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Understanding the gap between reality and expectation: Local social engagement and ethnic concentration

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Abstract

It is widely known that there is a strong relationship between local ethnic concentration and local social engagement. This article attempts to take a step forward by analysing the gap between the real and the expected local social engagement and its association with local ethnic concentration. Understanding this gap may assist policy makers with better urban planning aiming for high social cohesion, particularly in those cities with high ethnic concentrations. Using the case of the Netherlands, this article finds a positive association between the real and the expected local social engagement, but this is higher for native Dutch people than for immigrants (i.e. Turks, Moroccans, Surinamese and Antilleans). This article also finds that as local ethnic concentration increases, Moroccans and Turks seem to meet their own expectations, but this effect is stronger for Moroccans. This is likely to indicate that an increase in local ethnic concentration assists Moroccans and Turks to maintain their cultural traditions, as they are able to derive benefits from each other and offer support to one another within a locality.

Keywords

ethnic concentration, expectation, locality, Netherlands, reality, social engagement

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摘要

众所周知，地方族群聚集度与地方社会参与之间有着强力联系。本文通过分析实际与预期的地方社会参与之间的差距，以及这一差距与地方族群聚集度之间的关联，尝试更进一步。理解这一差距可有助于决策者更好地做出旨在促进社会凝聚力的城市规划，尤其是在那些族群聚集度高的城市。本文以荷兰为案例，发现实际与预期的地方社会参与之间存在正向关联，但这一点对于荷兰本土人士比对于移民（即土耳其人、摩洛哥人、苏里南人和安替列群岛居民）更显著。本文同时发现，随着地方族群聚集度的增加，摩洛哥人和土耳其人似乎实现了自身的预期，而这一效应对于摩洛哥人更明显。这可能表明，地方族群聚集度的增加有助于摩洛哥人和土耳其人保持其文化传统，因为他们能相互受益，并在一个地方互帮互助。

关键词

族群聚集度、预期、地方、荷兰、现实、社会参与

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Introduction

Ethnic concentration has been widely examined in previous studies as a possible determinant of local social engagement¹ (see, for example, Tselios et al., 2015a; Gijsberts and Dagevos, 2007; Gijsberts et al., 2012; Vervoort et al., 2011). The different studies focused on different aspects of local social engagement, which are different aspects of local social capital. Local social capital derives from local social relations among individuals that lead to productive value for the actors involved, and is a form of group level interconnectedness that applies to place communities such that it is formed and nurtured by the intersection of people and place (Coleman, 1988; Mennis et al., 2013). However, none of these studies examined the differences between the real (i.e. actual) and the expected (i.e. ideal) local social engagement. On the one hand, the concept of actual social engagement refers to the existing social engagement of people. It presently exists in fact and is not merely potential or possible. On the other hand, the concept of ideal social engagement refers to the best-case scenario of social engagement, which is something that exists only as an idea and thus it can be potential or possible. It is an idea of either something that is perfect or something that one hopes to attain. It also refers to what people are usually striving for. Based

on these differences in concepts, what we find interesting, and what we want to explore in this article, is the (dis)connection between peoples' views about what they assume regarding ideal relations between neighbours and their actual contact with neighbours, and how this (dis)connection is associated with local ethnic concentration. In other words, changes in local ethnic concentration may force people to close the gap between reality and expectation in local social engagement. As yet, however, little is known about the differences between the real and the expected local social engagement.

This article examines whether the real local social engagement of a citizen is a function of his/her expected local social engagement, whether the gap between a citizen's actual local social engagement and his/her expected engagement is related to the ethnic concentration of the locality where the citizen lives and whether these two possible associations differ by ethnicity and generation.

In particular, using the case of the Netherlands and survey data from the 'Sociale Positie en Voorzieningsgebruik Allochtonen' (SPVA), which focuses on native Dutch people and on the four largest non-western ethnic minority groups in the Netherlands – Turks, Moroccans, Surinamese and Antilleans – combined with data from Statistics Netherlands, we test two

hypotheses. *Hypothesis 1* is that the degree or quality of contacts of an individual with people in the neighbourhood where the individual lives is positively associated with his/her ideal relations between neighbours, but that this association is moderated by ethnicity and generation. *Hypothesis 2* is that the gap between the self-reported ideal relations between neighbours of an individual and the degree or quality of real contact of this individual with people in the neighbourhood is conditioned by local ethnic concentration, but that this association is also moderated by ethnicity and generation.

The investigation of the relationship between the real and the expected local social engagement (*Hypothesis 1*) as well as the association of the gap between reality and expectation with local ethnic concentration (*Hypothesis 2*) provide some added value to the literature in the following areas. The *first* contribution of the article deals with the significance of considering both the real and the expected local social engagement. As has been noted, the former is an existing fact, while the latter is a potential fact. Empirical studies should consider both facts, because a citizen's willingness to pay to live in a neighbourhood depends both on the current and expected local characteristics (Frankel and Pauzner, 2002). The *second* contribution of the article deals with the measurement of social engagement. The empirical social engagement literature is plagued by vague and elusive definitions of concepts and poorly measured data, making the establishment of relationships fundamentally difficult (Durlauf, 2002). The social engagement arguments depend on psychological and sociological relations and in most cases they are unobserved factors and difficult to quantify. Additionally, both the realistic and the expected accounts of social engagement are affected by people's psychological and sociological investment in their geographic places. Thus, most studies use proxies for local social

engagement, which unfortunately suffer from bias in measurement. This measurement is unique for each citizen and depends on the perception of each respondent. In contrast, the current study uses the absolute difference (i.e. gap) between the real and the expected proxies for local social engagement, eliminating or removing the subjectivity of the measurement.² Thus this study provides much richer controls for individual heterogeneity than previous studies. The *third* contribution of the article deals with the 'optimum' level of social engagement. On the one hand, what the ideal relation between neighbours is differs between citizens. For example, some citizens may regard an ideal relation as having as few relations as possible with neighbours while for others having neighbours visit occasionally would be ideal. On the other hand, what the actual relation between neighbours is also differs between citizens. For example, some citizens may have many contacts with people in the neighbourhood while others have only a few. It should be noted here that if people have the same real engagement (e.g. the same frequency of contacts with people in the neighbourhood), it does not necessarily mean that they also have the same ideal social engagement, and vice versa. In other words, people with the same level of real local social engagement may have different views regarding what is an ideal level of local social engagement. This implies that the 'optimum' actual and expected levels for social engagement may differ between citizens, which may reflect differences in interest in social activity as well as differences in the degree to which people are motivated to create community in their neighbourhood. This article also examines whether ethnic concentration matters for these differences. For example, citizens who lack interest in local social activity may care less about ethnic concentration, while citizens with high social engagement expectations may be drawn towards localities with low ethnic

