Describing and explaining international retirement migrants' social integration: A study in thirty-five destination countries

Limited social integration can have adverse effects on migrants and host communities. Nevertheless, research shows that many international retirement migrants struggle to integrate into the local community. However, these studies have often focused on popular regions that provide a selective group of retirement migrants. Using a novel survey of Dutch retirement migrants based on a probability sample (DRM 2021), we describe and explain Dutch retirement migrants' social integration with locals, Dutch migrants, and non-Dutch migrants. We differentiate weak and strong ties by investigating levels of contact and the number of friendships. Findings showed that Dutch retirement migrants had the most friendships with locals, followed by Dutch migrants, and the fewest friendships with non-Dutch migrants. An important country-level predictor was relative number of Dutch individuals in the destination, which was negatively associated with local contact and positively associated with migrant contact. The strongest individual-level socio-cultural predictors as previous connections to the destination, which was associated with increased local contact, and stronger national identity, which was associated with more contact with Dutch and non-Dutch migrants. Duration of residence, national identity, and orientation towards the destination culture exhibit stronger effects in friendships than in acquaintances. Overall, our results shed light on the social integration of retirement migrants in various countries, revealing that, retirement migrants engage with locals as well as fellow migrants. Their contact is driven by several individual and contextual factors, which show the effect of preference and opportunity structures on retirement migrants' social integration.

Keywords: integration, migration, aging, retirees, strong ties, weak ties, multi-level models

1. Introduction

Social integration of migrants has become an increasingly popular topic as global migration rates continue to rise (Laurentsyeva & Venturini, 2017; Algan et al., 2011). The discourse on social integration often revolves around migrants from a lower-income country migrating to a higher-income country for better employment opportunities (Kanas et al., 2011; Castles et al., 2014; Zhang et al., 2023). Many migrants face challenges to integrate fuelled by moving to a country with different cultural values, religion, family norms, gender roles, and language (Laurentsyeva & Venturini, 2017), which might hinder the social integration of migrants. Lack of integration of migrants might cause tension in the destination when they are considered to be a burden on community resources (Rogers et al., 2009). Difficulties with social integration raise concerns about discrimination, segregation, and low levels of labour market participation (Koopmans, 2008; Musterd, 2011; Janta et al., 2011).

Most of what is known about social integration of migrants comes from studies focusing on migrants who move in early or midlife. The current paper focuses on a specific form of migration, namely, international retirement migration. International retirement migration is characterized by relocating to a new country around retirement age. Popular retirement migration streams are from northern to southern regions, such as Northern Europe to Spain or the US to Mexico. Unlike other types of voluntary migration, this migrant group is characterized by their older age, relatively higher socioeconomic status, and their attraction to warmer climates or nature in the destination country (Savas et al., 2023, Spaan et al., 2023; Casado-Diaz, 2006; Warnes & Patterson, 1998; King et al., 1998). The characteristics of international retirement migrants differ from those of the younger labour migrants, indicating possible differences in the levels, determinants, and consequences for their social integration. For example, international retirement migrants often prioritize leisure and quality of life over economic factors, contributing to variations in their social integration experiences compared to younger labour migrants. Although researchers note different indicators of retirement migrants' social integration, such destination language ability and contact with others, less attention has been given to empirically describing the extent of their interactions and examining the factors influencing their social contacts. The current study has two aims. The first aim is to assess the amount of contact Dutch retirement migrants abroad have with locals, Dutch migrants, and non-Dutch migrants in the destination. The second aim is to investigate the extent to which country-level and individual-level socio-cultural characteristics explain social integration differences among retirement migrants.

The stereotypical image of international retirement migrants is one that seeks amenities the destination provides without feeling the need to integrate into the local community (Huber & O'Reilly, 2004). However, if there is a lack of social integration among retirement migrants, this can carry cultural, political, and economic repercussions for the destination country (Williams et al., 1997), such as

creating hierarchical power dynamics between retirement migrants and the locals (Benson, 2015). Additionally, not having family close by to carry out caretaking responsibilities in times of need can negatively affect retirement migrants' health and well-being. If there is a limited understanding of bureaucratic processes and the destination language, this can hinder retirement migrants' access to formal healthcare services in their new residence (Hardill et al., 2005; La Parra & Mateo, 2008; Hall & Hardill, 2016; Calzada, 2017; Gehring, 2017; Hall et al., 2021), potentially leading to precarious situations (Repetti & Calasanti, 2023).

Previous researchers have examined retirement migrants' interactions with locals (Bolzman et al., 2021; King et al., 2019; Gustafson & Cardozo, 2017; Casado-Diaz, 2009; Howard, 2008), and with fellow migrants (Iorio, 2020; Oliver, 2017; Ahmed & Hall, 2016; Lardies-Bosque et al., 2016; Rojas et al., 2014). Research investigating integration with locals emphasized the difficulties migrants encounter trying to integrate into the local community. Most cited issues were related to language barriers (Lardies-Bosque et al., 2016; Gustafson & Cardozo, 2017; Iorio, 2020), followed by cultural differences (King et al., 2019). Research investigating integration with fellow migrants mostly focused on the communities and social clubs established by or for these migrants, such as the University of Third Age (U3A) that promotes educational, creative, and leisure activities mostly catered to retirees of foreign nationality in Spain (Casado-Diaz, 2009). Studies have explored how retirement migrants use these clubs and communities to create social capital (Casado- Diaz, 2009; Innes, 2009; Oliver, 2017; Calzada & Gavanas, 2020) while others characterized these communities as 'expatriate bubbles' (Lardies-Bosque et al., 2015), where expats form communities with limited interaction with the local population. Furthermore, comparative surveys have identified variations in integration levels and reasons for different levels of integration among different origin groups (Rodriguez et al., 1998; Huber & O'Reilly, 2004; Casado-Diaz, 2006). However, most comparisons focused on southern Europe (King et al., 1998), except for the comparison between Mexico and Spain (Lizarraga-Morales et al., 2015), creating a limited understanding of the variations between less popular destination countries. Additionally, only a few studies quantified retirement migrants' relationships in the destination.

