

The influence of social ties on social and recreational activity participation of ethnic groups in the Netherlands

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Abstract

A well established literature has demonstrated the relationship between size and composition of social networks and engagement in social and recreational activities and travel. However, less attention has been given to the issue of how the influence of social networks on activity participation differs between individuals from different backgrounds. The paper addresses this issue in the context of differences between ethnic groups. First, the potential roles of various types of social networks for engagement in social/recreational activities are discussed and differences in this respect between ethnic groups, discussed in the literature, are discussed. Next, using a Dutch data set of activity engagement in social/recreational activities of different ethnic groups in the Netherlands, the influence of involvement in different social networks (family, friends, associations) on the participation in social/recreational activities is investigated by estimating ordered logit models for ethnic groups separately. Special attention is given to the role of inter-ethnic contacts. The results suggest that interactions with friends and family and associational membership are more important for individuals from ethnic minorities than for native Dutch to facilitate engagement in social activities such as seeing a play, sightseeing and visiting a restaurant. For sports, differences are less pronounced. Inter-ethnic contacts generally increase engagement in social-recreational activities, although the effect is not equally clear for all ethnic minorities.

1. Introduction

Over the past decade, the literature in transportation and geography has witnessed an increased interest in social and recreational activities and travel. In transportation science, the increased interest stems from the awareness that the increase in car mobility over the past decades, which has led to adverse effects such as congestion, pollution and CO₂ emissions, is caused to a considerable extent by an increase in travel for social and recreational purposes (Schad et al., 2009; Axhausen 2008). In contrast to their importance to mobility development, social and recreational trips have received less attention in the literature than for instance commute and shopping trips. Yet, the importance of social and recreational travel in total mobility calls for a better understanding of their backgrounds and influencing factors.

In geography and sociology, social and recreational activities have received increasing attention from an accessibility and social exclusion point of view. Various scholars have studied to what extent specific groups, such as elderly (Spinney et al., 2009), ethnic minorities (Comber et al., 2008) or socially vulnerable groups (Lucas et al., 2009) are able to take part in social and recreational activities in the context of their spatial location, transportation options or specific limitations (e.g., physical limitations). Underlying many of these studies is the notion that participation in social activities is important for individuals' well-being (Scott, Jacobson) and that participation in social activities, such as associations, leads to more social cohesion and mutual respect (Andrews, 2009).

It is obvious that social and recreational activities and travel have a social dimension. According to (Urry, 2003), social-recreational travel and activities are necessary in order for individuals to function in social life and to make and maintain complex connections between leisure groups, family or friends. As a result, social-recreational activities are, in majority, performed with other people (Sharmeen and Ettema, 2010; Bhat and Srinivasan, 2008). This implies that decisions regarding frequency, company, destination and travel mode of social-recreational trips also need to be understood from a social perspective. Based on this consideration various scholars have over the past years started to study the relationship between individuals' social-networks and their engagement in social and recreational activities.

A first strand of studies has focused on general relationships between the composition and structure of social networks and frequency of social or recreational trips. Carrasco et al. (2006) found that engagement in social activities (e.g. hosting visitors and going to a bar/restaurant), controlled for socio-demographic characteristics, was dependent on the composition of a person's social network such as the number of family members, friends, and network members from social organisations. Also geographical aspects of the social network appeared to matter, to the extent that increased distance to social network members reduced frequency of engagement in social activities. In a later study, (Carrasco and Miller, 2009) found that apart from characteristics of the network as a

whole (such as density, number of isolates and centrality), characteristics of the alter (age, gender, alter's position in his/her ego-net work) and the tie (similarity, distance, frequency of ICT-interaction) also influenced the probability of social activities. Ginsberg (1975) found that if more friends lived in the same neighbourhood, one is more likely to undertake leisure activities with friends rather than with the spouse/husband. Although this relationship is mediated by gender, education and cultural background, it suggests that the social network of friends and family constitutes a resource for undertaking leisure activities which normally require company.

Other scholars have focussed in a more general way on the size and composition of the social network and the frequency of face-to-face contact between network members. Tillema et al. (2007) found that the frequency of face-to-face contact correlated negatively with distance to the other network members and increased with the number of persons in the social network, the share of relatives in the social network, use of Internet and SMS and car availability. Mok et al. (2007) also found that frequency of face-to-face contact between social network members depends on geographical distance, and also on the type (kin, friends) and intensity (intimate, non-intimate) of the tie. Regarding the travel implications of face-to-face contacts between network members, Silvis et al. (2006) found that the length of social trips is positively related to the number of people in the social network, proportion and number of non-immediate kin, and the average age of the social network ties. The number of social trips correlated positively with social network size, household size and income.

Thus, the existing literature on social networks, activities and travel suggests that size and composition of the social network plays an important role in generating social and recreational activities and travel. However, given this general observation the question can be raised to what extent the influence of social network on activity participation may be different for people with different backgrounds. For instance, Walker (1995) notes that social interactions between blue collar workers are more often aimed at practical support with services, equipment etc, whereas social interactions between white collar workers are more often directed toward cultural and social events. This suggests that social networks of individuals of different social classes fulfil different roles and lead to engagement in different types of social activities. In this paper, we will further explore the differences in the role of the social network for participation in social and recreational activities for individuals from different ethnic backgrounds.

This focus contributes to the literature in various ways. First, the transportation literature has to date paid limited attention to the role of ethnicity for understanding travel decisions. Some scholars have investigated the role of ethnicity on issues such as car ownership, travel duration and mode choice (e.g. Giuliano, 2003), but differences in social and recreational activity participation between ethnic groups have received little to no attention. Getting more insight into the

participation in social and recreational activities by minorities is important if we are to understand trends in mobility patterns related to demographic transitions in Western societies (Harms, 2008). Demographic transitions and migration will increase the relative share of non-western immigrants in both Europe and North-America, further necessitating studies into the relationship between ethnicity and travel behaviour.

A second contribution to the literature is that we specifically address the relationship between membership of social networks and participation in social/recreational activities for different ethnic groups. Various studies have been carried out into the relationship between ethnicity and membership of various types of social networks (Aasland and Fløtten, 2001; Kim and McKenry, 1998) and into the relationship between ethnicity and social activity participation (Farber and Paez, 2009; Kim and McKenry, 1998; Platt, 2009). However, the way in which ethnicity mediates the influence of social network membership on social activity participation has not been addressed (Figure 1). Yet, to understand participation in social activities of different ethnic groups, with obvious implications for travel, social inclusion and social cohesion, it is important to understand to what extent different ethnic groups rely in a different way on their social networks. To this end, ordered logit models of participation in various activities will be estimated for different ethnic groups, using a 2005 Dutch data set, using both socio-demographic and social-network variables as independents.

The paper is organised as follows. Section 2 reviews the literature on the role of social networks and formulates hypotheses about how social networks influence activity engagement of different ethnic groups. Section 3 describes the data set that was used to test the hypotheses, including selected sample characteristics. Section 4 describes the results ordered response models, which were used to test the impact of social network links on activity engagement. This section also draws conclusions about the role of various social networks. Section 5 draws general conclusions and charts directions for further research.

