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Do birds of a feather play football together? A study on ethnic segregation in Dutch amateur football

Arend F. van Haaften

School of Governance, Utrecht University, Utrecht, The Netherlands

ABSTRACT

Policy makers in the Netherlands and elsewhere have increasingly put their faith in sports in general and especially club-based sports activities as an easy and effective tool for creating and maintaining cohesion in an ethnically heterogeneous society. Various studies, however, have hinted towards the limits of using sports activities and clubs for interethnic mixing. Using a unique and comprehensive dataset of amateur football club memberships over ten years, this paper investigates to what extent ethnic groups are unequally distributed over clubs in the Netherlands' most popular organised sport. The results show that despite the wide popularity of club membership across ethnic groups, there exists a substantial amount of ethnic segregation between clubs. I conclude that sports, even when widely popular, face limitations in their potential to bring people of different backgrounds together and that while organised sports prove to be a fruitful case for further research on ethnic homophily and interethnic relations, we should also temper and carefully (re)consider our expectations of its use for social integration.

KEYWORDS

Voluntary sports club; membership; ethnicity; segregation; homophily

Sports clubs: sites for interethnic mixing?

All across the globe, sports – especially when organised within the context of clubs – are lauded for their ability to cut across ethnic or racial boundaries. As a consequence, policy makers in the Netherlands and elsewhere have increasingly put their faith in sports clubs as easy and effective sites for interethnic mixing and fostering cohesion in an ethnically heterogeneous society.

However, in the past, various scholars have expressed their scepticism towards the idea that sports clubs are particularly effective at bringing people with various ethnic backgrounds together. For example, Krouwel, Boonstra, Duyvendak, and Veldboer (2006) found that the majority of Dutch adolescents belonging to ethnic minority groups in their study voice a strong preference for football clubs with ethnic peers.

CONTACT Arend F. van Haaften a.f.vanhaaften@uu.nl Utrecht University, School of Governance (USG), Bijlhouwerstraat 6-8, 3511 ZC Utrecht, the Netherlands

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Similarly, Vermeulen and Verweel (2009) observe indications of bonding around ethnic identities during sports activities inside and outside clubs, by ethnic minority as well as majority groups. Furthermore, Wiertz (2016) finds proof for pronounced ethnic sorting tendencies when individuals join various civic associations, including sports clubs.

These findings echo what has been called the homophily principle: the phenomenon that socially similar individuals associate more frequently than dissimilar individuals (McPherson & Smith-Lovin, 1987). Reviewing more than a hundred studies spanning multiple decades, McPherson, Smith-Lovin, and Cook (2001) illustrate the pervasiveness of homophily in our lives. Many of the connections we make, from marriage to mere knowledge of others, show a general bias towards others with whom we share social similarities, vastly limiting our social worlds.

Ethnicity is found to be one of the most important characteristics through which similarity breeds connection. Consequently, it acts as a major social fault line in people's personal networks (McPherson et al., 2001). Additionally, while voluntary associations serve as important organisational settings to connect to others outside the family structure (Louch, 2000), these organisations tend to be marked by socially homogenous compositions favouring the production and preservation of homophilic ties (McPherson, 1983). Therefore, we may be directed to expect that the landscape of voluntary associations is rather ethnically segregated, severely constraining the meeting and bonding opportunities with members outside of one's own ethnic group.

Surprisingly, barely any studies so far have looked at ethnic homophily in voluntary association membership on a large scale (Wiertz, 2016 being a notable exception). A number of sports sociological studies have explored links between ethnicity and sports participation quantitatively, but it remains unclear how and/or with whom these activities are organised (e.g. Breuer & Wicker, 2008; Higgins & Dale, 2013; Van Haaften, *in press*). Furthermore, McPherson and his colleagues have demonstrated a positive relation between membership and shared similarities with co-members, but ethnicity was not included in these analyses (McPherson & Rotolo, 1996; Popielarz & McPherson, 1995). Moreover, even when voluntary associations might produce homophilous co-membership ties in general, McPherson (1983) notes that different types of voluntary groups can vary strongly in the forms and degree of homophily they induce. An important distinction can be made between voluntary groups organised around activities which enjoy interest by a selective pool in general population and voluntary groups organised around activities which share a wide interest across different social strata. The first type induces homophily due to a selective interest, while the latter induces homophily when the total member population distributes unequally over groups. I would argue that this latter case is a particularly fruitful area for research on homophily because it can direct us to potential sorting mechanisms with a broader relevance.

This study, therefore, aims to further explore ethnic homophily in membership of Dutch amateur football clubs and its development over roughly a decade. The Netherlands is estimated to have both the highest share of club-based sports activities (23%), and the highest membership rate (27%) of Europe (Eurobarometer, 2014). Of these voluntary sports organisations, amateur football clubs are by far the most popular, accommodating well over a million members nationally. Moreover, earlier studies have shown

that amateur football, unlike various other organised sports, enjoys a wide interest and high participation rates across various ethnic minority groups (Elling & Knoppers, 2005; Van Haaften, *in press*), illustrating its suitability as a case for both the study of ethnic homophily and sports' integrative potential. Consequently, I have formulated the following research question:

RQ: To what extent and in what way are ethnic groups within the Netherlands unequally distributed over amateur football clubs?

