-3514.90.5.751>
- Renaud, J., (2003). *Enquête sur l'établissement des nouveaux immigrants*. Université de Montréal. Data available at <https://doi.org/10.5683/SP2/YPLF65>.
- Renaud, J., Carpentier, A., Ouimet, G., & Montgomery, C. (1992). *La première année d'établissement d'immigrants admis au Québec en 1989*. Université de Montréal. Retrieved April 3, 2007. Available at <https://borealisdata.ca/api/access/datafile/150747>.
- Rijk, M., & Lubbers, M. (2020). *Hebben recente Bulgaarse, Poolse, Spaanse en Turkse migranten hun draai gevonden in Nederland?* Working paper 2020/03. NIDI.
- Rioseco, P., De Maio, J., & Hoang, C. (2017). The building a new life in Australia (BNLA) dataset: a longitudinal study of humanitarian migrants in Australia. *Australian Economic Review*, 50(3), 356-362. <https://doi.org/10.1111/1467-8462.12234>
- Röder, A., & Lubbers, M. (2016). After migration: Acculturation of attitudes towards homosexuality among Polish immigrants in Germany, Ireland, the Netherlands and the UK. *Ethnicities*, 16(2), 261-289. <https://doi.org/10.1177%2F1468796815616153>
- Ruiz, I., & VargasSilva, C. (2017). Are refugees' labour market outcomes different from those of other migrants? Evidence from the United Kingdom in the 2005–2007 period. *Population, Space and Place*, 23(6), 2049. <https://doi.org/10.1002/psp.2049>
- Simon, H., Ramos, R., & Sanroma, E. (2011). *Occupational mobility of immigrants in a low skilled economy: The Spanish case (IZA Discussion paper series, No. 5581)*. IZA.
- Statistics Canada (2003). *Longitudinal survey of immigrants to Canada: process, progress and prospects*. Statistics Canada.
- Statistics New Zealand (2008). *Longitudinal immigration study of New Zealand – wave 1*. Statistics New Zealand.
- Titzmann, P. F., & Silbereisen, R. K. (2009). Friendship homophily among ethnic German immigrants: A longitudinal comparison between recent and more experienced immigrant adolescents. *Journal of Family Psychology*, 23(3), 301-310. <https://psycnet.apa.org/doi/10.1037/a0015493>
- Tokudome, S., Hashimoto, S., & Igata, A. (2016). Life expectancy and healthy life expectancy of Japan: the fastest graying society in the world. *BMC Research Notes*, 9(1), 482. <https://doi.org/10.1186/s13104-016-2281-2>
- Van Tubergen, F. (2006). *Immigrant Integration: A Cross-National Study*. LFB Scholarly Publishing.
- Van Tubergen, F., & Kalmijn, M. (2005). Destination-language proficiency in cross-national perspective: A study of immigrant groups in nine western countries. *American Journal of Sociology*, 110(5), 1412-1457. <https://doi.org/10.1086/428931>

- Urban Institute (2018). *2018 Survey of Refugees*. <https://www.openicpsr.org/openicpsr/project/131025/version/V1/view>
- WODC (2021, December). *Cohortonderzoek Syrische Statushouders in Nederland*. WODC. <https://www.wodc.nl/onderzoek-in-uitvoering/statistiek-en-monitoring/syrische-statushouders-in-nederland>