The few studies quantifying the number of local and migrant contact in the destination have presented a more nuanced picture of retirement migrants. Breuer (2005) showed that fifty percent of German retirement migrants in the Canary Islands had a local friend. Bahar and colleagues (2009) showed that eighty percent of EU retirement migrants in Turkey had at least one local friend. Additionally, one of the few large-scale studies that investigated the frequency of contact among fellow migrants by Huber & O'Reilly (2004) revealed that only two-fifths of 1,100 Swiss retirement migrants in Spain surveyed had joined social clubs targeting retirement migrants, which was lower than what the researchers had expected and lower than what other studies with solely qualitative interviews had suggested (Ahmed & Hall, 2016). Although the number of friendships and the amount of involvement in the clubs were

unknown, these results suggest a potentially downward estimate of retirement migrants' social integration with the local population. This might be due to the snowball sampling methods used or surveys distributed through organizations reaching a selective group of individuals involved in retirement migrant clubs. Therefore, with respect to retirement migrants' contact with locals and fellow migrants, there are limited insights into the number of ties and the determinants of their contact in the destination.

This paper contributes to the existing literature in several ways. It employs a unique large-scale survey of Dutch retirement migrants who reside in thirty-five destination countries based on a probability sample (DRM 2021), which allows for a comprehensive overview of the social integration of Dutch retirement migrants around the world. Additionally, it describes, develops and tests hypotheses on a comprehensive set of determinants to explain Dutch retirement migrants' social integration. It enhances our theoretical understanding by testing notions of contact opportunities and preferences in the retirement migrant sample.

Two dimensions of social relations can be investigated to understand the social integration of retirement migrants: the type of ties and the strength of ties. The types of ties migrants create in the destination country, refer to contacts with locals and contacts with migrants. Both types of ties are deemed relevant for social integration of migrants. Contact with locals can reduce prejudice, increase trust and understanding between groups, and lead to a greater sense of togetherness (Casey, 2016). Contact with fellow migrants can ease new migrants' settlement process by introducing them to the migrant networks that provide support, for example in terms of housing and informal care. Fellow migrants can also provide a sense of belonging in their new residence (Wessendorf & Phillimore, 2019). The strength of ties is distinguished between strong and weak ties. Strong ties, which we include as friends, provide emotional support, and are characterized by high levels of trust. Weak ties, such as acquaintances, often provide new information, resources, and opportunities (Burt, 2004; Granovetter, 1973). This study takes a comprehensive perspective by focusing on retirement migrants' contact with locals, Dutch migrants, and non-Dutch migrants. We focus on friendships to measure strong ties and neighbourhood contact, dining, and visits to and from others to measure weaker ties.

The origin country of focus in this study is the Netherlands. The Netherlands is a high-GDP, densely populated Western European country with a growing population over 65 (CBS, 2023). With a retirement age of 66.3 years in 2021, more than 24,000 registered retirement migrants received their pensions abroad in 2021 (Henkens et al., 2021). Dutch residents build a state pension every year they live in the Netherlands once they turn 18 years old, in addition to the pension schemes provided by their work. The Dutch can only obtain the state pension when reaching the pension age set by the government. A

study on emigration from the Netherlands showed that age, education, income, and social networks played key roles in emigration decision (Van Dalen and Henkens 2007).

2. Theoretical framework

People tend to associate and bond with people who share similar characteristics, such as age, race, education, or values, a phenomenon regarded as homophily (McPherson, 2001). For retirement migrants, two types of homophily are prominent: national homophily and migrant homophily. National homophily captures the tendency of migrants to associate with those who share the same nationality, whereas migrant homophily captures migrants with different nationalities who have shared experiences as (retirement) migrants in the destination. Ethnic or national homophily is a strong predictor of social ties, including marriage formation (Kalmijn & Flap, 2001), friendships (Quillian & Campbell, 2003), career networks, and acquaintances (McPherson, 2001). Homophily can lead to the formation of separate networks for migrants and locals, which can make it difficult to socially integrate into the destination as a migrant. Existing research makes clear that homophily plays a role in 'strong' ties, such as friendships, as well as in 'weak' ties, such as neighbours and acquaintances (Kalmijn & Van Tubergen, 2006; Quillian & Campbell, 2003; Kleinbaum et al., 2013). The strength of homophily might differ depending on the strength of the relationships, making it important to distinguish between different strengths of relationships (McMillan, 2022; Curry & Dunbar, 2013).

Homophily is influenced by the combined selection process created by opportunities to contact people and the preferences of individuals with whom they want to interact. Contact opportunities create a pool of individuals available for selection, such as people being more exposed to others similar to themselves due to the neighbourhood they reside in or the school they attend to. Contact preferences determine whom the individuals are likely to engage with within that pool, often because of shared beliefs or values. Opportunities and preferences often complement each other and are not necessarily two fully separate dimensions (Kalmijn, 1998). For example, when someone moves to a certain neighbourhood due to their preferences, it also creates more opportunities to interact with people in that neighbourhood.

In forming our hypotheses, we build on the theory of contact opportunities and preferences to explain the social integration of retirement migrants in the destination country (Kalmijn, 1998). We elaborate on two sets of particularly relevant factors: country-level factors and individual-level socio-cultural factors. Country-level factors include opportunities or cultural principles that are accessible through the destination country, such as the group size of migrants in the destination, as well as the linguistic and cultural similarities between the destination and the origin country. The individual-level socio-cultural factors we focus on are motivated by notions of opportunity, preferences, or a combination of both. This group of determinants accounts for individual's varied social characteristics and cultural values towards social integration. We hypothesize on three types of contact: (1) contact with locals, (2) contact with Dutch migrants, and (3) contact with non-Dutch migrants. We further specify our hypothesis in cases where the effect is expected to differ between (a) stronger ties (friendships) and (b) weaker ties (neighbourhood contact, dining, and visits to and from others). In the following section, we start by hypothesizing on the country-level factors.

2.1. Country-level factors

Group composition, size, and structure create contact opportunities for individuals to interact with others (McPherson & Smith-Lovin, 1987; Blau, 1994). As migrants often represent a small portion of the general population in the destination, a greater representation of these groups enlarges the opportunity pool for retirees to interact with. Indeed, research has shown that the larger the group size of migrants, the more opportunities they have to interact with co-nationals (Blau & Schwartz, 1984; Kalmijn & van Tubergen, 2010). We hypothesize that having a relatively larger Dutch migrant population residing in the destination is associated with a higher likelihood of contact with fellow migrants, especially with Dutch retirement migrants and no effect on contact with locals. This is expected to apply to weak and strong ties.

The linguistic similarity between two languages is positively associated with the ease of learning the second language. Research has shown that the further away the destination language is from the origin language in the linguistic tree, the more difficult the language is to learn for the migrants, thus hindering social integration (van Tubergen & Kalmijn, 2005). Therefore, having an origin language that is linguistically more similar to the destination makes the language easier to learn, creating more opportunities to connect with the destination. We hypothesize that linguistic similarity between the destination and origin language is associated with a higher likelihood of contact with locals but not with Dutch and non-Dutch migrants. We expect this to apply not only to weak but also to strong ties.