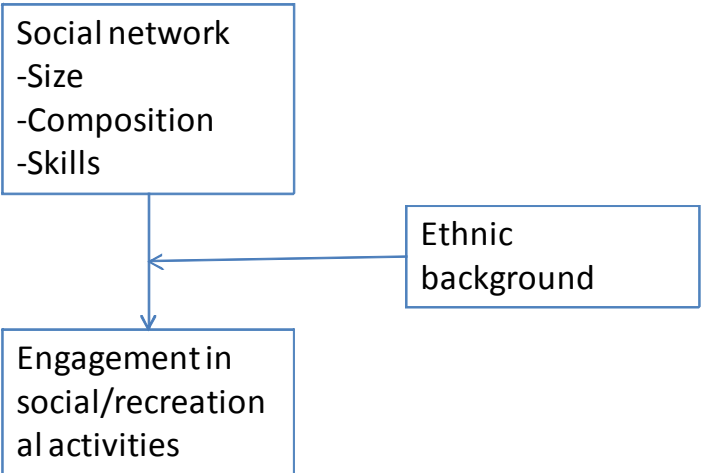


Figure 1: Conceptual model

2. Membership of social networks and social/recreational activities of ethnic groups

Before discussing membership of social networks and its implications for SR activities in details, some definition issues should be discussed. Studies of the influence of SN on travel and activities (e.g. Carrasco et al., 2006) have usually worked from a rather technical definition of SN. Basically, using name generators, relevant friends and family members (the alters) of an individual (the ego) are identified, together with characteristics such as frequency of interaction, socio-demographics, geographical location and mutual connections between alters. Based on these data, quantitative network characteristics can be derived based on formal social network theory (Hanneman and Riddle, 2005).

It is noted that in the sociological literature, also a more general definition is adopted, in which social networks are defined as the existence of social relationships between individuals, which function to provide emotional nurturance, resource and information assistance and include norms of reciprocity and trustworthiness (Andrews, 2009; Kim and McKenry, 1998; Platt, 2009). Basically, the function of SN is thus to provide and receive social capital, which is found in various organisational forms, which may be formal (such as associations, political organisations), or informal, such as family and friends' networks. Commonly, membership of such networks or frequency of certain types of contacts is at the focus of research, more than their exact configuration and composition. In line with this approach, we will focus in this paper on the membership of various types of social networks (types of associations, friends and family, jobs) and their influence on participation in social and recreational activities for different ethnic groups.

In the remainder of this section we will discuss various types of social networks and their potential implications for social network participation of various ethnicities. In this respect, we will emphasize the role of social networks as carriers of social capital defined as tangible (goods, money) or intangible (advice, emotional support, companionship) resources held by others, to whom one is linked via friendship, kinship or organisational ties (Hanson, 1998; Magdol and Bessel, 2003; Warde and Tampubolon, 2002; Wellman and Frank, 2000) . The exact configuration and composition of the social network and their impact on activity participation are beyond the scope of this paper.

Associations

Membership of associations (e.g. sports clubs, cultural clubs, political organisations etc.) is reported to differ between ethnic groups in different geographical contexts. For instance, Kim and McKenry (1998) report differences in organisational membership of various kinds (political, sports, hobby, nationality, religious) between Caucasians, African-Americans, Hispanics and Asian-Americans in the United States. The fact that they also report differences in participation in social activities between these groups suggests that associational membership plays a role in engagement in these activities.

In a different context (England and Wales), Platt (2009) also reports differences in participation in social activities (including organised club activities) between white British, Indian, Pakistani, Bangladeshi, Caribbean and black African inhabitants. Aasland and Fløtten (2001) report differences in membership of political and other organisations between the Slavic and Baltic groups in Estonia and Latvia, possibly adding to different degrees of social isolation.

Obviously, membership in an organisation leads to more frequent engagement in activities directly associated with the organisation (e.g. sports activities organised by a sports club). However, there may be wider impacts. In the context of recreational activities, Warde and Tampubolon (2002) mention the availability of companions and spreading of information regarding recreational options as resources offered by the association. For instance, they find that individuals involved in more associational memberships (clubs etc.), engage more frequently in leisure activities associated with the membership (e.g. sports) but also in other leisure activities such as eating out. In addition, higher levels of associational membership are positively correlated with a wider range of leisure activities. This suggests that the social network offers both the availability of companionship and the opportunity to learn about recreational options.

With respect to information, Stalker (2008) and Warde and Tampubolon (2002) show that individuals with a higher degree of associational membership have a broader range of leisure and recreational activities. This can be attributed to the fact that being active in multiple different networks leads to obtaining more diverse and more complete information.

Thus, the literature suggests that associational memberships contribute to engagement in social activities directly through the activities organised by the association, but also indirectly by serving as a platform for the exchange of information about social activities and providing companionship for social and recreational activities. It is likely, however, that associational membership has different added value for people from different ethnic backgrounds. For instance, constraints with respect to other modes of information or companionship (such as other social networks), monetary resources or geographical location will be different for different groups (Platt, 2009), possibly making them more or less dependent on associational memberships.

Friends and family

Besides associational memberships, networks of friends and family serve as a source of social capital. Note that in studies of the relationship between SN and travel, the focus is usually on friends/family. As noted by Kim and McKenry (1998), kin and friendship networks differ between ethnic groups in size, composition and functionality. For instance, Mindel (1980) reports that family and friends' networks are more instrumental for African-Americans than for Hispanics.

Regarding the functionality of friendship and kin networks, their role in providing various types of support (emotional, financial, practical services, advice) is often highlighted (Wellman and Frank, 2000; Voorpostel and Lippe, 2007). Scholars in this domain indicate that the probability of receiving support depends on various network characteristics. First, the character of the link may play a role. For instance, kin may be more likely to provide support than friends, due to a higher degree of moral obligation than in networks of friends. However, the quality of the link also plays a role. For instance Voorpostel and Van der Lippe (2007) show that siblings under 36 years who both have children are more likely give each other advice, since they are more equal to each other. Thus, the availability of resources (advice, practical skills) plays an important role in giving/receiving support.

However, family and friends' networks also play a role for participation in social and recreational activities. Walker (1995) mentions joint activities with friends, such as going to a pub or visiting cultural events. Ettema and Sharmeen (2010), Bhat and Srinivasan (2008), Fan and Khattak (2009) all highlight that a large percentage of social and recreational activities is undertaken with family or friends.

As for associational memberships, friends and family may fulfil multiple roles in the context of social and recreational activities. A first is companionship. With respect to companionship, it is noted that the characteristics of alters play a significant role. For companionship in sports or cultural activities, for instance, one needs a companion with the appropriate taste and/or skills. Supporting this observation, Warde and Tampubolon (2002) found that individuals with more homogeneous networks of friends, who are more likely to share the same taste/skills, were more likely to engage in leisure activities. Another role of the friends' network, as in associational networks, is exchanging information (Warde and Tampobulon, 2002) about social and recreational events or about behaviour that is desirable. In this respect, one would expect that a more diverse social network would be associated with more engagement in social/recreational activities, since diversity adds to more diverse information being available. However, a high degree of heterogeneity may also lead to weaker ties and less frequent interaction. This effect was shown for women in ethnic minority groups by Plat (2009). The question thus remains, to what extent diversity of one's social network leads to more and more diverse engagement in social/recreational activities, and how this may differ between ethnic groups.

Finally, it is noted that social networks can be regarded as exchange networks, in which network members exchange tangible or non-tangible goods (Thibaut and Kelley, 1959; Molm, 2003) with the intention of achieving certain goals. An important principle in exchange theory is that network partners want to maintain access to their network capital and therefore will actively work to

maintain their network links, for instance by providing company or giving attention in general, both leading to joint social or recreational activities.

This is related to the concept of reciprocity, which entails that social links will only last durably if the outcome is profitable for both partners. In other words, if one receives much support (in whatever way) from family or friends, one is requested to also do something in return. This does not, however, have to be in the same fashion, but may take place in terms of other support or by devoting time and attention to the other (Jain and Lyons, 2008), again implying joint SR activities.

Thus, friends and family networks will influence SR activities through providing companionship and sharing information about SR opportunities. In addition, maintaining links with friends/family as a goal in itself may lead to joint SR activities. Again, the way in which family and friends networks influence SR activities may be different for people with different backgrounds. As already noted, the role of friends' and family networks differs between people of different backgrounds (Kim and McKenry, 1998; Walker, 1995) with possibly different implications for SR activity engagement. Also, access to other networks, such as associations and work, may be different for different ethnic groups, implying different degrees of dependency on friends' and family networks.