The remainder of this paper contains the following structure. In the following section I will discuss the study's theoretical background and expectations. Next, I will describe the data and measures that were used, which is then followed by the presentation of the results. Finally, the main conclusions of this study are summarised and discussed.

Theoretical assumptions and expectations

Baseline versus inbreeding homophily

If homophily is the principle that similar individuals connect more frequently than dissimilar individuals, one of the first things to further specify is what is meant by more frequently. Consequently, a key distinction in research on homophily is the difference between so-called baseline and inbreeding homophily (McPherson et al., 2001).

Baseline homophily is concerned with the most basic opportunity structure for homophilous tie-formation, namely the distribution of one or more characteristics in a certain population of interest. As soon as these characteristics are not equally represented, we expect a degree of homophily to occur on the basis of mere chance alone. This becomes apparent when we consider the ethnic make-up of almost any given country. Usually, national populations consist of a substantial ethnic majority group and various minority groups. Considered for example a population where the majority group makes up 80% of the population and four other minority groups each make up roughly 5% of the population. This population structure is likely to induce a high amount of in-group ties for the majority group merely due to their relative size.

When researchers speak of homophily, however, they usually mean inbreeding homophily. This type of homophily refers to the degree of homophilous tie-formation that occurs on top of the baseline model in which ties are randomly distributed. So, in the former example inbreeding homophily would occur if the majority group and minority groups have more than 80% or 5% in-group ties respectively. The distinction between baseline and inbreeding homophily is important as it helps us to better locate and work towards understanding mechanisms that drive similar individuals together.

The distinction between baseline and inbreeding homophily requires us to specify both a population and a form of tie that links individuals out of that population together. This is dependent on the research interests and the data available and will vary accordingly. In one case the population might be that of a whole country in which the marriage dyads between individuals are studied. In another study, the

population might consist of a single school in which multiple friendship ties between classmates are mapped.

The focus of this study is on the distribution of members over amateur football clubs. The population thus consists of all members of amateur football clubs in the Netherlands. As a function of their composition and size, clubs offer a certain number of in-group and out-group co-membership ties to members (McPherson et al., 2001). Inbreeding homophily occurs when the degree of in-group co-membership ties is higher than a group's share in the total member population.

Ethnic inbreeding homophily in co-membership ties

Ethnicity is known to produce a substantial amount of inbreeding homophily. People with similar ethnic backgrounds are much more likely to form various ties with each other than homophilic baseline models would predict (McPherson et al., 2001). Given the importance of recruitment through network ties for voluntary groups, it seems likely that:

E1: The average proportion of in-group co-membership ties substantially exceeds an ethnic group's proportion in the total member population.

While it is expected that ethnic inbreeding happens across all ethnic groups, there are reasons to assume that its extent and nature varies between groups. Below, I will discuss two important factors which can drive these differences.

Size matters

The first reason is that the ecological model of affiliation is affected by the distribution of opportunities for homophilic tie formation across groups. Essentially, this boils down to a classic critical mass argument, meaning that to seek out similar others, they first need to be there in sufficient numbers. Various factors may influence these opportunities, but group size is known to be an important factor (McPherson et al., 2001). The higher the number of ethnic peers who are members of amateur football clubs, the more likely an individual is aware of their presence and/or knows one or more of them directly. Moreover, when more ethnic peers have memberships to amateur football clubs, the attractiveness of club membership compared to other forms of time investment offering homophilic tie formation increases. This, in turn, can draw in more co-ethnic members, especially those who attach high value to homophilic ties, thereby further strengthening ethnic concentration and segregation. A similar pattern is found from studies on residential segregation of blacks in the United States, in which increases in group size seem to stimulate segregation (Hao & Fong, 2011). The relation between group size and segregation is likely to be particularly influential for minority groups, as changes in numbers and relative group size can have a substantial impact on their opportunities for homophilic tie formation, unlike majority group members for whom these opportunities are often guaranteed. Consequently, I expect that:

E2A: The relative size of an ethnic minority group in the total member population is positively related to inbreeding.

E2B: An increase in the size of an ethnic minority group within the total member population will be accompanied by a higher degree of inbreeding.

Interethnic boundaries

The second reason for the fact that we may expect interethnic differences in inbreeding is that ethnicity is constructed out of multiple ‘characteristics or expressions of shared belonging’ (Burton, Nandi, & Platt, 2010), through which ethnic similarity and difference are experienced. Characteristics which have been linked to ethnicity are manifold. Burton et al. (2010) note that they “may include ‘race’ (or colour or visibility), national identity, parentage or ancestry, nationality, citizenship, religion, language, and country of birth (or being an immigrant), as well as the problematic domain of ‘culture’” (1335). Barth (1969), however, stresses that ethnic classifications do revolve around ‘cultural stuff’, but are created and maintained through an ongoing process of identification and ascription by members and non-members. This involves what he describes as ‘boundary maintenance’, which is the continuous social practice through which both members and non-members use certain characteristics to signify ethnic in- and out-groups. Following this line of reasoning, ethnic difference and similarity are communicated through certain salient social characteristics, which act as stronger or lesser boundaries between groups.

