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A Closer Look at Loneliness: Why Do First-Generation Migrants Feel More Lonely Than Their Native Dutch Counterparts?

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Abstract

Background and Objectives: Along with the current aging demographics in the Netherlands, the number of older first-generation migrants is also increasing. Despite studies suggesting a higher quantity of social contacts of migrants, loneliness is more common among migrants as compared to native Dutch. We theorize that migrants experience more emotional and social loneliness due to a lower satisfaction with social relationships and lower participation in social activities, respectively, compared to their native counterparts.
Research Design and Methods: We use data from Statistics Netherlands (N = 7,920) with first-generation migrants aged 40 years and older and their Dutch counterparts. Contact frequency, household composition, satisfaction with social relationships, relationship quality with the partner, and social activities, are used as main predictors and separate regression models for social and emotional loneliness are analyzed.
Results: Compared to the native Dutch, first-generation migrants are both socially and emotionally more lonely. Migrants have a similar contact frequency as the native Dutch, but are less satisfied with their social relationships, which contributes to their higher emotional, social, and overall loneliness. Migrants engage less in social activities but this does not put them at additional risk of loneliness.
Discussion and Implications: Migrants experience more social and emotional loneliness and are less satisfied with their social relationships compared to their native counterparts. Interventions should focus on reducing both social and emotional loneliness among older migrants. Specific attention should be paid to fostering satisfying social interactions. Additionally, encouraging migrants to broaden their social network may reduce social loneliness.

Keywords: Immigrants, Social networks, Satisfaction, Social isolation, Social loneliness, Emotional loneliness

Along with the current aging demographics in Europe, the number of older first-generation migrants is also increasing. Compared to their native counterparts, older migrants experience not only more health problems, but also more loneliness (Ciobanu, Fokkema, & Nedelcu, 2017). The Netherlands has received different migrant streams (Rath, 2009). Migrants from former colonies and guest workers, who came in the 1960s from Morocco and Turkey, represent the largest aging migrant groups (Statistics Netherlands, 2019). In 2018, the number of first-generation migrants represented 12% of the whole population of the Netherlands (Statistics Netherlands, 2019). Although pre-

vious research indicates that migrants forge new contacts in the countries of immigration while maintaining existing ones across nation-state borders (Bilecen, Catir, & Orhon, 2015; Ryan, 2011), they are not immune to loneliness when they age in a cultural context that is not necessarily close to their own. After all, having social relationships does not protect individuals against loneliness when these are not fulfilling ones (De Jong Gierveld & Van Tilburg, 2006). Given that social life is rated to be the most important domain of well-being among older adults (Douma, Steverink, Hutter, & Meijering, 2017), this paper examines quantitative and qualitative aspects of social relationships to better understand differences in loneliness experienced by older first-generation migrants and natives[1] in the Netherlands.

Feeling lonely poses not only a threat to mental health like depression and impaired cognition (Pinquart & Sörensen, 2001), but also to physical health as indicated by increased mortality risk (Holt-Lunstad, Smith, Baker, Harris, & Stephenson, 2015). Loneliness is defined as an unpleasant experience due to a lack of quality or quantity of social contact. The distinction between emotional and social loneliness is crucial to understand why someone feels lonely. When the number of social relationships and contact frequency are lower than the desired amount, social loneliness may arise. When social relationships are not as intimate as desired, emotional loneliness may result (De Jong Gierveld & Van Tilburg, 2006). For emotional loneliness, having a partner or close friend is important, whereas for social loneliness having companionship of friends, engagement in social activities, and a sense of belonging to a community are of importance (Liu & Rook, 2013). In this paper, we look at both types of loneliness to explain what might be missing in the social relationships of older natives and migrants in the Netherlands.

Previous research showed that the higher loneliness among migrants in Western countries can be explained by their lower socioeconomic status (SES) and health (Fokkema & Naderi, 2013). For instance, migrants in Europe have a lower income and report more (severe) health problems at a younger age as compared to native populations (Kristiansen, Razum, Tezcan-Güntekin, & Krasnik, 2016). Worse health and lower SES reflect difficulties in maintaining and developing social relationships, resulting in more loneliness (Nicolaisen & Thorsen, 2016). Migrant-specific factors such as homesickness (Patzelt, 2016), experiences of discrimination (Castaneda et al., 2015), and a sense of belonging to the host society (Klok, Van Tilburg, Suanet, Fokkema, & Huisman, 2017) also play a

role in explaining their loneliness levels. Previous research focusing on the Netherlands also confirms these findings (Conkova & Lindenberg, 2018; Visser & El Fakiri, 2016).