concentration. The *fourth* contribution of the article concerns the determinants of the gap between the real and the expected local social engagement. To the best of our knowledge, the microeconomic studies focusing on social engagement have concentrated on the determinants of either the real or the expected local social engagement. No study so far has investigated the determinants of the gap. Moreover, the majority of the studies have thoroughly scrutinised the role of individual characteristics (e.g. sex, age, education, employment), while local factors have been overlooked. This article goes a step further by examining the influence of local interactions and spillovers related to adjacent locality (i.e. adjacent neighbourhood). This article also investigates whether the influence of the local factors differs by ethnic and generation groups, because these groups may receive and assess local resources and endowments differently. The *fifth* contribution of the article relates to geographical information.³ People's conception of the neighbourhood is subjectively defined, but individuals are also nested within administrative neighbourhoods, which in turn are nested within wider areas. This approach makes it possible to utilise subjective and objective geographical information in the same study. Finally, the *sixth* contribution of the article deals with the policy context and the practical implications. Conditions in specific local neighbourhoods create a serious challenge to the social inclusion and cohesion policy of the EU, which remains an important policy objective within the Europe 2020 strategy of 'inclusive growth' (Davies et al., 2011; Rodríguez-Pose and Tselios et al., 2015). Generally, gaining an understanding of the relationships between real local social engagement, expected local social engagement and local ethnic concentration may assist policy makers with better urban planning aiming both for high social cohesion and a low gap between real and expected social engagement, particularly in those cities with high ethnic

concentrations. In other words, policy makers should not only aim to improve the social integration of ethnic minorities through neighbourhood intervention, but also should want citizens to meet their expected level of social engagement making them happier and more satisfied. Our findings provide reasons to believe that policies should be focused both on the individual characteristics (people-based policies) and the local characteristics (place-based policies) so as to stimulate social contacts between people in the neighbourhood and to enhance the social welfare of citizens. A neighbourhood, as a local entity (i.e. 'community'), is an arrangement in which individuals derive important personal benefits for well-being from doing things together with others (Volker et al., 2007), and policies should help citizens to do things together.

This article is structured as follows. The next section seeks to contribute to the theory by being one of the first studies to investigate whether and how the ethnic concentration of a neighbourhood affects the gap between the real and the expected local social engagement. After the theoretical background, we briefly introduce the logic and structure of our proposed model, which is a hierarchical model with spatial externalities, and we describe the variables used. We then present the regression results and discuss whether our findings reject or fail to reject our two hypotheses. The last section concludes with a discussion of the usefulness of our findings and presents some policy implications.

Theoretical background

Local social engagement and local ethnic concentration

The socioeconomic environment is likely to have a large impact on both expectations and actual social engagement. It is widely known that there is an association between individuals' social engagement and the ethnic concentration of the neighbourhood in

which they live. An individual's behaviour and engagement are affected by the characteristics of his/her neighbours. Local social ties and networks with individuals living nearby may generate positive neighbourhood externalities, while social ties and networks with people not living nearby are more restricted due to the barriers posed by geographical distance (Kan, 2007).

People (both natives and immigrants) generally prefer to live among people with the same background and are less likely to be willing to share resources with those who they perceive as different from themselves (Schelling, 1969; Twigg et al., 2010; van Ham and Feijten, 2008; Vervoort et al., 2011). They prefer to interact socially with others who share the same ethnic heritage, the same socioeconomic status, the same lifestyle, and who therefore share common interests, experiences and tastes or, put simply, people they have more to talk about with (Tolsma et al., 2009). Similarity and familiarity facilitate interpersonal local relations (Tolsma et al., 2009). On the one hand, local ethnic concentration can help to build the local social engagement of immigrants. Immigrants prefer to live in urban areas with a high percentage of ethnic minorities, which may hinder their integration in the host society, due to having fewer meetings with natives (Tselios et al., 2015b), but may increase their engagement in the neighbourhood as high local ethnic concentration leads to more social contacts with co-ethnics and with other minority groups. Local ethnic concentration can also assist with the maintenance of immigrants' cultural traditions, and can make it easier to maintain ethnic networks, through which people are able to derive benefits from each other and offer emotional support to one another, and can function as a safe haven in a hostile environment (Bolt et al., 2008). On the other hand, local ethnic concentration can erode the local social engagement of native people.

Natives may feel threatened and insecure when the number of ethnic minorities is high, making them more careful, fearful and less familiar with each other (Blalock, 1967; Tolsma et al., 2009; Vervoort et al., 2011). This is likely to result in a lower willingness on the part of natives in neighbourhoods with a high percentage of ethnic minorities to engage in contact with ethnic minorities (Vervoort et al., 2011). Thus, indigenous residents may have fewer neighbourhood contacts as the ethnic concentration of their local neighbourhood increases (Gijsberts et al., 2012). Therefore, the association between individuals' local social engagement and the ethnic concentration of the neighbourhood in which they live may operate differently for different ethnic and generational groups. This association is expected to be positive for immigrants, and especially for first generation immigrants, and negative for natives and possibly for second generation immigrants.

Following the work by Tselios et al. (2015b) and Tselios et al., (2015a), we consider not only the local effects (which are any effects associated with the neighbourhood in which the individuals live), but also the neighbouring effects (which are any effects associated with the adjacent neighbourhoods). From a *theoretical point of view*, there are strong socioeconomic interactions between neighbourhoods – through labour and capital mobility, technology transfers and knowledge spillovers, among others – which lead to geographically interdependent areas (Tselios et al., 2015a, 2015b). These neighbouring effects may also affect the residential social engagement of an individual, because community life and socioeconomic interactions do not exclusively take place in neighbourhoods (Tolsma et al., 2009). The neighbourhood is a place where community can emerge without external interventions. Neighbours, given their resources and interests, are likely to be