Sharing a language facilitates communication. As English is the most common second language worldwide, it creates opportunities for migrants to use English while communicating with locals. However, for this communication to work efficiently, both sides must have adequate proficiency in English. The Netherlands has the highest proficiency in English as a second language compared to over one hundred countries (EF, 2022), which might make Dutch migrants' efforts to contact locals in the destination easier. Nevertheless, destination countries differ widely in their English proficiency. We hypothesize that higher levels of English proficiency in the destination country are associated with a higher likelihood of retirement migrants' contact with locals, but no association for Dutch and non-Dutch migrants. We expect this to apply not only to weak but also to strong ties.

The cultural similarity between the origin and destination country has been shown to reduce the social distance between people due to a shared understanding of cultural beliefs and values. Research has

shown that cultural similarity is positively associated with the social integration of non-western migrants in the Netherlands (Martinovic et al., 2009). One of the dimensions of cultural value differences around the world, according to Inglehart and colleagues (2014), is traditional versus secular values. Traditional values emphasize religiosity, national pride, and traditional family values, while secular values emphasize the contrary. Although the Netherlands is located high on secular values (WWS 2023), our study includes retirement migrants living in thirty-five destination countries with a large variety of cultural values, such as France, Thailand, Brazil, and the US. Differences in cultural values between the Netherlands and destination countries could affect retirement migrants' social integration. Some studies show the difficulties retirement migrants encounter due to their cultural differences; for example, US retirement migrants in Mexico indicated that it was perceived to be difficult to integrate because of the Mexicans' 'family comes first' values (Rojas et al., 2014). We hypothesize that cultural similarity between the country of origin and the destination is associated with higher contact with locals. While this association might be present for weaker ties, it will be stronger for friendships as people are more selective in whom they become close with. Thus, this effect will be particularly strong in stronger ties.

2.2. Individual-level socio-cultural factors

Longer duration of residence is a prevalent factor investigated in the social integration of migrants in the West, as residing in the destination for longer helps to familiarize migrants with the formal and informal institutions in the destination country (Martinovic et al., 2009). It not only creates opportunities to interact with others in the destination but also helps with learning the language and culture of the destination, which promotes contact with locals. Longer duration of residence is also related to a possible selective process in which people who deem their migration as unsuccessful return to their origin, and those who stay are deemed successful. Research shows that longer residence in the destination is positively associated with the social integration of residence in different European countries (Sirven & Berchet, 2012; Aleksynska, 2011). We assume similar processes will take place for retirement migrants. We hypothesize that a longer duration of residence in the destination is associated with more contact with locals and less contact with Dutch and non-Dutch migrants. For friendships, a longer duration of residence is even more essential as friendships take longer than acquaintances (Granovetter, 1973). We expect this association to be stronger for strong ties.

Pre-existing social ties to the destination support social integration as they make the settling process easier for new migrants by creating opportunities for the migrants to connect with their network. These ties can include family ties to the destination, such as having a partner from the destination or friendships made in previous visits to the destination for tourist purposes (Barbosa et al., 2021; Casado-Diaz et al., 2014; Rodriguez, 2001). Bolzman and colleagues (2022) reported that retirement migrants in Morocco

who have relationships with Moroccans had some contact with their partner's family, via which they explored the culture. Additionally, several studies showed that many retirement migrants visited the destination country before moving there permanently, getting to know the destination, and making friends (Williams & Patterson, 1998; Benson, 2012). We hypothesize that more prior social ties to the destination are associated with a higher likelihood of contact with locals. This effect will be particularly strong for weaker ties as prior ties create more opportunities to meet others. We do not expect an effect of prior social ties on Dutch and non-Dutch migrants.

Strong identification with the culture and beliefs of the origin country might hamper social integration in the destination country. Migrants might identify with the culture and beliefs of their origin country on varying levels. National identity refers to the feeling one shares with a group of people about a nation (Guibernau & Montserrat, 2004) and is a strong predictor of homophily (de Vroome, Verkuyten, Martinovic, 2018). The strength of national identity may not be the same for everyone, as some people feel more connected to their nationality than others, which affects whom they want to associate with. Indeed, results from a study of Turkish and Moroccan migrants in the Netherlands show that higher identification with the origin country often leads to fewer ties with the natives, showing a preference to associate with co-nationals (de Vroome, Verkuyten, Martinovic, 2018). We hypothesize that higher identification with being Dutch is associated with a higher likelihood of contact with Dutch migrants in the destination and a lower likelihood of contact with locals and non-Dutch migrants. This effect will be stronger for strong ties as people are more selective about whom they become friends.

While some migrants might be oriented towards their origin, others might be oriented towards the destination culture. For example, Spaan and colleagues (2023) have shown that three out of four retirement migrants from a sample of more than 5,000 were attracted by the destination's culture and people. The orientation towards the destination culture could affect the type, and the amount of contact retirement migrants will have in the destination. We hypothesize that retirement migrants for whom the culture and the people played a role in their migration compared to people for whom that has played no role will be more likely to have contact with locals and less contact with Dutch and non-Dutch migrants. This relationship will be stronger for strong ties.

3. Methods

3.1. Data and sample

We employed the survey of Dutch Retirement Migrants Abroad (DRM 2021), which includes 6,100 individuals between the ages of 66-90 residing in forty destination countries. The initial sample was drawn by the Social Insurance Bank (SVB), which executes the public pension system in the Netherlands. The data of the SVB cover the entire Dutch population. The population was defined as

people who were born in the Netherlands, were between the ages of 66-90 in 2021, lived at least 35 years in the Netherlands after reaching age 15, and were receiving their pension in a country outside of the Netherlands (Henkens et al., 2021). We limited the population to the forty most common destination countries, covering 98% of the population (Appendix A). People who lived in Belgium or Germany were excluded beforehand as these countries are in very close proximity to the Netherlands, often involving border migration. Labour migrants who have returned to their country of origin after retirement were excluded as this would require a separate conceptual and empirical treatment. A probability sample was drawn from the population of 14,168 retirees. The sample was contacted via SVB and our fieldwork agency for a web-based or paper-and-pencil questionnaire. The response rate was 45%, resulting in an effective sample size of 6,110. Further information on the sample and fieldwork can be found in the codebook (Henkens et al., 2021).