This paper expands upon the current literature on loneliness among older migrants in the Netherlands by focusing on diverse aspects of social relationships in a comparative manner, and by looking at both emotional and social loneliness. Previous studies suggest that migrants may have a higher quantity of social relationships than the native population. For instance, migrants, as compared to natives, more often live in a multigenerational household (Burholt, Dobbs, & Victor, 2018), and have a higher contact frequency with family members and friends (Burholt et al., 2018). Some studies also suggest that migrants have a higher quality of family relationships than the native Dutch (Arends-Tóth & Van De Vijver, 2008, 2009), which is counterintuitive, because at the same time, it was found that migrants are emotionally more lonely than their Dutch counterparts (Visser & El Fakiri, 2016). Based on these findings, it is puzzling as to why the greater social network size, higher contact frequency, and better family relationships of migrants do not protect them against loneliness. To address this knowledge gap, this study explores the following questions: To what extent are there differences in social and emotional loneliness among older migrants and the native population in the Netherlands? What aspects of social relationships can account for these differences?

Social Relationships of Migrants and Loneliness

Satisfaction with Social Relationships

Being satisfied with one's social relationships is an important predictor of loneliness (Nicolaisen & Thorsen, 2016). In general, older adults tend to be satisfied with their social relationships (Carstensen, Fung, & Charles, 2003), despite age-related reductions in network size due to the death of their partner, friends, relatives, or leaving the workforce. However, we argue that older migrants may be less satisfied with their social relationships in comparison to their native counterparts, because of migrant-specific factors such as feelings of homesickness, or a lack of belonging to the Dutch society. For instance, a qualitative study on older Albanian and Moroccan migrants in Italy showed that migrants did not interact with their neighbors, which restricted them in developing meaningful friendships (Cela & Fokkema, 2017).

In addition, migrants may be less satisfied with their family relationships, when compared to natives, as they may have higher expectations from their family members. In Western Europe, children tend to have fewer obligations towards their family, and older adults prefer to be independent (Lykes & Kemmelmeier, 2013; Weeks & Cuellar, 1981). Studies on Turkish, Moroccan, and Surinamese migrants in the Netherlands show that migrants, as compared to natives, report stronger obligations towards

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[1]   Throughout the paper, for the sake of simplicity we use the terms migrants and natives. Migrants indicate only first-generation migrants who have obtained Dutch citizenship, and who themselves and their parents were foreign-born. The terms native or native Dutch refer to those with citizenship, who themselves and their parents were born in the Netherlands.

taking care of parents and the family (Arends-Tóth & Van De Vijver, 2009; De Valk & Schans, 2008). For older migrants, with their (grand)children being socialized in the Netherlands, it may be difficult to achieve the desired family relationships (Wu & Penning, 2015), leading to more emotional loneliness. Recurrent themes of qualitative research show that older migrants describe their children as westernized and too busy with their jobs, leading to disappointment and loneliness. Additionally, older migrants report not discussing feelings of homesickness and nostalgia with their children in order to avoid being a burden to them (Cela & Fokkema, 2017; Salma, Keating, Ogilvie, & Hunter, 2018). In sum, migrants may feel more emotionally lonely than the native Dutch due to a lower satisfaction with social relationships, despite a potential higher quantity of social relationships of migrants. Therefore, we hypothesize: migrants have a lower satisfaction with social relationships in comparison to the natives (H1a), which partly explains their higher emotional loneliness (H1b).

Social Activities

A second explanation for more loneliness might be that migrants tend to engage less in social and community activities in comparison to natives (Cela & Fokkema, 2017; Conkova & Lindenberg, 2018; Van Tilburg & Fokkema, 2018). For instance, migrants in the Netherlands have lower rates of activities outside the household, such as membership of organizations, social activities of clubs, and volunteer less when compared to natives (Van Tilburg & Fokkema, 2018). In particular, Turkish and Moroccan migrants have a lower so-called "social integration" (Smits, Van Den Beld, Aartsen, & Schroots, 2014), usually meaning having fewer ties to the Dutch society. These limited social interactions may especially increase social loneliness among migrants. Activities outside the household have the potential to reduce social loneliness as they may lead to more social contacts and a sense of a larger community (Dykstra & De Jong Gierveld, 2004). Underlying reasons for the lower level of social activities may be that migrants have relatively low SES-related resources, as well as "worse" health conditions, hindering them to take part in social activities. Here we expect: migrants have a lower level of social activities in comparison to natives (H2a), which partly explains their higher social loneliness (H2b).

Overall Loneliness

Besides providing access to a larger social network, we expect that social activities may also strengthen existing social relationships. For instance, when friends regularly engage in social activities, this could increase mutual affection, leading to more emotional bonding (Spencer & Pahl, 2006). Furthermore, it may increase the likelihood of having more diversity in social contacts, and as such increase the likelihood of also having more emotionally

satisfying social relationships (Fiori, Antonucci, & Cortina, 2006). For overall loneliness, therefore, we hypothesize: migrants have a higher overall loneliness than natives, which is partly explained by their lower level of social activities (H3a) and their lower satisfaction with social relationships (H3b).