According to Brubaker (2013), two social markers have been particularly influential in this regard: religion and language. Given the data at hand, I will limit myself here to these two. Below I will discuss how both these boundaries could play a role in driving ethnic groups closer together or further apart, and consequently are related to inbreeding. However, before I move on to this discussion, I do want to stress here that I do not wish to imply that religion and language are the only boundaries between ethnic groups, nor does it mean that they are the most important in any situation or at any given time.

Language

When considering use of language and religion for ethnic classifications of difference we should not regard it as a ‘continuous spectrum of variation’, but instead, as ‘categorically differentiated’, which means that ‘in popular understandings’ they ‘sort people into distinct, bounded and largely self-reproducing ‘communities’ (Brubaker, 2013, 3). Consequently, even though indices for linguistic distance that express the degree of similarity or difference between languages exist, there is little reason to believe individuals consciously take such measures into account or that they provide a realistic reflection of their boundary management practices in daily life.

In order to conceptualise the role of language as an interethnic boundary, we must consider how language could come into play when making ethnic classifications of difference. A crucial distinction to make in this case would be the differentiation between people who speak a specific language and people who do not. More specifically, in a post-migration context where most people with migrant backgrounds – particularly those of the second generation – will often be able to speak the language of the host country, speaking and/or using another language, in addition to the host country language will be of particular significance. Namely, it is in these circumstances that language can be used

most effectively as a signal of ethnic group membership to both members and non-members. Communicating with each other in a language which is not the dominant language strongly separates you and your ethnic peers from those who cannot communicate in that language, precisely because of the fact it is a language used in a context with many individuals who do not master it. As such, it can be understood as functioning as a more radical way of Terkourafi's (2018) description of differentiating between more and less familiar ways of getting things done linguistically within a single language. As she explains, a key social function of the enactment of familiar linguistic acts is that 'they provide evidence that the speaker is "one of us" – someone who has been socialised with the same habits and who can therefore be expected to be like us in other respects as well' (Terkourafi, 2018, 7). By doing so, language takes a primary role in creating a sense of belonging. It can be argued that the inclusionary and exclusionary significance in the case of sharing an additional, different language are even stronger due to the fact it is not so much about familiarity as it is about intelligibility. As such, language serves as a powerful criterion to signify ethnic group membership and ethnic distance between groups.

This situation does not apply to all ethnic groups, however, as not all groups master and/or use a second language. Consequently, a language primarily creates a boundary between groups who speak and use a specific language, and those who do not speak that specific language or any second language at all. Of the ethnic backgrounds taken into consideration, individuals with Turkish backgrounds are most likely to speak their own language, closely followed by individuals with a Moroccan background. Minority groups with a background in one of the Dutch ex-colonies (Indonesia, Suriname and the Dutch Antilles) are in turn very likely to use Dutch as their only language (Herweijer, Iedema, Andriessen, & Vervoort, 2016). This would set members with Turkish and Moroccan backgrounds apart from both each other and other groups, while it would group members with ex-colonial backgrounds or a Dutch background more closely together.

Although the concept of inbreeding homophily is normally used in reference to a single in-group and out-group, it can be easily extended to capture multiple inter-group relations. If we take the example of a majority group that takes up 80% of the population and four minority groups which each take up 5% of the population, inbreeding between two minority groups would occur if the ratio between in-group and out-group co-membership ties exceeds 1:1. After all, both groups have an equal share (5%) in the total member population. Inbreeding between the majority group and a single out-group occurs when the ratio between in-group and out-group co-membership is higher than 16:1 for the majority group ($80/5 = 16$) or, vice versa, higher than 1:16 for the minority group.

Taking the preceding points into account, the homophily principle would dictate that:

E3A: Members with Turkish and Moroccan backgrounds show relatively high degrees of inbreeding.

E3B: Amongst members with Dutch, Surinamese, Antillean or Indonesian backgrounds exist relatively low degrees of inbreeding.

Religion

As part of the pillarization of civic life in the Netherlands, amateur football was strongly segregated across religious lines in the past. To this very day, many existing Dutch amateur football clubs still bear apparent signs of their respective catholic, protestant or secular origins, even though the social significance of these markers has waned due to secularisation. It would be wrong, however, to assume that religion therefore has no role to play. Just as immigration has introduced new forms of language diversity, it has also introduced new forms of religious diversity. Consequently, the Netherlands, like various other European countries, is now home to a substantial and growing Muslim population.

Two characteristics of this religious group are of particular interest when it comes to boundary management between ethnic groups. Firstly, Muslims on average show a relatively high degree of religiosity and identification with their faith (Huijnk & Andriessen, 2018; Verkuyten, 2007; Voas & Fleischmann, 2012). Secondly, adherence to Islam is highly dependent on specific migrant backgrounds (Maliapaard & Gijsberts, 2012). Together, these two characteristics make the distinction between Muslim and non-Muslims in particular a potentially powerful dimension for ethnic classifications of difference. For some ethnic backgrounds, such as the Dutch autochthonous population, adherence to Islam clearly signifies being part of the ethnic out-group, while for others, particularly Dutch citizens with Turkish and Moroccan backgrounds, not being a Muslim signifies ethnic out-group members. Consequently, ethnic identity and religious identity have become increasingly intertwined (Maliapaard, Lubbers, & Gijsberts, 2010).