From the DRM dataset, we excluded 14 people who indicated residing in neighbouring countries to the Netherlands. We also excluded 528 individuals who migrated before age 50, 15 who did not fit in the age range of 66-90, and 33 who indicated that they were not born in the Netherlands (N = 34). Furthermore, we excluded five countries with fewer than 25 respondents (N = 81). The final sample size was 5,438 individuals, of which 31% were female (the mean age was 74), living in 35 destination countries.

3.2. Measures

3.2.1. Dependent variables

We included nine dependent variables corresponding to different types and strengths of social ties. There are three contact variables, measured for both locals and other migrants: contact in the neighbourhood, going to a restaurant together, and visiting/being visited. Respondents answered questions such as "How often did you have contact with people from the destination country in your neighbourhood?" from a scale of 1 (None) to 5 (Almost every day). These questions were asked for the period 12 months before COVID-19 as contact with others were severed during the data collection process (2021).

There were three friendship variables, measuring friendships with locals, Dutch migrants, and non-Dutch migrants. For the friendship variables, respondents answered questions such as "Do you have close friendships with migrants with a Dutch background?" on a scale of 1 (No) to 5 (Yes, 6 or more friends). Table 1 presents all the dependent variables, their mean, standard deviation, range, and the wording of their questions and answers. All dependent variables were standardized.

Table 1 here

Table 2 presents the independent variables' means, proportions, standard deviations, coding, and psychometric properties. The division between country-level and individual-level socio-cultural factors represents the hierarchical structure of our data. Please note that all continuous variables were standardized. The following section provides further information on how independent variables were constructed.

Table 2 here

Ingroup size was proxied by calculating the percentage of individuals born in the Netherlands but living in the destination country (CBS, 2022) to the population of the destination country in 2022 (World Bank, 2023). This was calculated for 30 destinations. The relative group size of Dutch individuals in the destination was then log-transformed and added to the models. We treated destinations that had colonial ties with the Netherlands (Aruba, Bonaire, Curacao, and Suriname) separately as the percentage of Dutch migrants in these destinations were outliers. Therefore, destinations with colonial ties were mean imputed in the ingroup size variable. A dummy variable of colonial ties with the Netherlands was added to control for the effect of these countries. Canary Islands was also mean imputed as the group size was missing in the CBS (2022) dataset.

Linguistic similarity was measured by examining language families that exhibit systematic similarities that cannot be attributed to random chance or the influence of language contact. Therefore, while languages in the same family and branch are the closest, languages in a different family and different branch are the furthest away in similarities. We coded the distance between the Dutch language, which is in the Germanic branch of the Indo-European language family, and the destination language in the linguistic tree into three categories (van Tubergen et al., 2009): (a) different language family, different branch (such as Hungarian), (b) same language family, different branch (such as Spanish), (c) same language family, same branch (such as English).

English proficiency scores of each country were obtained from EF English Proficiency Index 2022 (www.ef.com/epi). This index was created by analysing the results of 2.1 million adults worldwide who took the EF SET English tests in 2021. The destination countries in which English was the mother tongue were coded the highest score (661), the score for the Netherlands. It is important to mention that the scores used to create this index were of exams that younger adults took (median age 25), therefore, the English proficiency of the Netherlands might not reflect the English proficiency of the older Dutch population.

Cultural similarity scores were obtained from the Cultural Map from the European and World Values

survey of Inglehart and Welzel (WVS 2021). In the WVS, countries are given a score in traditional– secular values. Some items to test the traditional-secular values are "Respondent favours more respect for authority" and "God is very important in respondent's life". Higher scores on these items indicate more traditional values, while lower scores indicate more secular values. By subtracting the scores of each country from the scores of the Netherlands and taking the absolute term, we created the cultural similarity variable.

Duration of residence was calculated by subtracting the year the respondents emigrated into the country they reside in from the year 2021, the time of the survey.

We included three variables to measure the previous ties in the destination. The first variable was related to the migration partner's background; responses were coded into four categories: (a) Dutch partner, (b) partner with a migration background, (c) partner from the destination, and (d) no partner. The partnership status was about the partner at the time of migration, and the categories regarding the partner's background were gathered by asking where retirement migrants' partner and their parents were born. The second variable measured familial ties in the destination before migration. The number of family ties was gathered from respondents' indications of whether they had (a) children, (b) parents, or (c) other family members in the destination before migration. This variable ranged from 0 (no prior family ties) to 3 (all three family ties). The third variable indicated friendship and acquaintance ties before migration his variable was constructed from their answer to whether they had (a) friends or (b) other acquaintances at the destination before migration. This variable ranged from 0 (no prior friend ties) to 2 (both friends and acquaintances).

National identity was measured by the respondent's answers to the following three statements: "I feel at home in the Netherlands," "I really feel connected to the Netherlands," "The Netherlands is a part of my identity" on a scale from 1 (strongly disagree) to 5 (strongly agree). The answers were standardized, and a scale score was created. The scale reliability coefficient was 0.83.

Orientation toward the destination culture was calculated by the respondent's answers to whether the culture and the people of the destination country played a role in their decision to migrate. The response categories were (a) played no role, (b) played a bit of a role, (c) played a big role.

Several characteristics are controlled for in the analyses: age, gender, education, household income, health, extraversion, and urbanization. A continuous age variable was added to account for the differences in how younger and older retirement migrants socialize. Gender, coded as a binary variable, was added to account for the differences in how males and females socialize. Education was measured by asking the highest level of education respondents completed with a diploma. This question, which had eight response options ranging from primary school to university, was recoded to the linear ISLED

scale (Schröder & Ganzeboom, 2014). The education variable was added to account for the association between higher education and efficiency in language learning (Chiswick & Miller, 2001). Equivalized household income was inquired by asking respondents' monthly net household income in eight categories in euros: (a) less than 1000, (b) 1000-2000, (c) 2000-3000, (d) 3000-4000, (e) 4000-5000, (f) 5000-6000, (g) 6000-7000, (h) more than 7000 euros. For categories b to g, we took the average of the two numbers. For categories a and h, we calculated the percentage decrease from 1000 and increase from 7000 euros by corresponding the income percentile in the Dutch population (CBS 2021) to the percentage that chose these categories in our sample. If the respondent had a partner, we took the square root of household income. The income variable was added to account for socioeconomic effects on social integration. Subjective health was added to account for whether their health prevented them from contacting others. This variable was constructed by the question inquiring about how they feel about their general health from 1 (very poor) to 5 (very good). Extraversion, measured with the seven-item scale taken from the IPIP personality inventory (Goldberg et al., 2006), was added to account for their preference for socializing. The items included statements such as "feel good in the company of people." The scale reliability coefficient was 0.83. Furthermore, urbanization, coded as a continuous variable ranging from rural area to big city, was added to account for where in the destination the retirement migrants live (rural or urban areas), which could affect the opportunities they get to contact others.