Research Design

Study Sample

The Netherlands is transitioning into a so-called "participation society," promoting individual involvement and responsibility, next to developing family and community safety nets, while formal welfare protection is seen as a last resort (Smits et al., 2014). Since the introduction of the Participation Act in 2015, certain types of formal care (i.e., supporting social participation, youth care, and household care) have become the responsibility of municipalities, who can decide autonomously on the distribution of welfare provisions (Delsen, 2016). Formal care is provided by professional care workers, and is paid by the municipality. In order to evaluate this shift in the provision of formal care, Statistics Netherlands (CBS) and the Netherlands Institute for Social Research (SCP) devised a survey, called the Social Domain Index (SDI). It is a yearly monitor of the Dutch population, started in 2015 (Coumans, Knops, & Van Cruchten, 2018).

The SDI dataset consists of five groups drawn from the general population: (a) parents of children who use youth care (mental and physical care), (b) those using household care (e.g., cleaning, health care at home), (c) those using social participation care (e.g., related to unemployment, debts), (d) those who use two or more forms of care, and (e) those who do not use any form of care. Participants were also asked about their personal relationships who are considered as informal protection networks. Because the SDI has an oversampling of citizens who use various types of formal care and therefore might have different loneliness profiles than the general population, we control for the use of formal care to account for these possible differences.

Respondents received a postal invitation to fill out the online questionnaire, which, on average, took 24 min. When respondents chose not to use the online questionnaire, telephone and face-to-face interviews were conducted. Of the native Dutch (n = 6,658), 48.9% completed the online questionnaire, 33.9% were interviewed by telephone, and 17.2% were interviewed face-to-face. Of the migrants (n = 1,262), 44% completed the online questionnaire, 19.2% were interviewed by telephone, and 36.8% had a face-to-face interview. Average response rate for the natives was 56.5%, whereas 40% of migrants responded (see Coumans et al., 2018, chapter 3 for details on the data collection). A reason for the lower response rate among migrants might be that the questionnaire was only available in Dutch, which might have excluded part of the migrant population. A comparison of the response rate of migrants

to other surveys is difficult because of the different sampling designs. However, it closely resembles another Dutch study, which had a 45% response rate, drawing a sample from the general population with translated questionnaires ([Klok et al., 2017](#)).

We use SDI data collected in 2016 and 2017, with no overlapping populations (N = 10,537). Respondents aged 40 years and over were selected, because migrants, compared to natives, experience more (severe) health problems at a younger age ([Kristiansen et al., 2016](#)). In addition, second-generation migrants were excluded because they are socialized in the Netherlands and, therefore, are likely to have different experiences regarding loneliness than the first generation ([Wu & Penning, 2015](#)). In our remaining sample (n = 7,920), most common migration backgrounds, based on the country of birth, are Surinamese (n = 216), Turkish (n = 162), Moroccan (n = 124), Dutch Antilles (n = 82), and former Dutch Indies (n = 52).

The highest proportion of missing data was found for emotional loneliness (5.7%), experienced income difficulties (5%), overall loneliness (3.1%)[2], and social loneliness (2.9%). Especially migrants have a higher percentage of "don"t know' answers or refused to answer questions. For migrants, the percentage of missing cases for the separate loneliness scales are: emotional = 13.1%, social = 10.2%, and overall = 8.4%. For natives, these percentages are: emotional = 4.4%, social = 2.4%, and overall = 2.1%. Some questions might have been interpreted by migrants as "too personal." In addition, because migrants had more face-to-face interviews, sensitive topics might have been avoided, resulting in more missing cases.

Measurement

Loneliness

The six-item scale of De Jong Gierveld ([De Jong Gierveld & Van Tilburg, 2006](#), [2017](#)) is a reliable uni- and bi-dimensional instrument ([Van Baarsen, Snijders, Smit, & Van Duijn, 2001](#)) for measuring loneliness. The three items about social loneliness refer to the quantity of social relationships, for instance, having many or enough people who can be trusted, provide support, and a sense of closeness. Emotional loneliness has three items measuring feelings of emptiness, feeling rejected, and missing people. Respondents could answer yes, more or less, or no, to each item, after which answers were dichotomized into 0 and 1, according to the guidelines of the [De Jong Gierveld and Van Tilburg (2017)](#). Overall loneliness (α = 0.81) thus ranges from 0 to 6, combining the social and emotional dimension, and both social (α = 0.79) and emotional loneliness

(α = 0.76) have a range from 0 to 3 where higher values indicate more loneliness.