Work

Work is mentioned as a critical factor in studies of social exclusion (Aasland and Fløtten, 2001). An important role is that it provides economic security and thereby the opportunity to establish social contacts and participate in social activities. Also, it leads to a higher sense of well-being and self confidence. Although income is a key variable in explaining and understanding social inclusion, various authors (e.g., Platt, 2009) note that other circumstances may compensate for lack of income and that sufficient income in itself is not a necessary condition for social inclusion. Apart from work as a source of income, it is important as a source of social relationships (Platt, 2009). As with friends and family, workers will establish social relationships with colleagues, which may serve as sources for companionship and exchange of information. As noted by Walker (1995), work relationships may develop into friendships and occasionally, social activities may be undertaken with colleagues.

Participation in paid work may differ between ethnic groups (Aasland and Fløtten, 2001; Platt, 2009) and intensity of contact with colleagues once at work may differ between ethnic groups (Aasland and Fløtten, 2001). As a consequence, the importance of having a job for participation in social and recreational activities may differ between ethnic groups.

Conclusion

This section has illustrated that the existing literature reports differences between ethnic groups with respect to associational memberships, friends and family networks and work participation in a variety of western societies. In addition, differences between ethnic groups are reported with respect to participation in social activities such as going out, attending club activities etc. Although there will likely be relationships between differences in social networks and differences in social participation, stemming from the functionalities of social networks described in this section, these relationships are not reported. This paper aims at filling this specific gap, by investigating for different ethnic groups in the Netherlands, to what extent participation in various social activities depends on participation in various types of social networks.

3. Survey design

3.1. Data

To gain insight into the role of various social network for social and recreational activities of different ethnic groups, we have used an existing survey of activity and travel behaviour in the Netherlands (Life circumstances of Urban Immigrants Survey). A specific characteristic of this survey is that it includes the dominant ethnic minorities (Turks, Moroccans, Surinamese and Antilleans) and original Dutch in about equal proportions.

The survey includes questions regarding frequency of involvement in social (contacts with friends and family, hosting friends/neighbours, getting help or advice, contacts with neighbours or people in the neighbourhood, helping family or friends) and recreational (seeing a play/dance, visiting a classical music concert, seeing cabaret, pop/rock concert, visiting a house party, seeing a musical, seeing a movie, going to a museum, sightseeing, going to a restaurant, out-of-home sports) activities. In addition, the survey involves questions regarding associational memberships (clubs for drawing/painting/sculpture, clubs for music, clubs for dancing, sports club).

Data were collected in 2004 and 2005 in the 50 largest municipalities in the Netherlands, based on municipal administrations of inhabitants. The sample consists of 919 Moroccans, 947 Turks, 825 Antilleans, 763 Surinamese and 642 original Dutch. The response rates for these groups were 45%, 51%, 47%, 38% and 50% respectively. Data were collected using compute assisted personal interviews (CAPI).

Table 1 provides details of the sample characteristics. Regarding the age distribution, it is noted that whereas Dutch are overrepresented in the cohort 45-65 years, ethnic minorities are overrepresented in the age cohorts up to 30 years. Regarding marital status, we find that the

majority of Dutch and especially Turks and Moroccans are married, and that Surinamese and Antilleans have higher shares of divorced/widowed and never married persons. With respect to driver license holdership, ethnic minorities, especially Moroccans, are less likely to have a license. Similar trends are seen for car ownership. Considerable shares of ethnic minority groups have only elementary education, whereas Dutch are 2-5 times more likely to have an academic or higher education degree than other groups. This is reflected in the income distribution, which shows an overrepresentation of Dutch in the higher income classes and the reverse for the lower income classes.

Table 1: Sample characteristics by ethnicity

| | Turkish | Moroccan | Surinamese | Antilleans | Dutch | Total | p ¹ |
|-------------------------|---------|----------|------------|------------|-------|-------|----------------|
| Age | | | | | | | |
| 15-19 | 11.0% | 14.4% | 13.7% | 14.2% | 8.3% | 12.4% | 0.00 |
| 20-29 | 26.2% | 23.5% | 20.7% | 25.9% | 15.9% | 22.8% | |
| 30-44 | 44.7% | 41.5% | 34.5% | 34.5% | 32.9% | 38.2% | |
| 45-65 | 18.1% | 20.6% | 31.2% | 25.5% | 42.9% | 26.6% | |
| Marital status | | | | | | | |
| Married | 71.1% | 67.4% | 37.5% | 30.0% | 58.0% | 53.8% | 0.00 |
| divorced, widow | 8.6% | 5.8% | 15.5% | 10.8% | 9.2% | 9.8% | |
| never married | 20.4% | 26.8% | 47.0% | 59.3% | 32.9% | 36.5% | |
| drivers license? | | | | | | | |
| drivers license? | 64.5% | 46.1% | 56.4% | 59.5% | 79.7% | 60.4% | 0.00 |
| Car ownership | | | | | | | |
| no car | 23.5% | 29.2% | 33.6% | 43.8% | 14.3% | 29.2% | 0.00 |
| one car | 64.3% | 62.8% | 50.9% | 45.3% | 57.1% | 56.6% | |
| two or more cars | 12.1% | 8.0% | 15.5% | 10.9% | 28.7% | 14.3% | |
| Education level | | | | | | | |
| elementary school | 41.6% | 36.7% | 24.0% | 25.8% | 0.0% | 26.6% | 0.00 |
| lower vocational | 32.9% | 33.7% | 29.1% | 25.5% | 34.8% | 31.2% | |
| medium professional | 19.0% | 22.5% | 32.2% | 30.6% | 32.4% | 27.0% | |
| university | 6.5% | 7.1% | 14.7% | 18.0% | 32.8% | 15.2% | |
| Income | | | | | | | |
| < 1500€ | 58.4% | 69.2% | 46.4% | 57.7% | 28.5% | 53.3% | 0.00 |
| 1500-2500€ | 35.2% | 24.5% | 29.6% | 22.9% | 28.5% | 28.2% | |
| 2500-3500€ | 4.3% | 5.5% | 17.2% | 13.0% | 27.1% | 12.6% | |
| >3500€ | 2.0% | 0.8% | 6.8% | 6.4% | 15.8% | 5.9% | |

¹ Significance level in Chi-square test of difference between ethnic groups

Table 2 shows the membership levels of professional (jobs) and associational networks (clubs). The general trend shown here is that Dutch more often have a job and are member of creative or sports clubs. They also more often are active as a volunteer in a club. The exceptions are Surinamese and Antilleans, who are more often member of singing and dancing clubs.

Table 2: Membership of networks by ethnicity

| | Turkish | Moroccan | Surinamese | Antilleans | Dutch | Total | p |
|---------------------------|---------|----------|------------|------------|-------|-------|------|
| % with job | 43.8% | 42.7% | 61.2% | 52.6% | 67.1% | 52.3% | 0.00 |
| % member of creative club | 1.1% | 1.5% | 1.2% | 2.7% | 3.9% | 2.0% | 0.00 |
| % member of singing club | 2.1% | 2.4% | 6.8% | 10.0% | 8.1% | 5.6% | 0.00 |
| % member of dancing club | 1.8% | 2.0% | 8.4% | 7.4% | 7.2% | 5.1% | 0.00 |
| % member of sports club | 16.7% | 20.2% | 29.3% | 27.7% | 36.8% | 25.3% | 0.00 |
| % voluntary work in club | 14.1% | 16.6% | 24.5% | 26.2% | 39.3% | 23.1% | 0.00 |

¹ Significance level in Chi-square test of difference between ethnic groups

Table 3 provides an overview of interaction with friends and family. The table shows that all groups in majority have contact with friends and family at least once a week. The most salient differences are in the 'hardly ever' categories. Moroccans and Surinamese more often have no contact with friends or family. Larger differences are observed for hosting visitors. All ethnic minorities, but especially Turks and Moroccans, more often host friends or neighbours than Dutch. Regarding giving and receiving help, we find that Dutch are more likely to help family and friends, but are less likely to receive help. Relating ethnicity to receiving help or advice, it is found that ethnic minorities are more likely to receive help or advice from Dutch than the other way around. We also find that Moroccans and Turks more often have frequent contacts with neighbours and people in the neighbourhood, and Surinamese and Antilleans the least. Regarding recreational activities, we find that Dutch most frequently participate in all listed recreational activities. Turks and Moroccans are the least involved in all categories.