motivated to invest in local and neighbouring relationships (Volker et al., 2007). Community, and thus neighbourhood, is not only a local entity but also a wider (supra-local) entity. Moreover, individuals' interactions in their immediate neighbourhoods may give rise to strong community-wide patterns, but these patterns might lead to neighbourhood-to-neighbourhood interactions (Ioannides, 2004). By investigating those neighbouring effects, we are able to examine the social engagement outcomes for residents in a high ethnic concentration area nested within a low one, compared to those in a high ethnic concentration area nested within a wider area of high ethnic concentration. From an *empirical point of view*, one reason for the inclusion of neighbouring effects is that while a neighbourhood is defined by local political or administrative areas which create discontinuities in space (Clapp and Wang, 2006), in surveys (such as the SPVA survey) that contain information on local neighbourhood social capital, neighbourhoods are not predefined. Some people may regard a neighbourhood as the streets immediately around their home, while others may refer to a larger area of a city such as a postal district or an electoral district (Davies et al. 2011). Thus, citizens are more likely to be affected by local communities that have more physical, social, or cultural boundaries than administrative boundaries (Gijsberts et al., 2012). Bearing these caveats in mind, we include both the local and the neighbouring effects to account for differences in respondents' understandings of the term 'neighbourhood' and to eliminate the mismatch between the political and the administrative and socioeconomic boundaries. Nevertheless, we assume that the local effects are likely to be more pronounced than the neighbouring effects, because socioeconomic connections and interactions fall sharply with physical distance (Glaeser et al., 2002). Moreover,

the immediate neighbourhood rather than the adjacent neighbourhoods is the most direct geographical environment in which we assume that people spend most of their social time (Tolsma et al., 2009) and which largely shape their social interactions.

The role of expectations

There is a strong relationship between an individual's social expectations and a neighbourhood's ethnic composition (Frankel and Pauzner, 2002). It has been argued that people prefer to live and interact with those who resemble them. But, their decision regarding where they live and with whom they interact will depend not only on the neighbourhood's ethnic concentration, but also on their *view* of what are ideal and expected social relations. For example, if for a citizen the ideal social relations between neighbours is 'as little engagement as possible', then the level of local ethnic concentration may not matter for his/her actual local social engagement because his/her ideal engagement is very low, possibly due to his/her lack of interest in local social activity. This person is likely to be less interested in having a community in his/her local neighbourhood, because he/she has alternatives to the community in the neighbourhood, such as in his/her work place (Volker et al., 2007). Moreover, community life may take place outside one's direct and indirect neighbourhood (e.g. an adjacent neighbourhood). For example, friends may live in different neighbourhoods but within the same city (Tolsma et al., 2009). This type of citizen has very low expectations about his/her local social engagement and is therefore largely neutral regarding the level of local ethnic concentration. However, the local ethnic concentration may matter for the social engagement of a citizen with high social engagement expectations, because this citizen is motivated to invest in local relationships and

expects to derive important personal benefits for well-being from doing things together with others within a neighbourhood. We therefore argue that the relationship between the real and expected local social engagement is positive, but it is likely to be moderated by ethnic and generation groups due to differences in culture, ethnic heritage, social status and socioeconomic background in general. The local living environment influences both the expected and the real local social engagement differently for individuals from different ethnic and generation backgrounds. The actual level of local social engagement depends on what level of social engagement citizens expect and aspire to – their ideal level of local social engagement – adjusted for the local context. This adjustment is likely to differ by social group and ethnicity, because people take residential ethnic concentration into account when making their choice of where to live (Permentier et al., 2008).

We also argue that an individual's actual level of social engagement with others in the neighbourhood relative to their assessment of the ideal relations between neighbours – i.e. the absolute difference between the perceived and the actual local social engagement – depends on the neighbourhood's ethnic concentration. Areas of high ethnic concentration are likely to have higher influence as a residential location both for people with high expectation and low actual engagement (because, for example, they are interested in local social activities but they have not had the opportunities and chances to do so) and for people with low expectation and high actual engagement (because, for example, they are more interested in social activities outside the locality than inside the locality and their current local social activities are not with neighbours they prefer) (which in both cases means a high gap between real and expected engagement) *than* for people with the 'same' level of expected and actual

engagement (because, for example, they have met their expectations about local social activity) (which means a low gap between real and expected engagement). Thus, local ethnic concentration may not affect the local social engagement of people when the absolute difference between the expected and the actual local social engagement is very small, because the best-case scenario of social engagement not only exists as an idea but also as a fact. Those people may worry less about ethnic concentration compared to others who have not met their expectations yet and they want to adjust and change their behaviour and attitude to reach their goal in terms of local social engagement.

Moreover, we argue that the relationship between the gap in real and expected engagement and the ethnic concentration is moderated by ethnic and generation groups, because different groups may receive and access the resources and opportunities of neighbourhoods differently. Ethnic minorities, and especially first generation immigrants, may have language barriers which inhibit interaction with the wider community (Martinovic et al., 2009; Park, 1928). Dutch language proficiency, for example, is related to more social contact with natives (Vervoort et al., 2011). On the one hand, an increase in ethnic concentration may increase the gap between reality and expectations in social engagement for natives and second generation immigrants. Indeed, we have already pointed out that there is a negative association between natives' local social engagement and local ethnic concentration because, according to the threat hypothesis, natives (who are the dominant group) may feel threatened when the number of ethnic minorities is high as they may perceive that certain resources which belong to them are being taken away or diluted (Blalock, 1967; Coffé and Geys, 2006). When resources are threatened by minorities, natives are also likely to react with hostility (Laurence and Heath,

2008). This may increase the real social engagement of natives and/or decrease the expected local social engagement, implying a higher gap. Thus, even if natives react with hostility, an increase in ethnic concentration implies an increase in the gap. On the other hand, an increase in ethnic concentration may make expectations a reality for minorities and especially for first generation immigrants, because they will increase their social contacts with co-ethnics and with other minority groups within the locality.

Generally, one cannot predict whether an increase in ethnic concentration will imply a decrease or an increase in local social engagement simply on the basis of examining only the current relations between neighbours. The reason is that information about what people expect, and how these expectations are connected with their observed behaviour and how these connections are moderated by different social groups, is also needed.

Methodology

Econometric specification

We use a multilevel (hierarchical) linear regression model which takes the nested structure of the data (i.e. individuals are clustered in neighbourhoods) into account (Snijders and Bosker, 1999). Our two-level model consists of a single outcome variable at the lowest level, while having explanatory variables at the individual and the neighbourhood level (Permentier et al., 2011). We have extended the standard two-level model by adding spatial externalities (i.e. neighbouring effects) to reduce the omitted variable bias (Tselios et al., 2015a, 2015b). Moreover, while the standard neighbourhood model assumes that no interaction occurs among neighbourhoods, and thus neighbourhoods with identical characteristics but dissimilar adjacent neighbourhoods are considered as being equivalent, our

model controls for these differences (Bolster et al., 2007; Dietz, 2002).