Social satisfaction

For satisfaction with social relationships, a scale was constructed (α = 0.79) that shows the overall satisfaction, with higher values indicating more satisfaction. Respondents could rate the degree of satisfaction with social relationships in general, the composition of their household, and their friends and acquaintances, on a scale from 1 (not satisfied) to 10 (very satisfied).

Social activities

Two items refer to participation in social activities. Social activities outside the household (e.g., going to a restaurant, theatre, concert, movie, museum, sports game), and social activities of clubs (e.g., sports, music, hobby) in the past twelve months were measured on a scale from 1 (never), 2 (less than once a month, 3 (several times a month) to 4 (weekly).

Social contacts

We consider three indicators of social contacts as controls, that is, household composition, contact frequency, and relationship quality with the partner. Household composition was measured by asking whether respondents (a) live alone, (b) live with their partner, and (c) live with their children. Three items measure contact frequency. Respondents could rate whether they had rarely to never (1), less than once a month (2), monthly but not weekly (3), weekly but not daily (4), or daily (5) contact with the following categories: family living outside the household, friends and acquaintances, and neighbors. Respondents with a partner could rate their relationship with the partner on a scale from 1 (very bad) to 5 (very good). To compare respondents without a partner to respondents who have a good or bad relationship with their partner, two dichotomous variables were constructed. Respondents answering (very) bad and not bad nor good, were considered to have a low or bad relationship quality with their partner. Respondents answering (very) good, were considered to have a good relationship.

Sociodemographic background

We control for gender (1 = women), age, the use of formal care (1 = yes), and having a paid job (1 = yes). In addition to perceived health, we control for having chronic diseases over the last year (1 = yes), and mean level of difficulties with daily activities. Respondents could rate their perceived health from 1 (bad) to 5 (good). Moreover, we constructed a scale showing the mean level of difficulties in daily activities. Respondents could indicate if they had difficulties with their mobility, personal care, and household activities (α = 0.85) from 1 (not difficult) to 4 (not possible). In addition, we control for household income of 2014, and perceived income difficulties. Household income is based on records

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[2]   The missings on the emotional and social loneliness scales do not add up to the missings on the overall loneliness scale, because respondents could have one missing item on overall loneliness, but no missing items on emotional and social loneliness were allowed.

of Statistics Netherlands and has eight categories ranging from 1 (below 10,000 euros) to 8 (above 200,000 euros). Respondents could rate on a scale from 1 (not difficult) to 6 (very difficult) if they had difficulty making ends meet.

Analyses

We analyzed the data in IBM SPSS version 22 using bivariate analyses and linear stepwise regression. The second regression models contain interaction effects between migrants and social activities, and satisfaction with social relationships. We use multiple imputation with 20 imputations to account for bias of missing cases in our regression models (see Rubin, 1987 and Van Buuren, 2012 on multiple imputation). Complete case regression models are available in Supplementary Table S1 of the Supplementary Material.

Results

Descriptive and Bivariate Results

Table 1 shows the descriptive results of all variables, for both migrant and native samples separately. Results show that migrants, as compared to natives, are both more emotionally and socially lonely. While 13% of the native population is severely lonely, this percentage is 22.1% for migrants. Migrants have a similar contact frequency with their family and friends and a somewhat lower contact frequency with their neighbors as compared to natives. The means show that both groups have at least monthly social contact with their friends and neighbors, and have weekly contact with their family. For all three contact frequency variables, the percentage of migrants in the categories of "never" and "daily contact" are higher than natives. Compared to natives, migrants are less satisfied with their social relationships, which support H1a. However, the difference is small, around .5 on a scale from 1 to 10. Nonetheless, 13.5% of the natives have a score below 7, whereas this is 24.1% for migrants showing that, relatively, there is a larger migrant group with a lower satisfaction with social relationships. A significant lower participation in social activities outside the household and of clubs was also found for migrants, which supports H2a. These mean differences show that natives, on average, engage at least monthly in social activities, while migrants do so less than once a month. With regard to sociodemographic background, migrants have a worse health and lower SES despite the fact that, on average, they are 4 years younger. Migrants less often have a partner in their households, but more often have children living with them. The lower proportion of migrants with a good relationship with their partner can be explained by the lower proportion of migrants who have a partner. The proportion of respondents living alone is comparable for natives and migrants.

Table 2 shows the bivariate associations between all continuous variables, with above the diagonal the coefficients for migrants, and below the diagonal those for natives. Most correlations are significant and in the expected direction.