Table 3: Participation in social and recreational activities by ethnicity

| | Turkish | Moroccan | Surinamese | Antilleans | Dutch | Total | p |
|---|---------|----------|------------|------------|-------|-------|------|
| contact with friends | | | | | | | |
| once a week or more | 82.8% | 75.5% | 77.0% | 82.3% | 84.1% | 80.2% | 0.00 |
| 2-3 times/month | 8.1% | 8.9% | 7.8% | 8.9% | 9.2% | 8.6% | |
| once a month | 2.5% | 3.9% | 4.2% | 2.6% | 3.3% | 3.3% | |
| less than once a month | 1.7% | 2.6% | 3.4% | 2.2% | 1.8% | 2.3% | |
| hardly ever | 4.9% | 9.1% | 7.5% | 4.0% | 1.7% | 5.6% | |
| contact with family | | | | | | | |
| once a week or more | 79.6% | 73.7% | 76.2% | 74.9% | 77.5% | 76.4% | 0.00 |
| 2-3 times/month | 9.8% | 11.4% | 12.3% | 13.5% | 13.5% | 11.9% | |
| once a month | 4.5% | 6.0% | 4.6% | 5.4% | 6.2% | 5.3% | |
| less than once a month | 3.3% | 3.3% | 4.0% | 3.5% | 1.4% | 3.1% | |
| hardly ever | 2.7% | 5.6% | 3.0% | 2.7% | 1.5% | 3.2% | |
| Hosting friends/neighbours | | | | | | | |
| Often | 30.0% | 16.0% | 11.1% | 9.4% | 7.0% | 26.4% | 0.00 |
| Dometimes | 37.9% | 38.0% | 40.7% | 33.3% | 25.8% | 37.2% | |
| Never | 32.2% | 46.0% | 48.1% | 57.3% | 67.2% | 36.4% | |
| frequent contact with neighbours | 64.7% | 64.7% | 48.8% | 47.4% | 52.3% | 56.3% | 0.00 |
| frequent contact in neighb.hood | 50.9% | 53.4% | 36.4% | 37.6% | 41.0% | 44.6% | 0.00 |
| Advice from other ethnicity | | | | | | | |
| Advice from same ethnicity | 34.3% | 40.4% | 52.4% | 52.7% | 17.1% | 39.9% | 0.00 |
| Help from other ethnicity | 57.0% | 48.5% | 53.4% | 47.0% | 66.2% | 54.0% | 0.00 |
| Help from same ethnicity | 27.2% | 33.9% | 41.3% | 42.0% | 13.7% | 32.0% | 0.00 |
| Interaction with family | 52.3% | 45.4% | 44.6% | 40.8% | 55.1% | 47.5% | 0.00 |
| % helps family | 7.0% | 9.3% | 10.1% | 6.1% | 13.4% | 8.9% | 0.00 |
| % helps friends | 1.5% | 1.6% | 3.4% | 2.6% | 4.1% | 2.5% | 0.03 |
| % helped by family | 9.6% | 10.4% | 7.8% | 5.8% | 4.7% | 7.9% | 0.00 |
| % helped by friends | 2.2% | 3.3% | 2.0% | 2.5% | 2.0% | 2.4% | 0.36 |

¹ Significance level in Chi-square test of difference between ethnic groups

Finally, Table 4 summarises the participation in various social/recreational activities of the ethnic groups. This table illustrates that Dutch have the highest percentage of participation in social/recreational activities, and Turks and Moroccans have the lowest participation rate in all activity classes. Surinamese and Antilleans show only slightly lower participation rates, but have lower percentages of sightseeing.

Table 4: Participation in social/recreational activities by ethnicity

| | Turkish | Moroccan | Surinamese | Antilleans | Dutch | Total | p |
|---|---------|----------|------------|------------|-------|-------|------|
| Part. in recreational activities | | | | | | | |
| % see a play | 12.8% | 11.8% | 26.8% | 26.7% | 33.5% | 21.3% | 0.00 |
| % sightseeing | 21.4% | 25.6% | 27.5% | 29.4% | 53.4% | 30.3% | 0.00 |
| % visiting a restaurant | 64.9% | 61.6% | 83.6% | 82.5% | 93.5% | 75.7% | 0.00 |
| % sporting | 41.3% | 43.4% | 57.8% | 51.4% | 66.7% | 50.9% | 0.00 |

3.2. Analyses

As noted before, the aim of the paper is to investigate the influence of various types of social networks on engagement in social and recreational activities. Although the database includes a wide variety of social/recreational activities we selected four that we believe represent the spectrum of social recreational activities well: seeing a play, sightseeing, visiting a restaurant or cafe, sports. To explain participation in social activities, we used indicators of participation in various networks. Having a job and associational memberships were directly available from the data set. It is noted that associational membership includes both formal and more informal associations, such as an informal group with whom one plays tennis. To represent interaction with family and friends, we did not have precise information about size and composition of social networks. Therefore we used indicators of frequency of contact with friends¹, family and neighbours, as well as certain types of contact, such as getting/giving support or advice. While it is recognised that the general specification of some variables (e.g. contacts with friends) opens the option of tautology (e.g. sightseeing with friends is a form of contact with friends), we believe that the use of very specific response variables strongly reduces this danger.

As noted before, a question raised in the literature is to what extent diversity in social networks is beneficial for engagement in social/recreational activities or constitutes a risk of social exclusion. Given the scope of this paper, this issue is particularly relevant in the context of ethnic diversity. To test whether ethnic diversity in social networks is beneficial for engagement in social/recreational activities, we use a set of variables of inter-ethnic contacts, both general and in the context of providing/receiving advice or help.

Thus, regression type models are estimated in which frequency of various forms of social activity participation serves as dependent variable. Engagement in various social networks (as described above) is used as explanatory variables, controlled for a set of socio-demographic variables with are likely to differ between ethnic groups. To be able to test whether various social networks

¹ Family does not include household members.

have a different impact for different ethnic groups, models were estimated separately for each ethnic group.

Frequency of activity participation is measured on an ordinal scale, leading to an ordered response formulation. In general, we assume that there exists a latent variable y^* , expressing the tendency to engage in a social or recreational activity more frequently. y^* is a function of a set of explanatory variables X , including socio-demographic, accessibility and social network characteristics, and an error term ε , accounting for unobservable factors:

$$y^* = \sum_j \beta_j X_j + \varepsilon \quad (1)$$

To link the latent variable to response classes C_1, \dots, C_N (assuming N response classes) we assume the existence of threshold values τ_n such that:

$$P(C_n) = \Pr(\tau_{n-1} < y^* < \tau_n) \quad (2)$$

Assuming a logistic probability function for ε , the probability of observing response C_n is defined as:

$$P(C_n) = \frac{e^{\tau_{n-1} - \beta'X}}{1 + e^{\tau_{n-1} - \beta'X}} - \frac{e^{\tau_n - \beta'X}}{1 + e^{\tau_n - \beta'X}} \quad (3)$$

Given observed responses C_n and explanatory variables X , models were estimated for various social and recreational activities, using SPSS..