Additionally, negative experiences and prejudice based on religion can further strengthen the boundary between Muslims and non-Muslims. During the last 15 years, anti-Muslim sentiments have grown in strength and become more overtly negative in the Netherlands. Several studies in recent years have indicated that a substantial share of the Muslim population in the Netherlands, most notably citizens with a Turkish and Moroccan background, currently do not feel at home in the Netherlands, do not trust Dutch citizens or the government, and experience a high degree of discrimination (Andriessen, Fernee, & Wittebrood, 2014; Huijnk & Andriessen, 2016; Huink, 2018; Maliapaard & Gijsberts, 2012). Others have echoed this by noting that there exist strong boundaries and a high degree of social distance between the autochthonous population and people with Turkish and Moroccan backgrounds (Entzinger & Dourleijn, 2008; Sniderman & Hagendoorn, 2007). The fact that the distinction between Muslims and non-Muslims can have very real implications for tie formation through homophily is exemplified by a recent study from Leszczensky and Pink (2017). They found that opposed to Christian and non-religious youth, Muslim youth preferred to befriend Muslim peers, and this increased with religiosity. Moreover, both Christian and non-religious youth were less likely to befriend Muslim youth, irrespective of their religiosity. Consequently, I expect that the Muslim–non-Muslim distinction acts as an important boundary between members with Turkish and Moroccan backgrounds on the one hand, and members with other backgrounds on the other hand:

E4: Members with Turkish and Moroccan backgrounds show lower degrees of mutual inbreeding compared to degrees of inbreeding between these groups and groups with other backgrounds.

Methodology

Data

The data include all club memberships during playing seasons 2005/'06 to 2014/'15, which were provided by the Royal Dutch Football Association (KNVB). To determine the ethnic background of members, these membership data were matched with individual data containing the country of origin of Dutch inhabitants and their parents kept by Statistics Netherlands (CBS).¹ This was done successfully for over 94% of the roughly 2.2 million individual members during this timeframe.

Measures

Ethnicity

In addition to ethnically Dutch, I distinguish between five single nationality minority backgrounds (Turkish, Moroccan, Surinamese, Antillean and Indonesian) and a 'rest of' category. In addition to being amongst the most sizable minorities in the Netherlands, these five groups have clear migration histories embedded within the Dutch historical context. For Turkish and Moroccan backgrounds this is tied to a large wave of labour migration and subsequent family reunification. Citizens with Surinamese, Antillean and Indonesian backgrounds have historical ties with one of the Netherlands' former colonies.

To determine an individual's ethnic background, the country of birth of the individual and the parents is used. If somebody has two parents who are both born in the Netherlands, this person has a 'Dutch' background. If someone has one or more parents born outside of the Netherlands, someone is considered to have a minority background. If this individual is born outside of the Netherlands, his or her background is determined by the country of birth (e.g. a person who is born in Turkey and has one or more parents who are born outside of the Netherlands will be considered Turkish). If a person has one or more parents born outside of the Netherlands, but he or she is born in the Netherlands, the country of birth of the parents is used. If only one parent is born abroad, the country of birth of this parent is used to determine the ethnic background. If both parents are born abroad and their countries of birth differ, the country of birth of the mother is used over the father's country of birth (e.g. a person who is born in the Netherlands with a mother born in Turkey and a father born in Morocco will be considered Turkish).

Club membership

An individual is considered a member of an amateur football club when he or she is officially registered at the Royal Dutch Football Association as a club member during a playing season. The length of the playing season was defined as beginning on the 15th of August of a certain year and ending on the 15th of May in the next year. Memberships which commenced after the 15th of May but were terminated before the 15th of August were left out. While rare, in some cases individuals have multiple club memberships. Given the focus on club compositions, these additional memberships are included in the study. Please note that the total number of memberships

reported in the results, therefore, slightly exceeds the number of individuals connected to these memberships. Furthermore, to avoid including clubs which are inactive and/or only exist on paper, I used a threshold of a minimum of 30 registered members in a given playing season.

Segregation

Ethnic inbreeding in co-membership ties can be measured using segregation indices, as these are primarily designed to measure the extent to which populations are unequally distributed over lower level units. For the purpose of this study, I use the index information theory index H , developed by Henri Theil (Theil, 1972; Theil & Finizza, 1971). In a review of six multi-group segregation indices, Reardon and Firebaugh (2002) conclude that the information theory index is the only measure following the 'principle of transfers', which means that transfers of members to clubs with a lower proportion of in-group members would be reflected in a decline of the index.