Emotional Loneliness

A stepwise linear regression model was estimated for testing H1b with interactions added in step 2. Table 3 shows the results. The model shows that being female, having a bad relationship with the partner, living alone, worse perceived health, chronic diseases, more problems with daily activities, and experiencing more income difficulties are related to a higher emotional loneliness. In addition, having a paid job, a higher contact frequency with family and neighbors, engaging in social activities, having a good relationship with the partner, and being more satisfied with social relationships, are protective against emotional loneliness. A counterintuitive finding is the small significant effect of engaging in social activities in clubs, such as for sports, being related to higher emotional loneliness. The main effect for being a migrant in model 1 shows that they are more emotionally lonely than natives. The positive interaction effect for satisfaction with social relationships shows that for migrants, being satisfied with social relationships is to a lesser extent protective than for the native population. These results support H1b: migrants are more emotionally lonely as compared to natives, which are partly explained by their lower satisfaction with social relationships.

Social Loneliness

To test H2b a stepwise linear regression model, with social loneliness as dependent variable, is executed. Table 3 shows that being male, having neither chronic diseases nor living with a partner, having worse perceived health, experiencing more income difficulties, and having a bad relationship with the partner, contributes to higher social loneliness. Having a paid job, a higher contact frequency, being older, having a good relationship with the partner, and being satisfied with social relationships, is protective against social loneliness. Engaging in social activities outside the household is related to a lower social loneliness, but social activities of clubs are not related to social loneliness. The interaction effects for social activities are close to zero and nonsignificant. These findings do not support H2b: migrants are more socially lonely, but this is not related to their lower engagement in social activities. The interaction for satisfaction with social relationships shows that migrants are more socially lonely because their (lower) satisfaction with social relationships is to a lesser extent protective against social loneliness, as compared to the satisfaction of natives.

Overall Loneliness

Hypothesis 3 was tested by a stepwise linear regression model for overall loneliness. In Table 3, the interactions for social activities are close to zero and nonsignificant, which

Table 1. Descriptives of All Variables for Native Dutch and Migrants

	Dutch	Migrant	Significance test
	N = 6,658	N = 1,262	
Age (range 40–95), M (SE)	60.43 (0.18)	56.65 (0.35)	F = 71.11***
% women	56.3	63.1	χ^2 = 6.78*
Overall loneliness (range 0–6), M (SE)	1.81 (0.02)	2.51 (0.06)	F = 132.63***
% 0–1 not lonely[a]	54.2	40.4	
% 2–4 moderately lonely[a]	32.8	37.5	
% 5–6 severely lonely[a]	13.0	22.1	
Emotional loneliness (range 0–3) M (SE)	0.90 (0.01)	1.27 (0.04)	F = 97.23***
% 0–1	71.1	59.2	
% 2–3	28.9	40.8	
Social loneliness (range 0–3) M (SE)	0.91 (0.01)	1.26 (0.04)	F = 94.85***
% 0–1	71.7	60.2	
% 2–3	28.3	39.8	
Social activities (range 1–4) M (SE)	2.29 (0.02)	1.97 (0.04)	F = 74.52***
% never or rarely	35.4	50.8	
% once a month or less	26.9	20.7	
% at least twice a month	26.9	20.3	
% every week	10.8	8.2	
Social activities clubs (range 1–4) M (SE)	2.13 (0.01)	1.86 (0.03)	F = 57.41***
% never or rarely	51.3	62.5	
% once a month or less	4.4	4.2	
% at least twice a month	8.6	7.5	
% every week	35.6	25.8	
Social satisfaction (range 1–10), M (SE)	7.63 (0.02)	7.13 (0.05)	F = 74.26***
% 1–4	3.4	6.8	
% 5–6	10.1	17.3	
% 7–8	53.7	48.5	
% 9–10	32.8	27.4	
Contact frequency friends (range 1–5) M (SE)	3.67 (0.01)	3.67 (0.03)	F = 0.02
% never or rarely	8.2	10.0	
% once a month or less	5.5	6.7	
% every month	17.9	14.8	
% every week	47.7	43.3	
% every day	20.7	25.2	
Contact frequency family (range 1–5) M (SE)	3.94 (0.02)	4.00 (0.03)	F = 3.13
% never or rarely	4.8	5.6	
% once a month or less	3.7	6.2	
% every month	12.3	10.1	
% every week	51.2	39.1	
% every day	28.0	39.0	
Contact frequency neighbors (range 1–5) M (SE)	3.55 (0.02)	3.46 (0.03)	F = 5.08*
% never or rarely	13.1	17.5	
% once a month or less	6.4	8.5	
% every month	14.8	10.9	
% every week	43.6	36.3	
% every day	22.1	26.7	
% relation partner bad	3.1	3.6	χ^2 = 1.05
% relation partner good	42.6	30.5	χ^2 = 64.95***
% formal care	78.6	90.9	χ^2 = 102.51***
% paid job	43.5	26.6	χ^2 = 113.38***
Income difficulties (range 1–6) M (SE)	3.05 (0.02)	4.01 (0.04)	F = 447.52***
Income household (range 1–8) M (SE)	2.80 (0.02)	2.28 (0.02)	F = 276.34***
Daily activities (DA) difficulties (range 1–4) M (SE)	1.54 (0.01)	1.58 (0.02)	F = 2.72
Perceived health (range 1–5) M (SE)	3.47 (0.01)	3.18 (0.03)	F = 96.94***
% chronic diseases	48.8	54.8	χ^2 = 15.25***
% living alone	35.6	35.2	χ^2 = 0.06
% partner in household[b,c]	55.0	46.9	χ^2 = 27.86***
% children in household[b]	41.4	47.5	χ^2 = 16.40***