4. Results

Seeing a play

The estimation results (Table 5) show some differences with respect to the role of social networks on activity participation between ethnic groups. First, seeing a play is for Dutch not affected by frequency of interaction with friends or family. For ethnic minorities, interactions with family and friends play a more dominant role. Moroccans and Surinamese are more likely to see a play, if they

see friends more often or have contact with family members more often, respectively. Turks and Moroccans are more likely to see a play if they receive help from friends (Turks) or family (Moroccans). All these findings suggest that interactions with friends and/or family are supportive in decisions to see a play. This can be interpreted in multiple ways. It may be the case that more interactions with friends/family leads to more opportunities for companionship or more information about options to see a play. Another explanation is that jointly seeing a play is part of maintaining a relationship in which reciprocity plays a role (e.g. by providing company). The relationship between being helped by family or others and seeing a play might point in this direction.

Interestingly, for Turks and Antilleans we find that receiving advice from or having contact with people from other ethnicities is associated with a higher frequency of seeing a play. This suggests that a more diverse social network is instrumental for participation in cultural activities such as seeing a play. This also contradicts the finding by Platt (2009) that for ethnic minorities, orientation on their own group provides better opportunities for social participation. Further, this is in line with Warde and Tambubolon (2002) who find that people with more diverse networks engage in a wider range of recreational activities.

For both Dutch and ethnic minorities (with the exception of Moroccans) we find that memberships of clubs for dancing, singing or creative arts, which are related to a cultural event such as seeing a play, add to the frequency of seeing a play. This is expected, since the interest in creative/cultural arts underlying such memberships likely leads to a higher frequency of seeing a play. However, for all groups we find that also membership of sports clubs or doing voluntary work in a club increases the probability of seeing a play. This suggests that membership of a club is a source of companionship and information also for activities not directly related to the club.

With respect to socio-demographics, some findings appear to be general for all ethnic groups. A higher income and higher education coincide with higher frequency of seeing a play. However, differences are also observed. Whereas for Surinamese, Antilleans and Dutch married individuals are less likely to see a play, widowed/divorced Turks are more likely to see a play. For Turks, Surinamese and Antilleans, women are more likely to see a play. For Surinamese and Moroccans, it is found that first generation immigrants are less likely to see a play. For Surinamese, younger people appear to see a play more often than older people. Finally, we find that higher car ownership levels lead to a higher frequency of seeing a play for Antilleans and to lower frequencies for Dutch. Apparently, for Antilleans a car is a resource that is instrumental in seeing a play. For Dutch, not having a car may be associated with lifestyles (urban orientation, students) that coincide with higher frequencies of seeing a play.

To summarise, we find that differences exist regarding the role of social networks for seeing a play. Ethnic minorities appear to rely more on contacts with friends and family when seeing a play.

Potential explanations could be the companionship, exchange of information and reciprocal considerations associated with such ties. Apparently Dutch use different resources for companionship or information or have different patterns of reciprocity in family and friendship ties. For some minorities, inter-ethnic contacts are found to be supportive for higher frequency of seeing a play, supporting the idea that diversity of networks adds to a wider variety of recreational and social activities. For all ethnicities, we find that associational memberships, both oriented at cultural activities and more general, are beneficial for participation in cultural events such as seeing a play.

Sightseeing

Regarding the role of interactions (Table 6) with friends and family, the results suggest that contacts with friends and family are associated with a higher frequency of sightseeing for Moroccans (more frequent contact with neighbours), Surinamese and Antilleans (more frequently hosting visitors). For Turks, helping others and receiving help from family adds to a higher frequency of sightseeing. For Dutch receiving advice from others is associated with a higher frequency of sightseeing. As argued for seeing a play, the friends and family network may serve to provide companionship and information and invoke joint engagement in sightseeing for reasons of reciprocity. Different from seeing a play, the differences between ethnic groups are less pronounced. For all ethnic minorities, it is found that some form of contact with other ethnicities (receiving advice by Turks, Surinamese and Antilleans or general contacts by Moroccans) are associated with a higher frequency of sightseeing. Again this supports the idea that a ethnically more diverse network is associated with higher frequency on social/recreational activities.

Associational memberships play a less pronounced role than for seeing a play, probably since sightseeing is a more general activity that is less associated with specific preferences and corresponding associational memberships. Nevertheless, doing voluntary work in a club has a positive effect for Turks and Surinamese and membership of a club for dancing has a positive effect for Moroccans. Associational membership does not play a role in the context of sightseeing for Antilleans and Dutch.

Regarding socio-demographic characteristics, we see a similar pattern that participation in sightseeing increases with higher education and income levels. For Dutch and Moroccans, it is found that younger people are less likely to go sightseeing than elderly. For Turks and Moroccans, men are more likely to go sightseeing than women. For Surinamese, the first generation is less likely to go sightseeing, whereas for Moroccans having a drivers' license is associated with a higher frequency of sightseeing.

Taken together, the outcomes suggest that, as for seeing a play, interaction with friends plays a relevant role for explaining frequency of sightseeing. Apparently, the family and friends

network provides companionship, information and leads to joint engagement for reasons of reciprocity and maintenance of links. Other than for seeing a play, the distinction between ethnic groups is less pronounced, as also for Dutch interaction with friends/family is associated with higher frequency of sightseeing. Another difference is that associational memberships play a less important role, probably since sightseeing is a more general activity. Club membership seems to play a general role to provide companionship and exchange information.

Visiting a restaurant or cafe

The models for visiting a restaurant (Table 7) show a slightly different pattern than the previous models. First, whereas for ethnic minorities visiting a restaurant/café is heavily associated with interactions with friends and family, this is not the case for Dutch. Apparently, frequency of visiting restaurants/cafes is for Dutch less related to contacts with friends/family. Probably, other activities than visiting restaurants/cafes are more important to do with friends and families, or visiting restaurants/cafes is also undertaken with other company such as household members, colleagues or business partners. It should be noted, however, that the relationship between social interaction and visiting restaurants is limited to receiving help from friends for Moroccans also. General contacts with family have a positive effect on visiting restaurants/cafes for Turks, Antilleans and Surinamese. Receiving help has a positive effect for Turks, Moroccans, Surinamese and Antilleans. Again, providing companionship and information or motivations to maintain network links could be underlying reasons. In the latter case, one may argue that restaurants and cafes provide an attractive environment for spending time with friends and family, which serves for maintaining social links and consolidate access to social capital. The estimation results further suggest that inter-ethnic contacts lead to a higher frequency of visiting restaurants/cafes for Turks and Antilleans. This may suggest that a more diverse network leads to participation in a wider range of activities, but may also reflect differences in lifestyle, where a more liberal lifestyle leads both to more frequent contacts with other ethnicities and more frequent visiting of restaurants/cafes.

A second difference is that the role of associations is much less pronounced. Membership of a sports club has a positive effect for Turks, Moroccans and Surinamese, but it is likely that this is related to visiting cafes directly linked to the sports club. Having a job increases the frequency of visiting restaurants for Moroccans. As discussed before this may be due to social contacts established with colleagues or joint activities with colleagues.

With respect to socio-demographics, we find that, as for the other activities, participation increases with increasing education and income. For Turks, Surinamese, Antilleans and Dutch younger people are more likely to visit restaurants and cafes and married people are less likely to do so. Car ownership has a positive effect on participation for Turks, but a negative effect for Dutch. As

discussed before, it is likely that whereas not having a car implies a lack of resources for one group, it indicates an urban and more outgoing lifestyle for Dutch. For Moroccans, first generation immigrants are less likely to visit restaurants/bars.

In short, the findings for visiting restaurants/bars suggest that interactions with families and friends are associated with visiting restaurants/bars for ethnicities, but not for Dutch. However, the degree of influence of these interactions varies and is less obvious for Moroccans. Inter-ethnic contacts seem to have a positive effect for Turks and Antilleans, however the causality of this finding is not obvious.