In order to examine whether the real level of local social engagement of an individual is an increasing function of his/her expected social engagement and also whether this association differs by ethnic groups and between first and second generation immigrants (*Hypothesis 1*), we use the following cross-sectional econometric specification:

$$\begin{aligned} RealSocEng_{ir} = & \beta_0 + D_{\lambda ir}\beta_1 \\ & + D_{\lambda ir}ExpSocEng_{ir}\beta_2 + D_{\lambda ir}EthCon_r\beta_3 \\ & + D_{\lambda ir}WEthCon_r\beta_4 + Ind_{ir}\beta_5 + u_{ir} + \omega_{0r} \end{aligned}$$

where $RealSocEng_{ir}$ is a proxy for the real (actual) local social engagement of individual i nested in neighbourhood r ; $D_{\lambda ir}$ is a vector of dummy variables for ethnicity or generation, with λ denoting categories either for ethnicity (i.e. Turks, Moroccans, Surinamese, Antilleans and native Dutch people) or for generation (i.e. first and second generation immigrants); $ExpSocEng_{ir}$ is a proxy for the expected (ideal) local social engagement of individual i nested in neighbourhood r ; $EthCon_r$ is ethnic concentration of neighbourhood r ; $WEthCon_r$ is the (average) neighbouring ethnic concentration of neighbourhood r ; and Ind_{ir} is a series of key individual level variables (i.e. background characteristics) such as sex, age, educational attainment, country and level of education and employment of individual i nested in neighbourhood r . The inclusion of these key individual characteristics (i.e. key individual controls) has a clear theoretical basis. For instance, we control for education because people who invest in human capital also invest in social capital (Glaeser et al., 2002). Generally, we expect the returns on local social capital and engagement to be different for individuals with different characteristics. Overall, this econometric specification

incorporates both individual-level and area-level characteristics.

The specification of the socioeconomic interactions across neighbourhoods is represented by a spatial weights matrix W (see Tselios et al., 2015a, 2015b). The elements of the matrix are coefficients that discount proximity. Each neighbourhood is connected to a set of adjacent neighbourhoods by means of spatial patterns introduced exogenously to avoid identification problems (Ertur et al., 2006). More specifically, the spatial weights matrix is a binary matrix with elements equal to 1 in the case of k -nearest adjacent neighbourhoods (with $k = 3, 5$ and 7), and 0 otherwise, and then this matrix is row standardised so that the elements in each row add up to 1. β_0 is constant and β_{1-5} are the regression coefficients which are fixed; u_{ir} is the individual-level random variation and ω_{0r} is the neighbourhood-level random variation. The standard errors of the regression coefficients and variance parameters are not determined by the number of respondents per neighbourhood, but by the number of neighbourhoods (Snijders and Bosker, 1999).

In order to examine whether the gap between the self-reported expected and ideal relations between neighbours and the actual degree or quality of real contact with people in the neighbourhood is conditioned by local (and neighbouring) ethnic concentration, and whether this association differs by ethnic groups and between first and second generation immigrants (*Hypothesis 2*), we use the following specification:

$$\begin{aligned} \text{GapSocEng}_{ir} = & \beta_0 + D_{\lambda ir}\beta_1 \\ & + D_{\lambda ir}\text{EthCon}_r\beta_2 + D_{\lambda ir}\text{WEthCon}_r\beta_3 \\ & + \text{Ind}_{ir}\beta_4 + u_{ir} + \omega_{0r} \end{aligned}$$

where GapSocEng_{ir} is the gap (i.e. absolute difference) between the real and the expected local social engagement of individual i nested in neighbourhood r .

Sources of data

To test our two hypotheses we used individual-level data from the SPVA survey which was carried out in 1998 in the cities of Amsterdam, Rotterdam, Den Haag, Utrecht, Eindhoven, Enschede, Almere, Alphen aan den Rijn, Bergen op Zoom, Hoogezand-Sapp., Delft, Dordrecht and Tiel, and in a diverse range of 345 neighbourhoods in terms of socioeconomic composition (see Tselios et al., 2015b). 14,967 individuals from five ethnic groups (i.e. Turks, Moroccans, Surinamese, Antilleans and native Dutch) filled out the personal questionnaire. The data was further enriched with neighbourhood information from Statistics Netherlands for 1995. This data provides information on the concentration of immigrants in neighbourhoods as well as on a series of control variables at the neighbourhood level. A neighbourhood in the Statistics Netherlands database refers to places with four-digit zip codes.

For the analysis we selected all respondents, excluding cases with missing information on the key variables (i.e. their expected and real local social engagement, ethnicity or generation, sex, age, country of education, level of education, employment and local ethnic concentration).⁴ This selection resulted in a sample of 5510 respondents, of whom 4328 are either first or second generation immigrants.

Local social engagement

The SPVA survey includes data on people's social ties with others living nearby, which we refer to as 'local social engagement'. Residents defined their neighbourhood borders in different ways because they decided what to consider as their neighbourhood (Permentier et al., 2009). Although there is no one-to-one relationship between four-digit postal codes (which is the categorisation used by the Statistics Netherlands

database) and neighbourhoods as perceived by residents (used by the SPVA survey), we assume that, in urban areas, four-digit postal codes come the closest to what people may perceive as their neighbourhood (van Ham and Feijten, 2008).

The level of *expected local social engagement* (*ExpSocEng*) is measured by using the responses to the survey question 'ideal relation between neighbours' with five possible outcomes, 'as little as possible', 'greeting only', 'have a chat', 'occasionally visiting' and 'frequently meeting'. The level of *real local social engagement* (*RealSocEng*) is measured by using the responses to the two survey questions: a) 'degree of contact with people in the neighbourhood' with four possible outcomes, 'none', 'few', 'many' and 'very many' (*RealSocEng_Quantity*); and b) 'quality of contact with people in the neighbourhood' with five possible outcomes, 'almost not at all', 'bad', 'ordinary', 'good' and 'very good' (*RealSocEng_Quality*).