The information theory index is an entropy-based measure, meaning its calculation is based on entropy score E , sometimes described as the diversity index or score (Hao & Fong, 2011; Iceland, 2004). The entropy score expresses the degree of uncertainty about group membership when randomly selecting an individual from a population, assuming mutually exclusive groups. This degree of uncertainty is both a function of groups' proportions in a population and the total number of groups, and can be expressed in the following way (Theil, 1972):

$$E = \sum_{m=1}^M p_m (-\ln p_m)$$

In the above formula, p_m refers to the proportion of ethnic group m in the total population for M groups. E then equals to the sum of each group's proportion multiplied by the negative natural logarithm of that proportion. The minimum score of E equals 0. In this case, there is no uncertainty because all individuals belong to the same group: $1(-\ln 1) = 0$. The maximum score of E is the natural log of the total number of groups and occurs when each respective group comprises the exact same numbers of individuals. For seven groups (six ethnic categories and one 'rest of' category), this equals 1.946.

The entropy score is an expression of the diversity of a certain population. On its own, however, this score cannot be used to say anything about the degree in which groups evenly or unevenly distribute over lower level organisational units such as clubs. In order to do that, we must use the entropy score E to calculate the information theory index H . The information theory index can be understood as an expression of the weighted sum of deviates of entropy on the lower organisational level from the entropy on the population level. Its expression takes the following form (Theil, 1972):

$$H = 1 - \sum_j \frac{t_j E_j}{T E}$$

In the above formula, t_j refers to club j 's size, T refers to the total member population size, E_j refers to the entropy score of club j , and E refers to the entropy score of the total member population. When $H = 0$, each club's ethnic composition perfectly

resembles the total population – i.e. no difference between the levels in entropy – suggesting the absence of any inbreeding. In these cases, the relative proportion of in-group and out-group co-membership ties are the same as the relative proportions of these groups in the total member population. Higher values for H indicate that ethnic groups are less evenly distributed over clubs, with $H=1$ meaning that clubs are entirely mono-ethnic. In these cases, in-group co-membership ties are, on average, overrepresented and inbreeding is occurring. The interpretation of H is not entirely straightforward. Reardon and Yun (2003) advise to use the following cut-off points: Extreme (0.4–1), high (0.25–0.4), moderate (0.1–0.25) and low segregation (0–0.1).

The calculation of the entropy score and information theory index can be easily adapted to express dichotomous segregation instead of multi-group segregation. For group versus non-group segregation, one simply uses the proportion of a group and the value of 1 minus that proportion as the two proportions for calculating entropy on both levels. For group versus group segregation, t_j and T represent the size of the two groups on the club and population level, and one uses the proportions of these groups within these subpopulations to calculate entropy on both levels. While the entropy score is dependent on relative group size and number of groups, the information theory index is not. Therefore, the information theory index can be used to make direct comparisons between groups and their degree of inbreeding.

Results

Rising ethnic diversity

Table 1 contains the total number of club memberships per ethnic background over ten playing seasons. Here we see that the share of memberships belonging to members with immigrant backgrounds has risen over time and that therefore the diversity of the total member population E has increased as well. When we look more closely to specific backgrounds, we see that out of the single nationality immigrant backgrounds, only the Moroccan and Antillean groups have increased strongly over time. Furthermore, Turkish, Moroccan and Surinamese backgrounds show substantially higher numbers than Antillean and Indonesian backgrounds. These patterns are in line with earlier research on ethnic participation in Dutch amateur football clubs using similar data (Van Haften, *in press*).

Moderate overall segregation and size matters

Table 2 shows that overall ethnic segregation (total H) in amateur football is moderate (between 0.1 and 0.25), which indicates that clubs are substantially less diverse than the total population. In the same table, to the right, the segregation of each respective group is presented. Higher segregation indices point to more inbreeding. We observe moderate and high degrees of segregation for all groups, except members with an Indonesian background which show a low degree of segregation. This confirms expectation 1 of this paper:

E1: The average proportion of in-group co-membership ties substantially exceeds an ethnic group's proportion in the total member population.

Table 1. Overall diversity and total memberships per ethnic background between 2005 and 2015.

Playing season	Total <i>E</i>	Dutch	Turkish	Moroccan	Surinamese	Antillean	Indonesian	Rest	Total
2005/'06	0.657	950,959	30,149	22,207	19,509	7181	15,685	74,366	1,120,056
2006/'07	0.663	982,084	30,112	24,554	20,492	7776	15,624	78,960	1,159,602
2007/'08	0.662	1,004,203	29,986	25,192	20,745	8038	15,419	82,109	1,185,692
2008/'09	0.668	1,024,594	31,533	26,844	21,002	8312	15,018	85,719	1,213,022
2009/'10	0.673	1,027,323	32,262	28,233	20,886	8412	14,520	87,295	1,218,931
2010/'11	0.680	1,033,363	32,542	29,723	20,996	8872	13,981	90,570	1,230,047
2011/'12	0.684	1,031,736	31,458	31,000	20,820	9106	13,438	92,730	1,230,288
2012/'13	0.688	1,030,636	30,855	32,335	20,709	9204	13,136	95,011	1,231,886
2013/'14	0.695	1,020,474	31,026	33,250	20,218	9280	12,591	96,579	1,223,418
2014/'15	0.700	1,024,545	30,137	34,056	20,317	9641	12,102	101,184	1,231,982

Range of diversity (*E*): 0–1.946.