3.3. Analytic strategy

Multilevel models are used to analyse the social integration of migrants, acknowledging the hierarchical nature of our data in which migrants reside in thirty-five destination countries. Nine separate two-level hierarchical models are specified corresponding to each dependent variable, divided into two tables (Table 4 & Table 5). The models included migrants (level 1) nested in countries (level 2). The Intraclass Correlation Coefficient (ICC) was used to measure whether there was clustering in the level 2 variable. We measured the ICC of nine empty models corresponding to our nine dependent variables. ICC of the empty models showed clustering in the level 2 variable with ICC being larger than 1 in dependent variables testing migrant contact (see the last rows in Table 3 & 4).

Independent variables with the largest number of missing cases were the household income (17.6%), migration background of the partner (13.1%), and extraversion (8.8%). The remaining variables had less than 3% missing cases. Multiple imputation procedures using mi impute in Stata 17 were employed to deal with the missings in the independent variables. We imputed the variables with missing values 20 times and used information from country-level variables and the age variable, which had no missings. Two-level random intercept models were used for each dependent variable and were estimated using mi estimate: mixed in Stata 17.

Dependent variables had between one and three percent missing cases. These variables were imputed

in the same imputation model explained above, but the imputed values were deleted in the analyses, following the technique proposed by von Hippel (2007). However, considering that the missing cases for the dependent variables were low, we compared our models to account for the differences between weak and strong ties.

4. Results

4.1. Descriptive statistics

Descriptive results showed that retirement migrants had a high prevalence of local contact. As seen in Figure 1, one in every four retirement migrants had daily contact with locals, while only 6 percent had no neighbourhood contact with locals. Contact with fellow migrants were also common, although less prevalent than contact with locals. Also seen in Figure 1, only six percent of retirement migrants had daily contact with fellow migrants while 33 percent had no neighbourhood contact at all with fellow migrants. These proportions were similar in dining and visitations, with dining and visiting locals being higher than fellow migrants. The correlations between the two types of contact were low. The highest correlation between the variables investigating local and migrant contact was .16 which was between two variables testing neighbourhood contact with locals and with migrants.

Figure 1 here

We have also investigated the number of friendships retirement migrants had with locals, Dutch migrants, and non-Dutch migrants (see Figure 2). Results showed similar patterns to that of weaker ties. As seen in Figure 2, there were more local friendships than friendships with Dutch migrants, and fewest friendships were made with non-Dutch migrants. While 19 percent had no local friends, 38 percent had no Dutch migrant friends, followed by the almost a half not having non-Dutch migrant friends. Additionally, only 11 percent had six or more Dutch migrant friends and seven percent had six or more non-Dutch migrant friends compared to 23% having six or more local friends. The friendship outcomes showed a preference for having more local friends in the destination. It is important to consider that the higher numbers of friendships and contact with locals can be partially explained by the larger number of locals compared to Dutch migrants in the destinations.

Figure 2 here

We further investigated country differences (Figure 3), which showed three countries where migrants had more Dutch friends than local friends: Spain, Bonaire, and Israel. In Spain, a popular destination of focus for retirement migration studies, the average number of Dutch migrant friends exceeded the average number of local friends. Similarly, Bonaire presented itself as the popular Dutch destination

for retirement migration with a large proportion of Dutch migrants. Our results show this popularity might have resulted in expat bubbles. The results of the country differences show that there might be country-specific integration effects.

Figure 3 here

Variability exists among individuals, some leaning towards limited social interactions while others lean towards more frequent contact with others. Nevertheless, how many retirement migrants have sparse or frequent contact with others? To answer this question, we investigated the percentage of retirement migrants who had little neighbourhood contact with others (locals and migrants combined). Our results showed that 10% of retirement migrants had either no contact or had contact less than once a month with others. We then investigated the percentage of retirement migrants who had extensive contact with others. Our results showed that 43% of retirement migrants had daily contact or contact one or more times a week/month with others. After investigating the two ends of the spectrum of social contact, we investigated the people with differing levels of migrant and local contact. Our results showed that only 5% of retirement migrants had simultaneously high levels of migrant contact and high levels of local contact.

4.2. Multilevel models

Table 3 presents the results of six multilevel models corresponding to contact with locals and migrants. The first and the fourth columns in Table 3 present contact in the neighbourhood with locals and migrants respectively. The second and the fifth columns present similar results for going out to a restaurant, and the third and the sixth columns present similar results for visit/being visited. Table 4 presents the results of the three multilevel models corresponding to friendships made with locals, Dutch migrants, and non-Dutch migrants.

Tables 3 and 4 here

4.2.1. Country-level characteristics

The results of the multilevel analyses partially supported our hypotheses on the country-level factors. The findings supported our hypotheses that having a higher percentage of Dutch migrants in the destination (ingroup size) is associated with more migrant contact. As seen in Table 3, a relatively larger group size predicted more neighbourhood contact with other migrants. Additionally, larger ingroup size had negative effects on contact with locals, especially in terms of going out and being visited. Interestingly, as seen in Table 4, although larger ingroup size did not significantly affect friendships

with Dutch migrants, it predicted a lower likelihood of having local friends and a higher likelihood of having non-Dutch migrant friends. This suggests that the more opportunities the migrants have to interact with other migrants, the less they keep contact with the locals.

We had constructed a dummy variable controlling for the countries that had colonial ties to the Netherlands. This was done to take into account the similarity that might arise from having colonial ties and to control for the large group of Dutch migrants these destinations have compared to other destinations (4 to 7 percent of their population was people born in the Netherlands). As seen in Table 3, residing in a country with colonial ties to the Netherlands increased the likelihood of having contact with migrants. As seen in Table 4, it increased the likelihood of having friendships with Dutch migrants while decreasing the likelihood of having friendships with locals. It did not affect friendships with non-Dutch migrants, which might suggest the existence of expat bubbles in the destination.

As hypothesized, our findings showed that residing in a country linguistically dissimilar to the Dutch language is associated with lowered likelihood of visits to/from locals (Table 3). As seen in Table 4, dissimilarity also lowered the likelihood of having local friends. Results also showed that residing in a country dissimilar to the Dutch language is associated with increased likelihood of contact and friendships with Dutch and non-Dutch migrants. The effect of linguistic dissimilarity on migrant contact could be an indirect effect of not being able to communicate with the locals, thus creating migrant communities in these destinations that connect with each other.