All these variables are considered as ratios in order to make them comparable and to enable linear regression models to be used (Tselios et al., 2015a). For example, individuals with very many contacts with people in the neighbourhood are the most socially engaged within a neighbourhood (local social engagement = 4) and individuals with no contact with people in the neighbourhood are the least socially engaged within a neighbourhood (local social engagement = 1). The correlation coefficient between these variables is very low (i.e. the correlation coefficient between *ExpSocEng* and *RealSocEng_Quantity* is 0.3486, between *ExpSocEng* and *RealSocEng_Quality* is 0.1278 and between *RealSocEng_Quantity* and *RealSocEng_Quality* is 0.2945, for 5510 respondents).

The gap between the real and the expected local social engagement (*GapSocEng*) is measured a) by the absolute difference between

'degree of contact with people in the neighbourhood' and 'ideal relation between neighbours' ($GapSocEng_Quantity = |RealSocEng_Quantity - ExpSocEng|$), and b) by the absolute difference between 'quality of contact with people in the neighbourhood' and 'ideal relation between neighbours' ($GapSocEng_Quality = |RealSocEng_Quality - ExpSocEng|$). The correlation coefficient between these two variables is 0.0283 (for 5510 respondents).

Local and neighbouring ethnic concentration

There were 3733 four-digit postcode areas (neighbourhoods) in 1995, but the Statistics Netherlands database provides information for the ethnic concentration (i.e. the number of foreigners per inhabitant) of 1365 neighbourhoods (*EthConc*). The adjacent ethnic concentration (*WEthCon*) is measured by the interaction between the ethnic concentration variable (*EthConc*) and the row standardised weights matrix *W*. Using exploratory spatial data analysis and a wide range of spatial weights schemes, we ended up with the five-nearest neighbours ($k = 5$) as the most appropriate weights scheme. This matrix controls for neighbourhoods with no neighbours ('islands') due to the missing observations for ethnic concentration, controls for high spatial autocorrelation and minimises the effects of spatial outliers (Tselios et al., 2015a, 2015b). The correlation coefficient between *EthConc* and *WEthConc* is 0.7520, which stresses the importance of controlling for neighbouring effects.

Table 1 shows the descriptive statistics for local social engagement and local ethnic concentration by ethnicity and generation.

Additional controls

We also test *Hypotheses 1* and *2* after controlling for some additional individual and

Table 1. Descriptive statistics for local social engagement and local ethnic concentration by ethnicity and generation.

Variable	Ethnicity/Generation	Obs	Mean	Std. Dev.	Min	Max
<i>RealSocEng_Quantity</i>	Turkish	1414	2.52	0.67	1	4
	Moroccan	1164	2.32	0.76	1	4
	Surinam	1475	2.37	0.61	1	4
	Antillean	827	2.31	0.65	1	4
	Native Dutch	1331	2.48	0.62	1	4
	First generation immigrant	4314	2.39	0.68	1	4
	Second generation immigrant	533	2.39	0.64	1	4
<i>RealSocEng_Quality</i>	Turkish	1414	3.66	0.85	1	5
	Moroccan	1164	3.72	0.77	1	5
	Surinam	1475	3.60	0.92	1	5
	Antillean	827	3.53	1.02	1	5
	Native Dutch	1331	3.58	1.00	1	5
	First generation immigrant	4314	3.63	0.88	1	5
	Second generation immigrant	533	3.64	0.91	1	5
<i>ExpSocEng</i>	Turkish	1414	3.99	0.93	1	5
	Moroccan	1164	3.18	1.14	1	5
	Surinam	1475	3.26	0.80	1	5
	Antillean	827	3.30	0.83	1	5
	Native Dutch	1331	3.45	0.73	1	5
	First generation immigrant	4314	3.46	1.01	1	5
	Second generation immigrant	533	3.49	0.88	1	5
<i>GapSocEng_Quantity</i>	Turkish	1414	1.58	0.84	0	4
	Moroccan	1164	1.07	0.87	0	4
	Surinam	1475	0.96	0.75	0	4
	Antillean	827	1.08	0.76	0	4
	Native Dutch	1331	1.02	0.70	0	4
	First generation immigrant	4314	1.19	0.85	0	4
	Second generation immigrant	533	1.19	0.83	0	4
<i>GapSocEng_Quality</i>	Turkish	1414	0.88	0.90	0	4
	Moroccan	1164	1.05	0.88	0	4
	Surinam	1475	0.90	0.74	0	4
	Antillean	827	1.00	0.83	0	4
	Native Dutch	1331	0.85	0.77	0	4
	First generation immigrant	4314	0.95	0.84	0	4
	Second generation immigrant	533	0.88	0.79	0	4
<i>EthConc</i>	Turkish	1289	0.25	0.17	0.01	0.65
	Moroccan	1062	0.25	0.16	0.01	0.65
	Surinam	1286	0.22	0.16	0.01	0.65
	Antillean	720	0.19	0.15	0.00	0.65
	Native Dutch	1153	0.13	0.11	0.01	0.64
	First generation immigrant	3850	0.24	0.16	0.00	0.65
	Second generation immigrant	478	0.19	0.15	0.01	0.65
<i>WEthConc</i>	Turkish	1289	0.19	0.12	0.01	0.49
	Moroccan	1062	0.19	0.11	0.01	0.49
	Surinam	1286	0.16	0.10	0.03	0.49
	Antillean	720	0.15	0.10	0.01	0.49
	Native Dutch	1153	0.12	0.08	0.01	0.49
	First generation immigrant	3850	0.18	0.11	0.01	0.49
	Second generation immigrant	478	0.16	0.10	0.01	0.49

neighbourhood characteristics. These control variables were chosen after considering the literature and the empirical studies on local social engagement and data availability (Tselios et al., 2015a, 2015b). The additional individual level controls are: the type of highest obtained educational degree, the length of residence in the Netherlands, labour experience in the Netherlands and the type of occupation and income levels. The additional neighbourhood level controls are: per-capita income; the degree of urbanisation; and the percentage of people on a low income, a high income and who are not active, among others. These individual-based and place-based factors are likely to determine the locational choices for both natives and immigrants.