Table 2. Overall and group versus rest segregation between 2005 and 2015.

Playing season	Clubs	Total <i>H</i>	Dutch vs out-group	Turkish vs out-group	Moroccan vs out-group	Surinamese vs out-group	Antillean vs out-group	Indonesian vs out-group
2005/'06	3294	0.194	0.171	0.335	0.258	0.283	0.150	0.089
2006/'07	3254	0.192	0.172	0.321	0.271	0.280	0.147	0.086
2007/'08	3248	0.191	0.172	0.319	0.270	0.272	0.148	0.085
2008/'09	3220	0.192	0.175	0.322	0.273	0.263	0.147	0.085
2009/'10	3188	0.194	0.179	0.323	0.279	0.259	0.145	0.085
2010/'11	3142	0.195	0.182	0.325	0.279	0.255	0.151	0.083
2011/'12	3101	0.193	0.181	0.319	0.279	0.251	0.151	0.082
2012/'13	3061	0.192	0.182	0.315	0.278	0.247	0.147	0.081
2013/'14	3013	0.191	0.184	0.312	0.278	0.239	0.147	0.078
2014/'15	2965	0.186	0.179	0.302	0.269	0.233	0.146	0.074

Cut-off points for segregation (*H*): extreme (0.4–1), high (0.25–0.4), moderate (0.1–0.25) and low: (0–0.1).

Out-group includes 'rest of' category for ethnic background.

We further observe that overall segregation slightly declines over ten playing seasons. As this coincides with a diversifying member population – knowing that *H* expresses the weighted difference between total member population and club populations – we can conclude that members on average experience increasingly diverse club populations. It is important to note here that we also witness a substantial decrease in the number of clubs over which members are spread. Within ten playing seasons, the population of clubs has decreased by 10 per cent. Fewer and bigger organisational units are known to result in lower degrees of segregation because it constrains the opportunities sorting over clubs while increasing the opportunities for sorting within them.

Expectations 2A and 2B of this paper considered the relation between inbreeding and group size.

E2A: The relative size of an ethnic minority group in the total member population is positively related to inbreeding.

E2B: An increase in the size of an ethnic minority group within the total member population will be accompanied by a higher degree of inbreeding.

When we look more closely to the segregation indices for each group in [Table 2](#), we find further substantiation for these expectations. The most numerous minority groups (Turkish, Moroccan or Surinamese background) are highly segregated, while the less numerous groups (Antillean or Indonesian background) show moderate and low segregation. Furthermore, we see that the development of segregation is different

for minority groups that have grown significantly in size, compared to those that have not. The segregation of members with Turkish, Indonesian and especially Surinamese backgrounds has declined substantially. For members with Antillean backgrounds, there has only been a marginal decrease in segregation, while Moroccan members even have experienced an increase in segregation. The difference between Moroccan and Antillean backgrounds might be partly explained by their different group size, and a more limited effect of growth on segregation, due to few boundaries between this group and other groups.

A limited role for language

The third set of expectations in this paper was based on the notion that speaking a second, additional language can act as an important boundary between certain ethnic groups:

E3A: Members with Turkish and Moroccan backgrounds show relatively high degrees of inbreeding.

E3B: Amongst members with Dutch, Surinamese, Antillean or Indonesian backgrounds exist relatively low degrees of inbreeding.

Table 3 and Table 4 present the segregation between members with Turkish and Moroccan backgrounds and all other groups. All segregation indices fall into the high segregation category and in a few situations (Turkish vs Surinamese and Turkish vs Indonesian), we even see extreme cases of segregation. These findings are in line with expectation E3A.

Tables 5, 6 and 7 contain the segregation between members with Surinamese, Antillean and Indonesian backgrounds versus each of the other groups. If we look at the figures between Dutch, Surinamese, Antillean and Indonesian backgrounds, we fail to see a clear pattern of clustering of these groups. Surinamese backgrounds are least, but still moderately segregated from Antillean backgrounds. Additionally, members with Surinamese backgrounds are more segregated from Dutch and Indonesian backgrounds than from Moroccan backgrounds. Segregation indices for Antillean and Indonesian backgrounds do follow the correct order and are lowest versus Dutch backgrounds. However, save for segregation between Indonesian and Dutch

Table 3. Turkish members' group versus group segregation between 2005 and 2015.

Playing season	Turkish vs Dutch	Turkish vs Moroccan	Turkish vs Surinamese	Turkish vs Antillean	Turkish vs Indonesian
2005/'06	0.380	0.340	0.422	0.368	0.410
2006/'07	0.367	0.342	0.410	0.357	0.391
2007/'08	0.365	0.338	0.401	0.355	0.385
2008/'09	0.370	0.328	0.393	0.344	0.381
2009/'10	0.374	0.331	0.391	0.343	0.380
2010/'11	0.378	0.328	0.386	0.344	0.380
2011/'12	0.374	0.326	0.388	0.342	0.375
2012/'13	0.373	0.322	0.381	0.336	0.375
2013/'14	0.374	0.314	0.371	0.330	0.368
2014/'15	0.364	0.305	0.367	0.320	0.357

Cut-off points for segregation (H): extreme (0.4–1), high (0.25–0.4), moderate (0.1–0.25) and low: (0–0.1).