Sports

The estimation results for sports (Table 8) suggest that interaction with family and friends is positively associated with frequency of sports for all ethnic groups. This holds for contact with family (Dutch), contact with friends (Antilleans), suggesting that companionship may play a role but also for receiving help (Turks, Surinamese), giving help (Dutch) suggesting that exchanging information and reciprocity may play a role. Inter-ethnic contacts have a positive effect for Turks, Moroccans, Surinamese but also Dutch. This might support the general idea that diversity of networks leads to involvement in a wider range of activities, due to receiving better information. Another explanation is that sports clubs are places where one is likely to meet people from other ethnicities and establish contacts, thus reversing the causality.

Membership of sports clubs has a positive effect on frequency of sports for obvious reasons. However, also memberships of other clubs (Surinamese, Dutch) or acting as a volunteer in a club (Moroccans) are associated with higher frequency of sports. This suggests that club membership leads to joint activities with club members outside the domain of the club or to acquiring better information about opportunities for sports.

With respect to socio-demographics, it is found again that higher education leads to higher frequency of activity participation, and that a higher income has a similar effect for Antilleans. It is also found that men are more likely to sport than women for Moroccans, Surinamese and Antilleans. For Surinamese, younger people are more like to sport than elderly whereas for Surinamese and Antilleans, married and divorced people are less likely to sport than those never married.

In short, the results suggest that both for Dutch and ethnic minorities, interaction with friends and family is positively associated with frequency of sports, suggesting that issues such as companionship and joint activities to maintain network ties play a role. Also, inter-ethnic contacts are positively associated with frequency of sport for Dutch and ethnic minorities, although the causality can be discussed in this case. Club membership is positively associated with frequency of

sports, even outside the domain of sports clubs, suggesting that club membership is a source of companionship for activities outside the specific domain of the club.

5. Discussion and conclusion

This paper has focused on the role of various types of social networks for engaging in various social/recreational activities, and how these roles differ between members of different ethnic groups. The literature suggests that differences exist between ethnic groups in terms of the role of friends and family, membership of associations and work participation, but also in the degree of participation in social and recreational activities. This paper has made an effort to investigate how differences in interactions with friends and family and differences in associational membership lead to differences in activity participation for different ethnic groups in the Netherlands.

An important finding is that differences between ethnic groups depend on the type of activity. For instance, for seeing a play, sightseeing and visiting restaurants/cafes, it is found that interaction with family/friends plays a much more pronounced role for ethnic minorities than for native Dutch. A potential explanation is that for Dutch these activities are mostly undertaken with household members, making contacts with family or friends less relevant for being involved in these activities. Another explanation is that contacts with family/friends are more important for ethnic minorities to receive information about options for social/recreational activities, but also that friends and family networks are more important to ethnic minorities and therefore require more joint activities to maintain. However, for sports contacts with family and friends are important also for Dutch, possibly suggesting that the family and friends network provides better companionship (e.g. in terms of skills) for these activities. With respect to the role of associational memberships, it is found that they are important for all groups in relation to seeing a play and sports, likely in order to find companionship of people with similar skills or interests. However, for sightseeing and visiting restaurants/cafes, clubs seem to be more important to ethnic minorities, suggesting that Dutch find information and companionship from other sources. It should also be noted that there are considerable differences between ethnic minorities with respect to the role of various social networks for activity participation. For instance, contacts with family/friends appear less often to influence activity participation of Moroccans as compared to other ethnic minorities.

Taken together, our findings are in line with the various roles of social networks for social/recreational activities (providing companionship, source of information and maintaining social network links) mentioned in the literature and differences between ethnic groups can potentially be explained from these various roles. In particular, levels of participation in social/recreational activities of ethnic minorities appear to be lower than those of Dutch, suggesting that they have fewer connections and communication channels with society than native Dutch. As a consequence,

access to such resources such as friends, family and associational memberships may be more decisive for involvement in social/recreational activities.

Although the paper provides meaningful insights into the relationship between social networks and activity participation for different ethnic groups, it at the same time raises questions that should be addressed in future research. First, more exact insight should be gained into the roles the social network fulfils for engagement in SR activities. While the literature suggests various options, the current data only allows us to speculate about the exact causal relationship between social networks and engagement in SR activities. Qualitative methods offer a promising way to disentangle the various relationships. Second, it would be helpful to collect data on the company during SR activities, such as relationship to the ego (family, friend household member, other) but also ethnicity. Using such data the role of ethnicity in social/recreational activities can be better assessed. Third, our understanding of the role of SN for different ethnic groups would strongly benefit from investigating the size and composition of the SN for different ethnic groups. Special attention should be given to the ethnic composition of such networks. Relating such extended network characteristics to frequency and company of SR activities would allow us to draw more definitive conclusions about the relationship between SN and SR activities for different ethnic groups.

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Table 5 : Estimation results 'seeing a play'

| | Turks | | Moroccans | | Surinamese | | Antilleans | | Dutch | |
|----------------------------------|-----------|-------|-----------|-------|------------|-------|------------|-------|-----------|-------|
| Goodness-of-fit | | | | | | | | | | |
| Nagelkerke r2 | 0.218 | | 0.202 | | 0.244 | | 0.179 | | 0.177 | |
| | Parameter | Sign. | Parameter | Sign. | Parameter | Sign. | Parameter | Sign. | Parameter | Sign. |
| Threshold values | | | | | | | | | | |
| tau1 | 11,58 | 0,00 | 16,14 | 0,00 | -2,46 | 0,01 | -0,32 | 0,55 | -1,64 | 0,00 |
| tau2 | 14,85 | 0,00 | 18,90 | 0,00 | 0,09 | 0,92 | 1,91 | 0,00 | 1,54 | 0,00 |
| tau3 | 15,56 | 0,00 | 19,43 | 0,00 | 1,60 | 0,10 | 2,84 | 0,00 | 2,93 | 0,00 |
| Hosting visitors | | | | | | | | | | |
| Often | | | 1,50 | 0,01 | | | | | | |
| Sometimes | | | 1,00 | 0,09 | | | | | | |
| Hardly | | | | | | | | | | |
| Contact with family | | | | | | | | | | |
| Often | | | | | 1,31 | 0,03 | | | | |
| Sometimes | | | | | 1,50 | 0,02 | | | | |
| Hardly | | | | | | | | | | |
| Received help from friends | 1,10 | 0,08 | | | | | | | | |
| Received help from family | | | 1,12 | 0,02 | | | | | | |
| Advice from other ethnicity | 0,92 | 0,00 | | | | | 0,39 | 0,05 | | |
| Contact with other ethnic groups | | | | | | | | | | |
| Often | | | | | | | 1,34 | 0,00 | | |
| Sometimes | | | | | | | 0,49 | 0,22 | | |
| Hardly | | | | | | | | | | |