Regression results

Testing Hypothesis 1: Real and expected local social engagement

Table 2 displays the association between the real local social engagement (*RealSocEng_Quantity* and *RealSocEng_Quality*) and the expected local social engagement (*ExpSocEng*) by ethnic and generation groups after controlling for key background variables at the individual (i.e. sex, age, country of education, level of education and employment) and neighbourhood (i.e. local ethnic concentration and neighbouring ethnic concentration) level (*Hypothesis 1*). As the correlation between the local ethnic concentration (*EthConc*) and the neighbouring ethnic concentration (*WEthConc*) is high, we run all regressions both without neighbouring ethnic concentration (Regressions 1, 3, 5 and 7) and with neighbouring ethnic concentration (Regressions 2, 4, 6 and 8). For the sake of brevity, we do not report the regression results with the inclusion of the additional individual and geographical control variables.

We observe that the social interaction of an individual within a neighbourhood is an increasing function of his/her views about the ideal relation between neighbours, because the coefficients on the expected local social engagement (*ExpSocEng*) are positive and statistically significant for all ethnic groups (i.e. Turks, Moroccans, Surinamese, Antilleans and native Dutch people) (Regressions 1, 2, 5 and 6) as well as for both the first and the second generation immigrants (Regressions 3, 4, 7 and 8). This finding is robust to the inclusion of neighbouring ethnic concentration effects. This suggests that people's decision regarding which locality they live in and with whom they interact will depend on their view of what ideal social relations are. However, the coefficients on the expected local social engagement (*ExpSocEng*) are higher for native Dutch people than for immigrants (Regressions 1, 2, 5 and 6). Hence, no matter what the level of actual and real local social engagement measured is (*RealSocEng_Quantity* and *RealSocEng_Quality*), natives are likely to take their expectations into account more seriously when making their choices of where to live than immigrants. For instance, if natives have low expectations, they might not care so much about local social activities, but if natives have high expectations, they might be motivated to invest in local relationships so as to derive important personal benefits for well-being from doing things together with others within a locality. In both cases, there is a strong positive association between the real and the expected local social engagement. However, this association is lower for immigrants, possibly because ethnic minorities have fewer socioeconomic choices of where to live, since they are often concentrated in deprived areas that are economically disadvantaged and poor (Heath et al., 2008). Living in such neighbourhoods itself has negative effects on immigrants' life chances and opportunities (van Ham and

Table 2. (Continued)

	RealSocEng_Quantity			RealSocEng_Quality				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Ind								
Female	base	base	base	base	base	base	base	base
Male	0.0350*	0.0339*	0.0444**	0.0440**	-0.0047	-0.0039	0.0004	0.0005
Age	0.0174***	0.0175***	0.0238***	0.0238***	0.0045	0.0045	0.0087	0.0087
Age squared	-0.0002***	-0.0002***	-0.0002***	-0.0002***	-0.0000	-0.0000	-0.0001	-0.0001
Country of education: The Netherlands	base	base	base	base	base	base	base	base
Origin and the Netherlands	-0.0721**	-0.0701**	-0.0540	-0.0541	-0.1049**	-0.1043**	-0.0971**	-0.0970**
Origin	-0.0814***	-0.0777**	-0.0563	-0.0546	-0.0219	-0.0196	-0.0064	-0.0061
No education	-0.0708*	-0.0691*	-0.0378	-0.0361	0.0472	0.0476	0.0763	0.0766
Highest obtained degree so far	-0.0125***	-0.0121***	-0.0090*	-0.0080	-0.0077	-0.0079	-0.0104	-0.0103
Unemployed	base	base	base	base	base	base	base	base
Employed	-0.0024	-0.0029	-0.0150	-0.0159	0.0094	0.0097	-0.0021	-0.0023
Constant	0.9752***	0.9690***	1.1648***	1.2550***	2.8526***	2.8466***	2.9767***	2.9885***
Log likelihood	-5166.1335	-5152.2459	-4154.0871	-4148.6472	-7200.6932	-7200.0964	-5549.8346	-5549.7739
Wald chi2 (p-value)	893.12 (0.000)	930.28 (0.000)	620.24 (0.000)	635.97 (0.000)	184.76 (0.000)	186.03 (0.000)	110.09 (0.000)	110.28 (0.000)
Observations	5510	5510	4328	4328	5510	5510	4328	4328

*** p < 0.01, ** p < 0.05, * p < 0.1.

Manley, 2010). Moreover, most immigrants arrived in the Netherlands for job-related reasons and usually work in low-wage industries and occupations with many other immigrants (Davies, 2011), and in most cases they live in the same area.

Table 2 also shows that the coefficients on the expected local social engagement (*ExpSocEng*) are higher for second generation immigrants than for first generation immigrants, but this is only when we investigate the determinants of the real local social engagement based on the quality of contacts (*RealSocEng_Quality*) (Regressions 7 and 8), and not on the quantity of contacts (*RealSocEng_Quantity*) (Regressions 3 and 4). This is probably because second generation immigrants are more socially integrated and more deeply involved in the social environment than first generation immigrants (Gijssberts et al., 2012; Tselios et al., 2015b). Overall, our results fail to reject *Hypothesis 1*.

As for the remaining variables, the real local social engagement based on quantity of contacts (*RealSocEng_Quantity*) is higher for Turks (Regressions 1 and 2) and the real local social engagement based on quality of contacts (*RealSocEng_Quality*) is higher for Turks and Moroccans (Regressions 5 and 6).⁵ This is probably due to the fact that since Turks and Moroccans are the least socially integrated in the Netherlands (i.e. Turks are the least integrated for the 'more relations with native Dutch people than ethnic groups' and 'quality of contact with native Dutch people' proxies, and Moroccans are the least integrated for the 'relations in spare time with native Dutch people' and 'degree of contact with native Dutch people' proxies (Tselios et al., 2015b)⁶) and they have the lowest education level (i.e. 24.68 per cent of Turks, 40.29 per cent of Moroccans, 7.05 per cent of Surinamese, 3.75 per cent of Antilleans and 0.23 per cent of native Dutch people do not have any degree in education), they prefer to

have contact with other immigrants who live in the same neighbourhood as them (i.e. neighbourhoods with a high ethnic concentration). Moreover, the study by Musterd and Ostendorf (2009) shows that Turks and Moroccans appear to be more oriented toward their own group. The local ethnic concentration characteristics (*EthConc*) seem to influence the real local social engagement, but it differs by ethnic and generation groups and is sensitive to the inclusion of neighbouring effects (*WEthConc*). This is hardly surprising, because people's decision regarding where they live and with whom they interact depends on the neighbourhood's resources and endowments, but different ethnic groups may receive and assess these resources differently. More specifically, the results show that, for the quantity of actual real interactions (*RealSocEng_Quantity*), local ethnic concentration helps immigrants (Regression 4), and especially Turks and Moroccans (Regression 2), but if they live in regions surrounded by ethnic concentrations then the additional spatial effect is negative. There is no spatial effect regarding the quality of interactions (*RealSocEng_Quality*). Finally, sex, age, country of education and level of education matter for real local social engagement, but these associations are sensitive to the proxies for local social engagement (*RealSocEng_Quantity* and *RealSocEng_Quality*).