Note: [a]Categorization according to criteria of De Jong Gierveld & Van Tilburg (2017).

[b]The categories partner and children in the household may overlap to a certain extent as respondents with children in the household, also often have their partner in the household. [c]The percentages of respondents having a good or bad relationship with their partner do not add up to number of respondents with a partner in the household, because of missings in the relationship quality variable.

*p < .05, **p < .01, ***p < .001.

Table 2. Correlation Matrix of All Continuous Variables for Native Dutch and Migrants[a]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Loneliness	1	.84	.87	−.37	−.28	−.28	−.28	−.14	−.57	.33	−.34	**−.02**	.22	−.15
2. Emotional loneliness	.85	1	.48	−.28	−.20	−.22	−.30	−.15	−.51	.35	−.35	**.02**	.23	−.15
3. Social loneliness	.86	.45	1	−.33	−.28	−.27	−.20	−.11	−.48	.23	−.25	**−.04**	.16	−.11
4. Contact friends	−.30	−.21	−.29	1	.31	.31	.23	.17	.43	−.13	.20	−.09	−.17	**.03**
5. Contact family	−.25	−.15	−.27	.23	1	.20	.11	.06	.23	**−.05**	.08	.06	**−.01**	**.03**
6. Contact neighbors	−.20	−.15	−.19	.24	.15	1	.15	.11	.33	−.11	.23	**.02**	−.07	**.02**
7. Social activities	−.29	−.28	−.21	.28	.09	.10	1	.29	.30	−.27	.31	−.14	−.28	.18
8. Activities club	−.17	−.15	−.14	.29	.06	.07	.31	1	.19	−.14	.18	−.07	−.18	.12
9. Social satisfaction	−.60	−.53	−.49	.38	.21	.23	.27	.18	1	−.31	.33	**−.03**	−.21	.15
10. Income difficulties	.31	.30	.23	−.08	−.08	−.05	−.30	−.19	−.27	1	−.35	−.16	.20	−.37
11. Perceived health	−.34	−.35	−.24	.18	.18	.08	.35	.23	.33	−.36	1	−.27	−.53	−.20
12. Age	.13	.19	.03	−.17	**−.01**	.03	−.28	−.10	−.12	−.03	−.11	1	.35	**−.01**
13. DA difficulties	.25	.30	.13	−.18	**−.01**	−.06	−.34	−.21	−.24	.20	−.59	.54	1	−.10
14. Income household	−.21	−.23	−.13	.10	.04	**.01**	.32	.20	.18	−.43	−.18	.28	−.25	1

Note: [a]Correlations above the diagonal for migrants and below the diagonal for native Dutch. Correlations in bold are **not** significant. All other correlations are significant at at least $p < .05$.

does not support H3a. However, the positive and significant interaction for satisfaction with social relationships shows support for H3b. Migrants have a higher overall loneliness which can partly be explained by satisfaction with social relationships: migrants are less satisfied with their social relationships and the protective effect of being satisfied with social relationships is smaller as compared to the protective effect for natives.

Discussion and Implications

This study aimed to explain differences in emotional and social loneliness between older migrants and older native Dutch, by looking at the role of relationship satisfaction and social activities. We hypothesized that migrants are less satisfied with their social relationships, resulting in a higher emotional and overall loneliness, and that migrants engage less in social activities, resulting in a higher social and overall loneliness. Our analysis showed that, although migrants have a similar contact frequency as natives, they are somewhat less satisfied with their social relationships, which can explain their higher loneliness. In addition, migrants engage less in social activities outside the household and in social clubs, but this did not explain their higher social and overall loneliness. Moreover, the interaction effect for satisfaction with social relationships shows that for migrants the protective effect of being satisfied is lower than it is for natives.