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| | | | | | | | | | |
|----------------------------------|-------|------|-------|------|-------|------|-------|------|------------|
| Associational memberships | | | | | | | | | |
| creative arts | 16,33 | 0,00 | | | | | | | |
| dancing | 2,22 | 0,02 | | | 1,10 | 0,01 | 0,86 | 0,00 | |
| singing | | | | | | | | | 0,91 0,01 |
| sports | | | | | | | 0,40 | 0,03 | 0,40 0,07 |
| voluntary work in club | 0,92 | 0,01 | 1,10 | 0,01 | 0,59 | 0,03 | | | |
| Household composition | | | | | | | | | |
| married/cohabitating | 0,29 | 0,62 | | | -0,57 | 0,09 | -0,41 | 0,05 | -0,68 0,02 |
| widowed/divorced | 1,49 | 0,03 | | | 0,04 | 0,93 | 0,24 | 0,40 | -0,31 0,43 |
| never married | | | | | | | | | |
| Education level | | | | | | | | | |
| elementary school | -1,81 | 0,00 | -2,20 | 0,00 | -1,14 | 0,00 | | | |
| lower professional | -1,34 | 0,00 | -1,81 | 0,00 | -1,36 | 0,00 | | | -1,69 0,00 |
| medium professional | -0,66 | 0,15 | -1,65 | 0,00 | -0,47 | 0,14 | | | -0,80 0,00 |
| University | | | | | | | | | |
| Household income | | | | | | | | | |
| <1500 EURO/month | -1,60 | 0,03 | 17,12 | 0,00 | -1,78 | 0,00 | | | -0,81 0,05 |
| 1500-2500 EURO/month | -1,42 | 0,05 | 16,55 | 0,00 | -1,73 | 0,00 | | | -0,76 0,03 |
| 2500-3500 EURO/month | -1,93 | 0,04 | 17,47 | . | -0,72 | 0,12 | | | 0,11 0,73 |
| >3500 EURO/month | | | | | | | | | |
| Male | 0,06 | 0,85 | | | 0,38 | 0,00 | 0,40 | 0,02 | |
| First generation | | | -0,83 | 0,07 | -0,84 | 0,01 | | | |
| Age | | | | | | | | | |
| <19 | | | | | 1,81 | 0,22 | | | |
| 20-29 | | | | | -1,22 | 0,01 | | | |
| 30-44 | | | | | -0,20 | 0,48 | | | |
| 45-65 | | | | | | | | | |

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Number of cars

| | | | | |
|---|-------|------|------|------|
| 0 | -1,36 | 0,00 | 0,78 | 0,05 |
| 1 | -0,59 | 0,02 | 0,34 | 0,20 |
| 2 | | | | |

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Table 6 : Estimation results 'sightseeing'

| | Turks | | Moroccans | | Surinamese | | Antilleans | | Dutch | |
|---|-----------|-------|-----------|-------|------------|-------|------------|-------|-----------|-------|
| Goodness-of-fit | | | | | | | | | | |
| Nagelkerke r2 | 0.177 | | 0.218 | | 0.176 | | 0.181 | | 0.100 | |
| | Parameter | Sign. | Parameter | Sign. | Parameter | Sign. | Parameter | Sign. | Parameter | Sign. |
| Threshold values | | | | | | | | | | |
| tau1 | -4,61 | 0,00 | -2,07 | 0,12 | -0,93 | 0,01 | -1,06 | 0,14 | -1,28 | 0,00 |
| tau2 | -1,46 | 0,19 | 0,11 | 0,94 | 1,62 | 0,00 | 1,32 | 0,06 | 1,20 | 0,00 |
| tau3 | -0,33 | 0,78 | 0,54 | 0,69 | 2,63 | 0,00 | 2,40 | 0,00 | 2,61 | 0,00 |
| Hosting visitors | | | | | | | | | | |
| Often | | | | | 0,37 | 0,14 | 0,82 | 0,01 | | |
| Sometimes | | | | | -0,43 | 0,10 | 0,64 | 0,04 | | |
| Hardly | | | | | | | | | | |
| Frequent contact with neighbours | | | 0,53 | 0,05 | | | | | | |
| Getting advice from own ethnic group | | | | | | | | | 0,42 | 0,01 |
| Helps friends | -1,33 | 0,05 | | | | | | | | |
| Received help from family | -0,56 | 0,08 | | | | | | | | |
| Contact with other ethnic groups | | | | | | | | | | |
| Often | | | 1,22 | 0,00 | | | | | | |
| Sometimes | | | 0,55 | 0,12 | | | | | | |
| Hardly | | | | | | | | | | |
| Advice from other ethnicity | 0,56 | 0,01 | | | 0,72 | 0,00 | 0,57 | 0,01 | | |
| Associational memberships | | | | | | | | | | |
| Dancing | | | 2,31 | 0,00 | | | | | | |
| voluntary work in club | 0,69 | 0,01 | | | 0,72 | 0,00 | | | | |
| Age | | | | | | | | | | |
| <19 | | | -19,20 | | | | | | -0,49 | 0,12 |

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| | | | | | | | | | | |
|------------------------------|-------|------|-------|------|-------|------|-------|------|-------|------|
| 20-29 | | | 0,67 | 0,10 | | | | | -0,61 | 0,01 |
| 30-44 | | | 0,29 | 0,38 | | | | | -0,63 | 0,00 |
| 45-65 | | | | | | | | | | |
| Household composition | | | | | | | | | | |
| married/cohabitating | -1,02 | 0,01 | 1,31 | 0,00 | | | | | | |
| widowed/divorced | -1,48 | 0,01 | 1,11 | 0,07 | | | | | | |
| never married | | . | . | . | | | | | | |
| Education level | | | | | | | | | | |
| elementary school | -0,92 | 0,01 | -1,63 | 0,00 | -0,98 | 0,00 | -1,20 | 0,00 | | |
| lower professional | -1,21 | 0,00 | -1,68 | 0,00 | -1,20 | 0,00 | -1,38 | 0,00 | -1,16 | 0,00 |
| medium professional | -0,21 | 0,59 | -1,12 | 0,01 | -0,52 | 0,04 | -0,45 | 0,10 | -0,71 | 0,00 |
| University | | | | | | | | | | |
| Household income | | | | | | | | | | |
| <1500 EURO/month | -1,84 | 0,00 | -2,31 | 0,01 | | | -0,53 | 0,19 | | |
| 1500-2500 EURO/month | -1,57 | 0,01 | -1,80 | 0,04 | | | -0,42 | 0,30 | | |
| 2500-3500 EURO/month | -0,88 | 0,22 | -2,18 | 0,03 | | | -0,29 | 0,49 | | |
| >3500 EURO/month | | | | | | | | | | |
| Male | 0,32 | 0,15 | 0,64 | 0,02 | | | | | | |
| First generation | | | | | -0,58 | 0,00 | | | | |
| Drivers' license | | | 0,50 | 0,08 | | | | | | |

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Table 7 : Estimation results ‘visiting a restaurant/bar’

| | Turks | | Moroccans | | Surinamese | | Antilleans | | Dutch | |
|---|-----------|-------|-----------|-------|------------|-------|------------|-------|-----------|-------|
| Goodness-of-fit | | | | | | | | | | |
| Nagelkerke r2 | 0.206 | | 0.209 | | 0.295 | | 0.320 | | 0.226 | |
| | Parameter | Sign. | Parameter | Sign. | Parameter | Sign. | Parameter | Sign. | Parameter | Sign. |
| Threshold values | | | | | | | | | | |
| tau1 | -2,17 | 0,00 | -3,45 | 0,00 | -2,53 | 0,00 | -1,04 | 0,10 | -4,69 | 0,00 |
| tau2 | -0,60 | 0,36 | -2,16 | 0,00 | -0,59 | 0,28 | 0,88 | 0,16 | -2,56 | 0,00 |
| tau3 | 0,01 | 0,99 | -1,44 | 0,02 | 0,33 | 0,55 | 1,81 | 0,00 | -1,44 | 0,00 |
| Contact with family | | | | | | | | | | |
| Often | 0,67 | 0,00 | | | | | 0,59 | 0,04 | | |
| Sometimes | 0,90 | 0,00 | | | | | 0,86 | 0,02 | | |
| Hardly | | | | | | | | | | |
| Hosting visitors | | | | | | | | | | |
| Often | | | | | 0,87 | 0,00 | | | | |
| Sometimes | | | | | 0,44 | 0,06 | | | | |
| Hardly | | | | | | | | | | |
| Contact with friends | | | | | | | | | | |
| Often | | | | | 0,76 | 0,00 | 1,05 | 0,00 | | |
| Sometimes | | | | | 0,55 | 0,10 | -0,02 | 0,96 | | |
| Hardly | | | | | | | | | | |
| Receiving help from same Ethnicity | 0,33 | 0,02 | | | | | | | | |
| Receiving help from family | 0,73 | 0,00 | | | 0,41 | 0,02 | 0,50 | 0,01 | | |
| Receiving help from friends | 1,08 | 0,01 | 0,29 | 0,51 | | | | | | |