Our findings failed to support our hypotheses that higher English proficiency in the destination and similarity in traditional values would be associated with more contact with locals. These variables had no significant effects on the social integration of retirement migrants.

4.2.2. Individual-level socio-cultural characteristics

For the individual-level socio-cultural factors, our findings supported the hypothesis that a longer duration of residence is associated with more local contact. As seen in Table 3, this was the case for neighbourhood contact, going out, and visiting. Longer duration of residence was also significantly associated with more migrant contact. As seen in Table 4, longer duration was also associated with more local, Dutch migrant, and non-Dutch migrant friendships. Our results indicate a generic positive effect rather than a group-specific effect of duration of residence on social integration.

We formulated a general hypothesis about the association between the role of previous connections and contact with locals. The testing of this hypothesis included variables concerning the migration partner's background and previous family and friendship ties to the destination. We find that having a partner from the destination was associated with increased likelihood of contact and friendships with locals and

lowered the likelihood of contact and friendships with migrants (Table 3 and 4). Although not hypothesized, having a partner with a migration background who was not from the destination country had a similar effect, which might suggest a form of migrant capital. Additionally, results showed that being single compared to having a Dutch partner was associated with more local contact and less Dutch and non-Dutch migrant contact. For previous family and friendship connections, results showed that only friendship connections were associated with increased likelihood of contact with locals. The positive effect of having friends in the destination before migration was a general effect rather than a group-specific effect and was evident in all strengths of ties.

Results provided support for our hypothesis that a stronger identification with the origin country would be associated with more migrant contact and less local contact. Our results showed that people who felt closer to the Dutch identity were more likely to have contact, go out, visit/be visited by migrants and less likely to visit/be visited by locals (Table 3). They were also more likely to have friendships with Dutch migrants and less likely to have friendships with locals (Table 4). As hypothesized, this effect was especially strong for friendships. Similarly, results supported our hypothesis on the orientation towards the destination culture, showing that people motivated to migrate due to the culture and the people from the destination were likely to have more contact with locals. This was true for all levels of contact (Table 3 and 4). Orientation towards the destination culture was also associated with increased likelihood of making non-Dutch migrant friends (Table 4), suggesting a general openness to new people and cultures that this group might have.

As for control variables, being older was associated with lower likelihood of contact with locals and migrants. Additionally, females were more likely to have contact with migrants as well as more likely to have friendships with locals, Dutch, and non-Dutch migrants. Higher education was positively associated with local neighbourhood contact. Higher education also predicted having less Dutch migrant friends. Higher income predicted more contact and friendships with migrants. Living in a more urban area was associated with a higher likelihood of going out with locals and lower likelihood of being visited by other migrants. Being extraverted had a generally positive effect on contact with locals and migrants.

5. Discussion

3 paragraphs on; Individual and country differences, Opportunities and preferences, Weak and strong ties (female difference for example: social position of the women are the same in the origin and also in the destination OR men are more involved in locals which is an exception)

In this study, we combined two aspects of social integration in the destination, namely those with locals and migrants. We aimed to describe and explain the social integration of a large representative sample of international retirement migrants from one origin country in 35 destination countries. Our findings showed that almost half of the retirement migrants had daily or weekly contact with others, which painted a well-connected picture of almost half of retirement migrants. For these migrants, migration created opportunities to make new friends and lead an active social life in their new residence. This changes the way we think about the shrinking social networks of aging individuals and creates new questions on how the increased contact in older ages might affect older adults. As opposed to half of the migrants who were well-connected in our sample, one in every ten migrants had very low levels of contact. Given that previous research has emphasized the significance of social integration of retirement migrants, particularly those susceptible to precarious situations (Repetti & Calasanti, 2023), the extremely low levels of contact with ten percent of retirement migrants become a matter of concern.

On average, retirement migrants had more contact with locals than migrants. It was intriguing that the highest level of contact was with the locals, as many researchers have emphasized the difficulties retirement migrants have trying to integrate with the locals (Huber & O'Reilly, 2004; Casado-Diaz, 2009; Lardies-Bosque, 2016; Ahmed & Hall, 2016; Gustafson & Cardozo, 2017; Iorio, 2020; Bolzman et al., 2021). However, these results might not be surprising as these are the absolute levels of contact retirement migrants have in the destination. If we consider the relative number of Dutch individuals in each destination, which was low, the level of contact with Dutch migrants can be considered high, suggesting relative national homophily.

There were three countries that were exceptions to our findings explained above. One of these countries was Spain, a common destination of focus in IRM research (Savaş et al., 2023). In Spain, retirement migrants had more contact and friendships with fellow migrants than with locals. This is in line with previous research studying Spain that mention the problems retirement migrants encounter while trying to form local friendships (Huber & O'Reilly, 2004). Considering that Spain was an exception in our case, our results indicate that what we know about retirement migrants so far might be deriving from the studies focusing on popular destinations, and these results might not hold when the non-popular destinations are investigated. This emphasizes the need to study a comprehensive view on the population of retirement migrants covering multiple destinations.

Multilevel models showed that both country- and individual-level socio-cultural factors played a role in the social integration of retirement migrants. In terms of country-level factors, the effect of linguistic similarity was the most prominent. The group-specific effects of linguistic similarity showed that the more difficult it was to learn the destination language, the more likely that the retirement migrants had contact with fellow migrants. Languages that are harder to learn made migrants less likely to form friendship with locals but connect with migrants instead. Also related to qualitative research emphasizing retirement migrants who struggle to learn the destination language, we show that the effect of difficulty of learning a new language do indeed play a big role in social integration of migrants that are older in age.

In terms of individual-level socio-cultural factors, variables such as previous friendships in the destination showed generic positive effects, which indicate a general preference and opportunity structures to socialize with others in a new context. As expected, feeling closer to the Dutch identity and orientation toward the destination culture showed opposing group-specific effects. While those who scored higher in feeling closer to the Dutch identity showed a strong preference for contact with Dutch migrants, those who scored higher in orientation toward the local culture showed a strong preference towards contact with locals. Furthermore, migrants who had a partner from the destination showed high local and low migrant contact. This shows a strong partnership effect in which the migrant is driven by the preferences and opportunities provided through their migration partner. Additionally, there were differences between weak and strong ties. The effects of duration of residence and previous social ties were stronger in friendships. These variables suggest that time and previous ties provide more opportunities to create stronger bonds with others. However, especially for the duration of residence, it is important to consider possible selectivity as migrants who stay for longer might be those who could create stronger bonds with others.