This study has some limitations. A first important limitation is the representativeness of the sample. The majority of the respondents used formal care and might, on average, be more lonely than the general population. Therefore, the findings might only apply to older adults who use formal care. In addition, the questionnaire was only available in Dutch which likely has excluded part of the migrant population. Language proficiency might play an important

role in social loneliness because it allows people to engage in more opportunities to expand and diversify their social network. Furthermore, there were various interview mode effects which we did not control for. An exploratory analysis on the modes (see Supplementary Table S2) showed inconclusive differences. These are difficult to interpret because of the complex interrelation between the mode and respondents' selection effects across modes (Vannieuwenhuyze & Loosveldt, 2013).

Second, the study is limited in making further inferences about differences in loneliness for the very diverse migrant population in the Netherlands. For instance, scholars have shown that especially the Turkish and Moroccan migrant populations are at risk of experiencing loneliness (Van Tilburg & Fokkema, 2018). Although it means putting together different streams of migration, in our study it was only possible to compare loneliness between migrants and natives, because group sizes of the various migrant groups were too small to test groups separately. We did, however, explore the mean differences in loneliness and social relationship variables for the five largest migrant groups of the sample (see Supplementary Table S3). Results show that Turkish migrants have the highest loneliness, whereas migrants from the Antilles and former Dutch Indies are less lonely compared to the Turkish, Moroccan, and Surinamese. Some differences in loneliness could be related to cultural differences in norms and expectations about social interactions (Van Tilburg, De Jong Gierveld, Lecchini & Marsiglia, 1998). In addition, for the majority of the sample (68%), migration history is unknown, because Statistics Netherlands recorded this information only from 1995 onward. Exploratory analyses on the two groups (migrants who moved to the Netherlands before 1995 and those after 1995) showed that the former have a lower emotional loneliness than the latter, but no differences were found for social loneliness (see Supplementary Table

Table 3. Linear Regression Models for Emotional, Social, and Overall Loneliness[a]

| | Emotional loneliness[a] | | | | Social loneliness | | | | Overall loneliness | | | |
| | 1 | | 2 | | 1 | | 2 | | 1 | | 2 | |
	b[b]	SE	b	SE	b	SE	b	SE	b	SE	b	SE
Constant	2.70***	0.13	2.80***	0.14	4.33***	0.14	4.50***	0.14	7.03***	0.20	7.29***	0.20
Migrant	0.09*	0.03	−0.34**	0.13	0.11***	0.04	−0.54***	0.04	0.20***	0.05	−0.88***	0.05
Age	0.001	0.001	0.001	0.001	−0.01***	0.001	−0.01***	0.001	−0.01**	0.002	−0.01***	0.002
Gender (1 = women)	0.09***	0.02	0.09***	0.03	−0.12***	0.03	−0.12***	0.03	−0.03	0.04	−0.03	0.04
Paid job	−0.06*	0.03	−0.05*	0.03	−0.06*	0.03	−0.06*	0.03	−0.12*	0.05	−0.12*	0.05
Income difficulties	0.07***	0.01	0.07***	0.01	0.07***	0.01	0.07***	0.01	0.14***	0.01	0.14***	0.01
Income household	0.01	0.01	0.01	0.01	0.02	0.01	0.02	0.01	0.03	0.02	0.03	0.02
Perceived health	0.07***	0.02	0.07***	0.01	0.05**	0.02	0.05**	0.02	0.12***	0.02	0.12***	0.02
DA difficulties	0.05*	0.02	0.05*	0.02	−0.01	0.02	−0.01	0.02	0.05	0.03	0.05	0.03
Chronic diseases	0.15***	0.03	0.15***	0.03	0.07*	0.03	0.07*	0.03	0.23***	0.04	0.23***	0.04
Formal care	0.01	0.03	0.01	0.03	−0.04	0.03	−0.05	0.03	−0.03	0.05	−0.04	0.05
Living alone	0.10*	0.05	0.10*	0.05	−0.04	0.05	−0.04	0.05	0.06	0.07	0.06	0.07
Partner household	0.01	0.05	0.004	0.05	−0.14**	0.05	−0.14**	0.04	−0.13	0.08	−0.13*	0.06
Children household	0.03	0.03	0.03	0.03	−0.06	0.03	−0.06	0.03	−0.03	0.05	−0.03	0.05
Contact friends	0.001	0.01	0.001	0.01	−0.09***	0.01	−0.09***	0.01	−0.09***	0.02	−0.09***	0.02
Contact family	−0.06***	0.01	−0.06***	0.01	−0.16***	0.01	−0.16***	0.01	−0.22***	0.02	−0.22***	0.02
Contact neighbors	−0.02*	0.01	−0.02*	0.01	−0.05***	0.01	−0.05***	0.01	−0.07***	0.02	−0.07***	0.02
Relation partner bad	0.19**	0.07	0.19**	0.07	0.49***	0.08	0.49***	0.08	0.68***	0.11	0.69***	0.11
Relation partner good	−0.23***	0.04	−0.22***	0.04	0.05	0.04	0.05	0.04	−0.18**	0.06	−0.17**	0.06
Social satisfaction	−0.27***	0.01	−0.29***	0.01	−0.26***	0.01	−0.28***	0.01	−0.54***	0.01	−0.57***	0.02
* migrant			0.07***	0.02			0.08***	0.02			0.15***	0.03
Social activities	−0.06***	0.01	−0.06***	0.01	−0.03**	0.01	−0.04**	0.01	−0.09***	0.02	−0.09***	0.02
* migrant			−0.02	0.03			0.01	0.03			−0.01	0.05
Social activities clubs	0.02*	0.01	0.02*	0.01	−0.004	0.01	−0.01	0.01	0.01	0.01	0.01	0.01
* migrant			−0.01	0.02			0.02	0.02			0.01	0.04
R^{2c}	0.34		0.35		0.32		0.32		0.43		0.44	
F change[d]	198.11***		5.12**		177.35***		8.43***		284.48***		10.18***	