Testing Hypothesis 2: The gap between reality and expectation and local ethnic concentration

Table 3 tests whether the gap between real and expected local social engagement (*GapSocEng_Quantity* and *GapSocEng_Quality*) is associated with local ethnic concentration (*EthConc*) and whether this association differs by ethnic and generation groups (*Hypothesis 2*). It is important, however, to take into account that the possible

Table 3. Testing Hypothesis 2.

	GapSocEng_Quantity			GapSocEng_Quality				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Turks	0.5493***	0.4995***			0.0722	0.0677		
Moroccans	0.1129*	0.0323			0.2028***	0.1951**		
Surinamese	-0.1063*	-0.1422**			0.0902	0.1058		
Antilleans	-0.0136	0.0040			0.1880***	0.1553**		
Native Dutch people	Base	base			base	base		
1st gen. immigrants			0.0062	-0.0074			-0.0012	0.0082
2nd gen. immigrants			base	base			base	base
EthConc								
Turks	-0.1959	-0.4409*			-0.0067	-0.2421		
Moroccans	-0.4195***	-0.8279***			0.0775	-0.1064		
Surinamese	0.0027	0.0137			-0.0127	-0.0021		
Antilleans	0.0308	0.4306			0.0306	-0.3058		
Native Dutch people	-0.2304	0.1092			0.3462	0.2487		
1st gen. immigrants			-0.0670	-0.1232			0.0274	-0.1320
2nd gen. immigrants			-0.1151	-0.0708			-0.2891	-0.4914
WEthConc								
Turks		0.4091				0.4111		
Moroccans		0.7728**				0.3549		
Surinamese		-0.0091				-0.0374		
Antilleans		-0.8321*				0.7054		
Native Dutch people		-0.6697*				0.1959		
1st gen. immigrants				0.1098				0.3152
2nd gen. immigrants				-0.0996				0.4249
Ind								
Female								
Male	base	base	base	base	base	base	base	base
Age	0.0008	0.0021	0.0395	0.0396	0.0419*	0.0404*	0.0700***	0.0698***
Age squared	-0.0077*	-0.0078*	-0.0174***	-0.0173***	0.0017	0.0017	-0.0006	-0.0005
Country of education:	0.0001	0.0001	0.0001	0.0001	-0.0000	-0.0000	0.0000	0.0000
The Netherlands	base	base	base	base	base	base	base	base
Origin and the Netherlands	0.0619*	0.0594	0.0482	0.0478	-0.0012	-0.0014	-0.0111	-0.0114

(continued)

Table 3. (Continued)

	GapSocEng_Quantity			GapSocEng_Quality				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Origin	0.0733*	0.0691*	0.1924***	0.1920***	-0.0019	-0.0041	-0.0410	-0.0425
No education	0.0345	0.0339	0.1499***	0.1500***	0.0118	0.0104	-0.0202	-0.0217
Highest obtained degree so far	0.0160***	0.0167***	0.0058	0.0058	-0.0049	-0.0053	-0.0102	-0.0107
Unemployed	base	base	base	base	base	base	base	base
Employed	-0.0393	-0.0395	-0.0772***	-0.0773***	0.0045	0.0045	-0.0081	-0.0075
Constant	1.2102***	1.2472***	1.5948***	1.6004***	0.7626***	0.7502***	0.9578***	0.9285***
Log likelihood	-6466.1354	-6459.461	-5388.0285	-5387.8902	-6731.359	-6729.0678	-5370.9625	-5369.7958
Wald chi2 (p-value)	528.72	542.38	59.54	59.93	52.07	56.84	17.61	20.02
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.091)	(0.095)
Observations	5510	5510	4328	4328	5510	5510	4328	4328

*** p < 0.01, ** p < 0.05, * p < 0.1.

association is conditional on individual level characteristics (*Ind*) and still exists after controlling for neighbouring effects (*WEthConc*). Once more, for the sake of brevity, we do not report the regression results with the inclusion of the additional individual and geographical control variables.

The results do not show any strong evidence that local ethnic concentration influences the gap between real and expected local social engagement differently across social groups (i.e. ethnic and generation groups). Only for Moroccans and Turks and only for the gap based on quantity of contacts (*GapSocEng_Quantity*) is there any statistically significant association between the gap and the local ethnic concentration. More specifically, there is evidence that the higher the local ethnic concentration is the lower the gap between reality and expectations for Turks and Moroccans after controlling for neighbouring ethnic concentration effects (*WEthConc*) (Regression 2). Nevertheless, this effect is stronger for Moroccans than for Turks. We can argue that, as the local ethnic concentration increases, Turks and Moroccans seem to meet their local social engagement expectations. This is likely to indicate that an increase in local ethnic concentration assists Turks and Moroccans in maintaining their cultural traditions, as they are able to derive support and benefits from each other. However, as has been noted, since Turks and Moroccans are more oriented toward their own groups, have the lowest educational attainment and are less socially integrated into the Netherlands than other minority groups, they want to be involved and participate in local social activities with other immigrants. These activities are usually hosted in high ethnic concentration neighbourhoods. As for Surinamese, Antilleans and natives, there is no evidence of a local ethnic concentration effect on the gap between the real and the expected local social engagement, because the coefficients

on ethnic concentration are not statistically significant. There is no effect of geography on the quality of local social engagement (*GapSocEng_Quality*) (Regressions 5–8), but only on the scale of such interactions (*GapSocEng_Quantity*) (Regressions 1–4). Overall, *Hypothesis 2* holds partially.