Our study has a number of strengths. It is a comprehensive study including a representative sample of Dutch retirement migrants residing in thirty-five destination countries, which enable us to study country as well as individual differences in social integration. It describes the social contact retirement migrants have with locals and migrants, which gives a more complete picture of social contact people who migrate around retirement age have in their new residence. It differentiates different strengths of ties, ranging from having neighbourhood contact to friendships. Using multilevel models, we tested the several determinants tapping into preference and opportunity structures that we hypothesized to play a role in retirement migrants' social integration in the destination. Overall, this study gave a comprehensive overview of the social integration of retirement migrants in the destination.

Our study is not without limitations. Although we inquired about the amount of contact in the destination, we did not include information on the quality of contact. Especially for the friendship questions, we rely on the subjective estimates of retirement migrants, which might not be reciprocal. By adding the dimension of quality of contact and friendships, future research can further our understanding of retirement migrants' social support networks in the destination. Furthermore, although we differentiated between Dutch and non-Dutch migrant friendships, migrants were combined for the contact variables. The combined measurement of the contact variables made it difficult to differentiate between national and migrant homophily when it came to contact with fellow migrants, which led to our assumptions on differences between Dutch and non-Dutch migrants dependent on the results of

friendships. At last, our study focuses on a sample of Dutch retirees, which might have different characteristics and integration levels to retirement migrants from other countries. For example, it has been shown that Dutch retirees were more interested in getting to know the Spanish people than the British and Germans (Rodriguez et al., 1998). Although we cannot generalize our results to the whole international retirement migrant population due to differences between different origin countries in their levels of social integration, we expect our predictors of social integration to be similar between retirement migrants from different origin countries.

The stereotype of international retirement migrants has been those who take advantage of the amenities the destination country provides without feeling the need to integrate into the destination. Their struggles to integrate might be fuelled by difficulties they experience while learning a new language at an older age or by the mismatches between their cultural beliefs and values to that of the local communities. These difficulties might lead to low levels of integration with the locals, which may have adverse consequences for the retirement migrants. While these might indeed be true for some retirement migrants, we showed that to there is still what there is still a substantive amount of retirement migrants who have frequent contact with locals in addition to migrants. We also showed that several individual preferences and opportunity structures help us explain their contact with others in the destination.

Tables and figures

Variables	Mean	SD	Range	Question	Answer		
				How often did you			
Contact with locals	2.60	1.15	0 - 4	have contact with people from the destination country in your neighbourhood?			
Dining with locals	1.17	1.03	0 - 4	go out for dinner in a restaurant or café with people from the destination country?	(0) None(1) Less than once a		
Visit/visited by locals	1.55	1.03	0 - 4	receive visits from people from the destination country or went to visit people from the destination country?	month(2) Once or severaltimes a month(3) Once or more times		
Contact with migrants	1.48	1.28	0 - 4	have contact with other migrants in your neighbourhood?	a week (4) Almost every day		
Dining with migrants	0.87	0.99	0 - 4	go out for dinner in a restaurant or café with other migrants?			
Visit/visited by migrants	1.12	1.04	0 - 4	receive visits from other migrants or went to visit other migrants?			
				Do you have close friendships with			
Dutch migrant friends	1.96	2.05	0 - 6	migrants with a Dutch background?	(a) No (b) Yes, 1 friend		
Non-Dutch migrant friends	1.51	1.89	0 - 6	other migrants?	(c) Yes, 2-3 friends(d) Yes, 4-5 friends(e) Yes, 6 or more		
Local friends	3.02	2.17	0 - 6	people from the destination country?	friends		

Table 1. Means, proportions, and standard deviations of dependent variables, N = 5,438

Note: "12 months before corona crisis?" was specified as a timeframe for the first set of variables as the survey was conducted during COVID-19, which affected the frequency of face-to-face social interactions.

Source: DRM 2021

	Mean (SD)	Coding and psychometric properties
Country level		
Relative number of Dutch nationals in	.04 (.03)	Continuous, range (.00083)
the destination		
Linguistic similarity		Categorical variable
Same family, same branch	12%	
Same family, different branch	6%	
Different family, different branch	82%	
English proficiency	577.6 (60.5)	Continuous, range 423 - 661
Cultural similarity	.44 (.46)	Continuous, range .02 - 2.11
Destinations with former colonial ties to NL	6%	Dummy variable coded 0-1, $1 = has$ former colonial ties
Individual level		
Duration of residence	10.62 (7.02)	Continuous, range 0 - 40
Partner background		Categorical variable
Dutch partner	48%	
No partner	22%	
Partner from the destination	13%	
Partner with another migration background	16%	
Previous ties to the destination (family)	.28 (.52)	Continuous, range 0 to 3
Previous ties to the destination (friends)	.59 (.67)	Continuous, range 0 to 2
National identity (Dutch) (alpha = .83)	3.16 (.94)	Three-item scale, range 1 (Completely disagree) to 5 (Completely agree)
Orientation towards the destination culture	2.12 (.77)	Continuous, range 1 (Played no role) to 3 (Played a big role)
Control variables		
Age	74 (5.1)	Continuous, range 66-90
Female	31%	Dummy variable coded 0-1, $1 =$ female
Education (ISLED)	60.59 (20.72)	Continuous, range 22.98 - 87.13
Household income (net, equivalized)	2350 (1379)	Continuous, range 615.18 - 8610
Self-rated health	3.79 (.77)	Continuous, range 1 (very poor) to 5 (very good)
Urbanization	2.98 (1.51)	Continuous, range 1 rural area to 6 big city (>100.000 inhabitants)
Extraversion (alpha = .83)	3.41	The seven-item scale ranges from 1 (Completely wrong) to 5 (Absolutely correct). From IPIP personality inventory (Goldberg et al., 2006)

Table 2. Means, proportions, standard deviations, and coding and psychometric properties of independent variables, standard deviation in parentheses, N = 5,438

Source: DRM 2021

Figure 1.Percentage of Dutch retirement migrants' social contact with locals and migrants in neighbourhood contact, dining, and visits



Contact with locals and migrants

Figure 2. Percentage of Dutch retirement migrants' friendships with locals, Dutch migrants, and non-Dutch migrants