Note: [a]Linear regression models for emotional, social, and overall loneliness, N = 7,920. Pooled results of 20 imputations. All variables are used for fully conditional specification multiple imputation with predictive mean matching for continuous variables and logistic regression for categorical variables.

[b]Unstandardized regression coefficients.

[c]Average R^2 of 20 imputations.

[d]Average F change of 20 imputations.

*p < .05, **p < .01, ***p < .001.

S4). Still, we refrain from deriving clear conclusions from this comparison, because of the unknown variation within groups regarding exact years of residence.

Third, information about the diversity of social relationships and network composition is limited in the data. For instance, whether migrants have transnational ties or native Dutch friends was not included. Previous research shows that a more diverse social network is related to less loneliness, as it can fulfill different social needs (Burholt et al., 2018) and provide different types of support (Thoits, 2011; Wellman and Wortley, 1990). However, such measures were not available in the present study.

To evaluate the robustness of the findings, we recommend future quantitative studies to include more generalizable samples, to account for variations in language proficiency of migrants, and to consider possible interview mode effects. In addition, such studies could compare the differences in loneliness levels across diverse migrant populations in the Netherlands. Further studies, especially qualitative ones, could also elucidate in more detail why older migrants seem to be less satisfied with their social contacts. For example, expectations about social relationships, but also a sense of a community, could be important in determining what migrants are missing in their social network and relationships. Moreover, for migrants, there might be another type of loneliness, next to social and emotional loneliness. This so-called "cultural loneliness" is about missing one's own culture, or not feeling understood in a different cultural context (Van Staden & Coetzee, 2010). This way, experiencing cultural differences may also relate to a higher loneliness. In sum, next to more general factors that increase loneliness among older adults, there might also be more migrant-specific risk factors for loneliness.

Despite the limitations of the study, our main contribution to the literature is that first-generation migrants aged 40 years and over in the Netherlands, especially those who use formal care, are more lonely than their native counterparts, both emotionally *and* socially. This indicates that these migrants might be at a double risk of feeling lonely. In our sample, the proportion of migrants who feel severely lonely is 9.1 percentage points larger than that of natives, showing a substantial difference. In addition, whereas previous studies showed that SES and health contribute to a higher loneliness among migrants, we primarily focused on the social relationships of migrants. Our results highlight the importance of including both quantity and quality measures of social relationships, as migrants can have a similar quantity of social relationships (e.g., contact frequency) but a lower quality (e.g., satisfaction with social relationships), which increases loneliness.

The results of this study have implications for policy and interventions. First, interventions could aim at reducing both emotional and social loneliness among older migrants, especially those who use formal care. While broadening and diversifying the social network might be feasible through community-based activities, providing intimate and fulfilling social contact is difficult to achieve through interventions. In our study, social activities were operationalized as going to restaurants, theatres, movies, and activities of clubs, but perhaps there are other activities migrants are engaging in that should be considered, such as religious or cultural activities. For instance, Patzelt (2016) found that sharing memories about the country of origin and having typical German activities were protective against loneliness among older German migrants in Canada. Second, as we found that migrants are less satisfied with their social relationships, interventions could focus on the reasons and meanings of such dissatisfaction. Here, also the possible interplay between the use of formal care and different types of loneliness should be taken into account. Migrants who use formal care might have difficulties in developing and maintaining satisfactory social relationships. It might, however, also be the case that both migrants who use formal care and the host society are less willing to forge social relationships. These issues should be considered when devising interventions and social policies, in order to enhance the well-being of older migrants.

Supplementary Material

Supplementary data are available at *The Gerontologist* online.

Conflict of Interest

None reported.

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