Table 4. Moroccan members' group versus group segregation between 2005 and 2015.

Playing season	Moroccan vs Dutch	Moroccan vs Turkish	Moroccan vs Surinamese	Moroccan vs Antillean	Moroccan vs Indonesian
2005/06	0.312	0.340	0.314	0.322	0.368
2006/07	0.325	0.342	0.318	0.320	0.366
2007/08	0.325	0.338	0.309	0.312	0.356
2008/09	0.330	0.328	0.305	0.308	0.356
2009/10	0.337	0.331	0.303	0.310	0.360
2010/11	0.341	0.328	0.295	0.306	0.357
2011/12	0.341	0.326	0.289	0.303	0.357
2012/13	0.342	0.322	0.284	0.293	0.356
2013/14	0.344	0.314	0.284	0.294	0.351
2014/15	0.335	0.305	0.274	0.280	0.340

Cut-off points for segregation (H): extreme (0.4–1), high (0.25–0.4), moderate (0.1–0.25) and low: (0–0.1).

Table 5. Surinamese members' group versus group segregation between 2005 and 2015.

Playing season	Surinamese vs Dutch	Surinamese vs Turkish	Surinamese vs Moroccan	Surinamese vs Antillean	Surinamese vs Indonesian
2005/06	0.339	0.422	0.314	0.244	0.364
2006/07	0.338	0.410	0.318	0.232	0.356
2007/08	0.332	0.401	0.309	0.227	0.345
2008/09	0.323	0.393	0.305	0.226	0.341
2009/10	0.320	0.391	0.303	0.225	0.340
2010/11	0.319	0.386	0.295	0.221	0.336
2011/12	0.317	0.388	0.289	0.218	0.330
2012/13	0.314	0.381	0.284	0.215	0.323
2013/14	0.305	0.371	0.284	0.212	0.310
2014/15	0.298	0.367	0.274	0.203	0.308

Cut-off points for segregation (H): extreme (0.4–1), high (0.25–0.4), moderate (0.1–0.25) and low: (0–0.1).

Table 6. Antillean members' group versus group segregation between 2005 and 2015.

Playing season	Antillean vs Dutch	Antillean vs Turkish	Antillean vs Moroccan	Antillean vs Surinamese	Antillean vs Indonesian
2005/06	0.191	0.368	0.322	0.244	0.277
2006/07	0.189	0.357	0.320	0.232	0.268
2007/08	0.190	0.355	0.312	0.227	0.269
2008/09	0.191	0.344	0.308	0.226	0.267
2009/10	0.188	0.343	0.310	0.225	0.266
2010/11	0.198	0.344	0.306	0.221	0.272
2011/12	0.199	0.342	0.303	0.218	0.272
2012/13	0.197	0.336	0.293	0.215	0.267
2013/14	0.196	0.330	0.294	0.212	0.261
2014/15	0.196	0.320	0.280	0.203	0.258

Cut-off points for segregation (H): extreme (0.4–1), high (0.25–0.4), moderate (0.1–0.25) and low: (0–0.1).

Table 7. Indonesian members' group versus group segregation between 2005 and 2015.

Playing season	Indonesian vs Dutch	Indonesian vs Turkish	Indonesian vs Moroccan	Indonesian vs Surinamese	Indonesian vs Antillean
2005/06	0.101	0.410	0.368	0.364	0.277
2006/07	0.099	0.391	0.366	0.356	0.268
2007/08	0.099	0.385	0.356	0.345	0.269
2008/09	0.098	0.381	0.356	0.341	0.267
2009/10	0.098	0.380	0.360	0.340	0.266
2010/11	0.097	0.380	0.357	0.336	0.272
2011/12	0.096	0.375	0.357	0.330	0.272
2012/13	0.096	0.375	0.356	0.323	0.267
2013/14	0.094	0.368	0.351	0.310	0.261
2014/15	0.089	0.357	0.340	0.308	0.258

Cut-off points for segregation (H): extreme (0.4–1), high (0.25–0.4), moderate (0.1–0.25) and low: (0–0.1).

backgrounds, segregation indices between ex-colonial and Dutch backgrounds remain moderate or high.

Moreover, the growth in members with Antillean backgrounds is, remarkably, coupled with increasing segregation between Dutch and Antillean members, which indicates that a more even ratio between these two groups on the population level has not led to a similar increase in meeting opportunities on the club level. In [Table 3](#) and [4](#) we do see that Moroccan backgrounds are less segregated from Dutch background than Turkish backgrounds, which we would expect based on their command and use of the Dutch language. The lack of clustering of ex-colonial and Dutch background, however, leads me to reject expectation E3B.

Religious exclusion over inclusion?

The last expectation of this paper was based on the consideration that the distinction between Muslims and non-Muslims can act as an important barrier between Turkish and Moroccan backgrounds on the one hand, and all other groups on the other hand:

E4: Members with Turkish and Moroccan backgrounds show lower degrees of mutual inbreeding compared to degrees of inbreeding between these groups and groups with other backgrounds.