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Contact with other ethnic groups

| | | | | | | | | |
|-----------|--|--|------|------|--|--|------|------|
| Often | | | 0,80 | 0,00 | | | 1,19 | 0,00 |
| Sometimes | | | 0,50 | 0,01 | | | 0,55 | 0,05 |
| Hardly | | | | | | | | |

Receiving advice from other ethnicity 0,45 0,00

Associational membership

sports 0,56 0,00 0,33 0,07 0,58 0,01

Age

| | | |
|-------|------|------|
| <19 | 0,23 | 0,55 |
| 20-29 | 0,94 | 0,00 |
| 30-44 | 0,41 | 0,05 |
| 45-65 | | |

Household composition

| | | | | | | | | | | |
|----------------------|-------|------|--|--|-------|------|-------|------|-------|------|
| married/cohabitating | -0,66 | 0,01 | | | -0,96 | 0,00 | -0,66 | 0,01 | -0,61 | 0,03 |
| widowed/divorced | -0,06 | 0,87 | | | -0,65 | 0,01 | 0,05 | 0,86 | -0,26 | 0,48 |
| never married | | | | | | | | | | |

Drivers license 0,39 0,03

Education level

| | | | | | | | | | | |
|---------------------|-------|------|-------|------|--|--|-------|------|-------|------|
| elementary school | -0,58 | 0,04 | -1,96 | 0,00 | | | -0,73 | 0,01 | | |
| lower professional | -0,48 | 0,10 | -1,89 | 0,00 | | | -0,60 | 0,06 | -1,03 | 0,00 |
| medium professional | -0,04 | 0,88 | -1,37 | 0,00 | | | -0,37 | 0,16 | -0,94 | 0,00 |
| University | | | | | | | | | | |

Male 0,43 0,00 0,43 0,02

Household income

| | | | | | | | | | | |
|----------------------|--|--|--|--|-------|------|-------|------|-------|------|
| <1500 EURO/month | | | | | -2,12 | 0,00 | -1,59 | 0,00 | -1,83 | 0,00 |
| 1500-2500 EURO/month | | | | | -1,62 | 0,00 | -0,89 | 0,03 | -1,27 | 0,00 |

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| | | | | | | | | |
|-------------------------|--|-------|-------|------|-------|------|-------|------|
| 2500-3500 EURO/month | | | -0,68 | 0,10 | -0,73 | 0,08 | -0,91 | 0,00 |
| >3500 EURO/month | | | | | | | | |
| First generation | | | -0,62 | 0,00 | | | | |
| Has a job | | | 0,60 | 0,00 | | | | |
| Age | | | | | | | | |
| <19 | | | 20,51 | . | 1,42 | 0,10 | 22,20 | 0,00 |
| 20-29 | | | 0,78 | 0,01 | 0,92 | 0,00 | 1,29 | 0,00 |
| 30-44 | | | 0,59 | 0,00 | 0,39 | 0,06 | 0,27 | 0,19 |
| 45-65 | | | | | | | | |
| Number of cars | | | | | | | | |
| 0 | | -0,53 | 0,03 | | | | 0,27 | 0,45 |
| 1 | | -0,35 | 0,08 | | | | 0,40 | 0,08 |
| 2 | | | | | | | | |

The influence of social ties on social and recreational activity participation of ethnic groups in the Netherlands

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Table 8 : Estimation results 'sports'

| | Turks | | Moroccans | | Surinamese | | Antilleans | | Dutch | |
|--|-----------|-------|-----------|-------|------------|-------|------------|-------|-----------|-------|
| Goodness-of-fit | | | | | | | | | | |
| Nagelkerke r2 | 0.436 | | 0.514 | | 0.492 | | 0.498 | | 0.514 | |
| | Parameter | Sign. | Parameter | Sign. | Parameter | Sign. | Parameter | Sign. | Parameter | Sign. |
| Threshold values | | | | | | | | | | |
| tau1 | -3,09 | 0,00 | -3,90 | 0,00 | -5,39 | 0,00 | -2,91 | 0,00 | -4,85 | 0,00 |
| tau2 | -2,35 | 0,00 | -3,17 | 0,00 | -4,61 | 0,00 | -2,15 | 0,00 | -4,16 | 0,00 |
| tau3 | -0,85 | 0,03 | -1,53 | 0,00 | -2,90 | 0,00 | -0,16 | 0,78 | -2,06 | 0,00 |
| Contact with family | | | | | | | | | | |
| Often | | | | | | | | | 0,62 | 0,03 |
| Sometimes | | | | | | | | | 0,88 | 0,01 |
| Hardly | | | | | | | | | | |
| Contact with friends | | | | | | | | | | |
| Often | | | | | | | 0,81 | 0,04 | | |
| Sometimes | | | | | | | 0,76 | 0,11 | | |
| Hardly | | | | | | | | | | |
| Receiving help from same ethnicity | 0,52 | 0,00 | | | | | | | | |
| Receiving help from friends | | | | | 1,35 | 0,01 | | | | |
| Giving help to friends | | | | | | | | | 1,30 | 0,00 |
| Receiving help from other ethnicity | | | 0,46 | 0,01 | | | | | | |
| Contact with other ethnicity | | | | | | | | | | |
| Often | 0,89 | 0,00 | | | 0,63 | 0,01 | | | 0,38 | 0,10 |
| Sometimes | 0,76 | 0,00 | | | 0,08 | 0,76 | | | 0,48 | 0,01 |
| Hardly | | | | | | | | | | |

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| | | | | | | | | | | |
|----------------------------------|-------|------|-------|------|-------|------|-------|------|-------|------|
| Associational memberships | | | | | | | | | | |
| Sports | 3,49 | 0,00 | 3,19 | 0,00 | 3,04 | 0,00 | 3,38 | 0,00 | 3,41 | 0,00 |
| Volunteer in club | | | 0,89 | 0,00 | | | | | | |
| Creative arts | | | | | 1,16 | 0,12 | | | | |
| Singing | | | | | | | | | 0,51 | 0,07 |
| Education level | | | | | | | | | | |
| elementary school | -1,12 | 0,00 | -1,14 | 0,00 | -0,72 | 0,01 | -0,76 | 0,01 | | |
| lower professional | -0,60 | 0,04 | -0,18 | 0,59 | -0,42 | 0,12 | -0,33 | 0,31 | -1,07 | 0,00 |
| medium professional | -0,66 | 0,04 | -0,30 | 0,38 | -0,28 | 0,24 | 0,12 | 0,66 | -0,63 | 0,00 |
| University | | | | | | | | | | |
| Male | | | 0,50 | 0,00 | 0,46 | 0,00 | 0,49 | 0,01 | | |
| Drivers license | | | | | 0,45 | 0,02 | | | | |
| Household income | | | | | | | | | | |
| <1500 EURO/month | | | | | | | -0,84 | 0,06 | | |
| 1500-2500 EURO/month | | | | | | | -0,55 | 0,19 | | |
| 2500-3500 EURO/month | | | | | | | -0,25 | 0,56 | | |
| >3500 EURO/month | | | | | | | | | | |
| Age | | | | | | | | | | |
| <19 | | | | | 0,83 | 0,02 | | | | |
| 20-29 | | | | | -0,04 | 0,87 | | | | |
| 30-44 | | | | | 0,38 | 0,06 | | | | |
| 45-65 | | | | | | | | | | |
| Household composition | | | | | | | | | | |
| married/cohabitating | | | | | -0,67 | 0,00 | -0,67 | 0,01 | | |
| widowed/divorced | | | | | -0,63 | 0,02 | -0,19 | 0,53 | | |
| never married | | | | | | | | | | |