Friendship with locals, Dutch and non-Dutch migrants

Figure 3. Average number of friendships with locals, Dutch migrants, and non-Dutch migrants in each destination country, y axis is arranged by the country with the most respondents (France) to least respondents (Malaysia)



Table 3. Multi-level regression coefficients of contact with locals and migrants in different strengths (standard errors in parentheses)

	With locals					With migrants						
-	NB Contact		Going out		Visit/visited		NB Contact		Going out		Visit/visited	
Country-level characteristics												
Relative ingroup size	003	(.026)	073*	(.029)	092**	(.032)	.121**	(.039)	.078	(.046)	.072	(.040)
Linguistic similarity (ref: same family, same branch)												
Same family, different branch	054	(.070)	067	(.078)	221*	(.089)	.296**	(.110)	.403**	(.132)	$.268^{*}$	(.113)
Different family, different branch	087	(.109)	139	(.119)	189	(.134)	.632**	(.164)	.564**	(.195)	.606**	(.169)
English proficiency in the destination	024	(.036)	023	(.040)	.006	(.046)	111	(.057)	081	(.068)	063	(.058)
Cultural similarity	.021	(.029)	019	(.031)	.025	(.035)	.034	(.043)	.020	(.052)	.021	(.045)
Former colonial ties to the Netherlands	109	(.085)	.043	(.092)	083	(.103)	.556**	(.125)	.437**	(.148)	.487**	(.128)
Individual-level characteristics												
Duration of residence	.036*	(.015)	.031*	(.015)	.047**	(.015)	001	(.014)	.035*	(.014)	.013	(.015)
Partner's background (ref: Dutch partner)												
No partner	.041	(.039)	.357**	(.038)	.239**	(.037)	183**	(.037)	086*	(.036)	211**	(.037)
Partner from the destination	.151**	(.048)	.373**	(.046)	.347**	(.045)	400**	(.047)	340**	(.046)	440**	(.046)
Partner with another migration background	.023	(.046)	.220**	(.044)	.182**	(.044)	121**	(.045)	033	(.042)	115**	(.044)
Previous connections to the destination (family)	.028	(.015)	.008	(.015)	.033*	(.014)	022	(.014)	028*	(.014)	018	(.014)
Previous connections to the destination (friends)	.081**	(.014)	.091**	(.013)	.106**	(.013)	.078**	(.013)	.061**	(.013)	.082**	(.013)
National identity (Dutch)	018	(.015)	022	(.014)	029*	(.014)	$.050^{**}$	(.014)	.052**	(.014)	.053**	(.014)
Orientation towards the destination culture	.112**	(.014)	.083**	(.014)	$.078^{**}$	(.014)	.015	(.014)	.015	(.014)	.006	(.014)
Control variables												
Age	069**	(.015)	001	(.015)	031*	(.015)	043**	(.014)	025	(.014)	039**	(.014)
Female	024	(.030)	019	(.029)	.023	(.029)	$.088^{**}$	(.029)	$.082^{**}$	(.028)	.142**	(.029)
Education (ISLED)	.054**	(.015)	023	(.015)	.017	(.015)	.000	(.014)	025	(.014)	005	(.014)
Household income (net, equivalized)	010	(.017)	$.059^{**}$	(.017)	006	(.017)	.061**	(.016)	.103**	(.016)	.067**	(.016)
Subjective health	.051**	(.014)	.006	(.013)	.003	(.013)	.019	(.013)	.003	(.013)	.013	(.013)
Urbanization	.002	(.015)	$.088^{**}$	(.015)	023	(.015)	020	(.015)	.018	(.015)	035*	(.015)
Extraversion	$.140^{**}$	(.014)	.141**	(.014)	$.148^{**}$	(.014)	.072**	(.014)	.091**	(.013)	.085**	(.013)
Constant	.006	(.101)	371**	(.110)	321**	(.122)	.228	(.147)	.008	(.174)	.057	(.151)
N	53	37	5316		5324		5331		5316		5321	
ICC	.012		.042		.047		.134		.137		.116	

Standard errors in parentheses * p < 0.05, ** p < 0.01

	With lo	ocals	With 1	Dutch	With non-Dutch			
			migr	ants	migrants			
Country-level characteristics								
Relative ingroup size	096**	(.029)	.075	(.040)	.113**	(.039)		
Linguistic similarity (ref: same family, same branch)								
Same family, different branch	263**	(.080)	$.225^{*}$	(.113)	.369**	(.112)		
Different family, different branch	288*	(.123)	$.410^{*}$	(.169)	$.740^{**}$	(.167)		
English proficiency in the destination	.046	(.042)	090	(.058)	032	(.058)		
Cultural similarity	032	(.032)	003	(.045)	.012	(.044)		
Former colonial ties to the Netherlands	328**	(.094)	.532**	(.128)	.180	(.127)		
Individual-level characteristics								
Duration of residence	.101**	(.014)	$.048^{**}$	(.014)	$.068^{**}$	(.015)		
Partner's background (ref: Dutch partne	er)							
No partner	.182**	(.036)	332**	(.037)	084*	(.037)		
Partner from the destination	.316**	(.046)	485**	(.045)	278**	(.046)		
Partner with another migration background	.126**	(.042)	315**	(.043)	.107*	(.045)		
Previous connections to the destination (family)	.022	(.014)	003	(.014)	004	(.014)		
Previous connections to the destination (friends)	.140**	(.013)	.110**	(.013)	.094**	(.013)		
National identity (Dutch)	046**	(.014)	.052**	(.014)	.016	(.014)		
Orientation towards the destination	.131**	(.014)	.010	(.014)	.030*	(.014)		
culture								
Control variables								
Age	062**	(.014)	015	(.014)	081**	(.015)		
Female	.142**	(.029)	$.180^{**}$	(.028)	.149**	(.029)		
Education (ISLED)	.026	(.014)	044**	(.014)	.022	(.014)		
Household income (net, equivalized)	020	(.015)	$.060^{**}$	(.016)	.047**	(.016)		
Subjective health	.042**	(.013)	.019	(.013)	006	(.013)		
Urbanization	.018	(.015)	018	(.015)	002	(.015)		
Extraversion	.197**	(.013)	.115**	(.013)	.143**	(.014)		
Constant	300**	(.112)	.168	(.151)	.096	(.150)		
Ν	531	2	53	04	5260			
ICC	.03	9	.11	11	.113			

Table 4. Multi-level regression coefficients of friendship with locals, Dutch migrants, and non-Dutch migrants (standard errors in parentheses)

Standard errors in parentheses * p < 0.05, ** p < 0.01