As was already mentioned previously, [Table 3](#) and [4](#) showed high degrees of segregation between Moroccan and Turkish backgrounds, and all respective out-groups. Members with Turkish backgrounds are least segregated from Moroccan backgrounds, which could be partly explained by their shared religion. However, the difference between this segregation and segregation between members with Turkish backgrounds and other groups is relatively small. Moreover, members with Moroccan backgrounds are in turn less segregated from members with Surinamese and Antillean backgrounds than from members with Turkish backgrounds. This does not seem to align with the idea that the Muslim–non-Muslim distinction acts as an important boundary for sorting members over clubs. While this distinction might play an exclusionary role and partly explains the high inbreeding of members with Turkish and Moroccan backgrounds, it does not seem to have an inclusionary effect. Therefore, I decide to reject the fourth and final expectation of this paper.

Conclusions and discussion

In this study, I have taken a closer look at ethnic inbreeding homophily in co-membership ties obtained in the Netherlands' most popular associational sport. The research question guiding this study was:

RQ: To what extent are ethnic groups within the Netherlands unequally distributed over amateur football clubs?

In line with the homophily principle, I find that clubs on average provide substantially more in-group co-membership ties than the composition of the total member population would suggest. This goes to show that even when a sport can count on high interest and participation across a wide range of ethnic groups – which is far

from always the case – there are limitations on its ability to link people with different ethnic backgrounds together.

I proposed two factors that could partly drive differences in groups' degree of inbreeding and co-membership ties with various other groups. The first factor was group size. This does seem to be associated with higher levels of inbreeding for minority groups, suggesting that bigger numbers allow for more homophilic tie-formation and/or that new members gravitate to clubs with ethnic peers. Consequently, we should not assume that democratisation of sports and increases in minority participation automatically translate to interethnic mixing at the club level.² Part of the increase in mixed interactions might take place between clubs instead of within clubs. While Janssens and Verweel's study (Janssens & Verweel, 2014) suggests that there is little reason to assume that 'separate' or 'mixed' clubs have diametrically opposed effects on ethnic relations, the potential for the development of durable interpersonal ties is most likely strongly diminished in the first instance. Moreover, when ethnic groups meet in the competitive and sometimes heated setting of the sports arena, this also involves a risk for escalation and reaffirmation of interethnic prejudice (Krouwel et al., 2006).

The second factor which could drive differences in ethnic inbreeding of groups is the presence or absence of interethnic boundaries. While I did find that the two groups which were expected to experience strong boundaries between themselves and various others were also on average the most segregated, there was no clear evidence that these boundaries caused strong and clear patterns of segregation between all groups. Surinamese members were much more segregated than both dimensions would have suggested. A possible explanation for this, as well as for the lack of clear effects of language and religion, might be that these dimensions are overshadowed by a strong pattern of residential segregation for this group. Additionally, I found very little proof for bonding over religion between members with Turkish and Moroccan backgrounds. The group size of these two groups might explain why they feel little need to join the same clubs. Additionally, citizens with Moroccan and Turkish backgrounds experience religion segregated from each other, in separate Mosques with services held in different languages. Language, in this case, might supersede religion.

The mechanisms which drive people with similar ethnic backgrounds together are manifold and strongly intertwined, making it both very difficult and, to a certain extent, problematic to isolate causal factors. The ethnic homogeneity of the family unit and the unequal distribution of ethnic groups over geographic space – for example due to selective settlement after immigration – present people from the very beginning with skewed starting positions for lifelong tie-formation. Overlapping cleavages between ethnic background and other important social characteristics,³ such as economic capital, educational attainment and occupational status, can perpetuate or intensify unequal meeting opportunities, and also serve as fruitful bases for interethnic prejudice. (McPherson et al., 2001).

Effectively testing several of these mechanisms requires very complex and dynamic data on large network structures and a wide range of time variant individual-level variables, which, unfortunately, is well beyond the scope and possibilities of this study. However, an interesting next step from this study would be to study the effect of club

compositions on dropout. Homophily is both driven by tie-formation and tie-dissolution, but the latter topic has enjoyed much less attention (McPherson et al., 2001). Comparing levels of ethnic segregation in membership with the effect of ethnic group sizes in clubs on dropout could help us in further understanding the extent to which segregation of groups and between groups is a product of unequal meeting opportunities or a consequence of interethnic relations and differences in group members' willingness and unwillingness to connect with in- and out-group members – described by McPherson and Smith-Lovin (1987) as choice homophily.

Notes

1. All results presented in this paper are based on calculations by the author using a combination of membership data from the Royal Dutch Football Association and non-public microdata from Statistics Netherlands. Under certain conditions, these microdata are accessible for statistical and scientific research. For further information: microdata@cbs.nl.
2. The focus of this study was put on ethnic inbreeding in co-membership ties. See Zwahlen, Nagel, and Schlesinger (2018) for an important discussion on the topic of social integration in club contexts beyond the notion of membership.
3. Described as social consolidation (McPherson & Smith-Lovin, 1987).

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