As for the remaining variables, not only is the level of real local social engagement based on the quantity of contacts (*RealSocEng_Quantity*, Table 2) higher for Turks, but in addition the gap between real and ideal expected social engagement based on the quantity of contacts (*GapSocEng_Quantity*, Table 3) is also higher for Turks (Regressions 1 and 2). Meanwhile, the actual level of real local social engagement based on the quality of contacts (*RealSocEng_Quality*, Table 2) is higher for Turks and Moroccans than for other ethnicities, and the gap between real and expected social engagement based on the quality of contacts (*GapSocEng_Quality*, Table 3) is higher for Moroccans (Regressions 5 and 6). These findings are in line with the arguments above, that Turks and Moroccans are willing to invest in local social activities and want to meet their expectations about ideal relations between neighbours. Finally, all individual level characteristics matter for the gap, but these associations are sensitive to the proxies employed (*GapSocEng_Quantity* or *GapSocEng_Quality*).

Conclusions

The main questions of this article were to explore: a) whether the level of actual real local social engagement is an increasing function of the expected local social engagement, and b) whether the differences in the gap between the real and the expected local social engagement can be explained by differences in local ethnic concentration. Both questions were addressed by looking at

differences between ethnic and generation groups. To answer these questions, we developed a hierarchical model with spatial externalities using data from a detailed survey for native Dutch people and four migrant groups (i.e. Turks, Moroccans, Surinamese and Antilleans) combined with data from Statistics Netherlands.

Our first finding (*Hypothesis 1*) is that there is indeed a positive association between the real and the expected levels of local social engagement, and that this is higher for native Dutch people than for immigrants. This seems to show that natives are likely to take their expectations more seriously into account when making their choices of where to live than immigrants. The second finding (*Hypothesis 2*) is that as local ethnic concentration increases, Moroccans and Turks seem to meet their social engagement expectations or aspirations, as the gap between the real and expected local social engagement decreases, but this effect is higher for Moroccans. This suggests that an increase in local ethnic concentration assists Moroccans well (and Turks less well) in maintaining their cultural traditions, as they are able to derive benefits from each other and offer support to one another.

This study is not without its limitations, which mainly have to do with the availability of data. One obvious limitation is that SPVA data do not capture the most recent impact of immigration, such as the major flows from Eastern Europe. A lot might have changed in the Netherlands with regards to tensions and interactions between ethnic groups. Another limitation is that we do not have recorded information about the percentage of ethnic minorities by each ethnic group separately at the neighbourhood level in order to construct an ethnic diversity index. Despite these limitations, improving our understanding of the association and differences between the real and the expected local social engagement as well as the sources of the gap is important

for designing effective strategies to improve the social welfare of both natives and immigrants. Based on our findings, we can argue that policy makers should help immigrants to have more choices of where to live in order to be able to meet their expectations about local social engagement, but this should not happen through higher local ethnic concentration, as is evident for Turks and Moroccans in this study, because living in a high ethnic concentration locality harms social cohesion in the Netherlands. More specifically, ethnic concentration harms minorities' contacts with natives and stimulates their contacts with co-ethnics, does not help minorities to improve their prospects in many aspects, such as economically, culturally and in terms of their acceptance, deviates norms and values with regard to work and generally goes hand in hand with economically deprived, high-poverty and criminal localities which have negative effects on labour market success and education (Gijsberts and Dagevos, 2007; Gijsberts et al., 2012; Tolsma et al., 2009; Vervoort et al., 2011). Immigrants could meet their expectations about local social engagement, for example, either with the provision of a better housing policy (e.g. mixed housing policies in order to create socially mixed neighbourhoods) so that ethnic minorities are not concentrated in deprived areas (which is a place-based policy) or with the provision of free Dutch language courses so that ethnic minorities can have more social contact with natives (which is a people-based policy). Both policies affect each other. Living in an ethnically mixed neighbourhood allows immigrants to have more 'opportunities' to speak Dutch. Generally, government attention, through people- and place-based policies, should be focused on countering socioeconomic disadvantage (Gijsberts et al., 2012; Letki, 2008). Policies should target both individuals and the areas where they live. Nevertheless, more evidence-based

insights into the role played by neighbourhood characteristics in influencing the gap between social engagement reality and expectations should contribute to improving the liveability of urban neighbourhoods.

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Notes

1. *Ethnic concentration* refers to the percentage of ethnic minorities within a locality (e.g. the percentage of Turks, Moroccans, Surinamese and Antilleans within a neighbourhood). Unfortunately, we do not have recorded information about the percentage of ethnic minorities by each ethnic group separately at the neighbourhood level in 1995 (i.e. the percentage of Turks, the percentage of Moroccans, the percentage of Surinamese and the percentage of Antilleans) in order to construct the Herfindahl index as a proxy for ethnic diversity. However, the studies by Gijsberts and Dagevos (2007), Vervoort et al. (2011) and Gijsberts et al. (2012) show that the measures of ethnic concentration and ethnic diversity at the neighbourhood level in the Netherlands are highly correlated. This implies that ethnic concentration and ethnic diversity are empirically the same in the country. *Local social engagement* refers to the resources that stem from social ties and networks within a locality (e.g. neighbourhood) through cooperative relations between people (Kan, 2007).
2. If the bias in measurement for the real and the expected social engagement for a citizen is α , taking the absolute difference between the real and the expected social engagement, the gap is: $|(real + \alpha) - (expected + \alpha)| = |real - expected|$, omitting the bias.
3. The authors thank a reviewer for this comment.
4. The missing observations are 7489 on the proxy for the expected local social engagement, 7467 or 8206 for the two proxies for

real local social engagement, 158 on ethnicity, 182 on generation (which is relevant only for immigrants) (i.e. 45 for Turks, 63 for Moroccans, 51 for Surinamese and 23 for Antilleans), 43 on sex, 81 on age, 371 on country of education, 728 on level of education, 1481 on employment and 1744 on local ethnic concentration. Thus the final dataset is unbalanced, producing heterogeneity bias (Rodríguez-Pose and Tselios, 2009). However, evaluating and understanding the distribution of missing data, we observe that values are missing at random (and not systematically) and thus the final data sample may still be representative of the population. We are confident the missing data will produce little or no bias in the conclusions drawn about the population.

5. If we use Turks as the base category, the differences in the real local social engagement based on quality of contacts between Turks and Moroccans are not statistically significant.
6. In the study by Tselios et al. (2015b), the concept of social integration of immigrants into a country (e.g. the Netherlands) refers to the acceptance or inclusion of immigrants in the primary societal relationships and social networks of the host society and the process of building personal relationships with members of the host society (i.e. native Dutch people) (Bosswick and Heckmann, 2006). They use indicators of the interactive integration of immigrants, which include social networks and ties with natives and are seen as key elements of the 'bridging' aspect of social capital.

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