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Recreation, informal social networks and social capital

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Abstract

This paper examines the determinants of recreational practices amongst members of three diverse voluntary associations in the North West of England, focusing on being hosts and guests in private homes and eating and drinking outside the home. Using multi-level models analysing a rich data source on the social networks of members, we show how respondents' sociability is affected not mainly by their socio-demographic characteristics, but also by the nature of their social networks. We show, against expectations, that there is little evidence of homophily in these recreational practices, which indicates that informal social contacts may be especially important in generating 'bridging' and 'boundary-spanning' types of social capital. We use the evidence to argue the need for a 'sociology of companionship' which highlights routine sociability around recreational practices.

Introduction

In the past decade the concept of social capital has been applied to an increasingly large number of fields, to explain outcomes such as educational attainment, health status, economic prosperity, crime rates, and democratic participation (see for instance, Putnam 2000; Lin 2001; Stolle and Hooghe 2004). However, this extension has come at a certain cost. For, whilst it is a commonplace that social capital refers to the relationships between norms, networks and participation, we know relatively little about how social capital is generated. We can detect a move away from conceptions of social capital which privilege the significance of involvement in formal arenas, such as voluntary associations (see Putnam 2000; Anheir and Kendal 2002; Field 2003) towards a recognition of the way that informal social relations might generate trust and participation. Some of those studying informal sociability see the rise of 'lifestyle communities' or 'lifestyle enclaves' based on shared leisure interests and friendship networks as inimical to the generation of social

capital (for an especially well known account here, see Bellah et al 1996). Sociability in public and semi-public arenas where strangers learn to live with each other is replaced by contact with 'people like us' who do not need to learn to engage with disparate others who do not share their common concerns or enthusiasms. Given the importance of this issue to current debates about social capital, it is important to know more about the social relationships implicated in informal recreational practices. Existing studies of informal social relationships in the areas of recreation, leisure, kinship, and friendship (e.g. Adams and Allan 1998; Allan 1998) have suggested that social relationships in these areas tend to be 'homophilous', implying that they do not generate 'bridging' social capital, which is to say where 'networks are outward looking and encompass people across diverse social cleavages' (Putnam, 2000:22). However, research on the topic is piecemeal and has not drawn fully upon the potential of social network analysis to explore the issue.

Our paper addresses this issue by using multi-level methods to examine the social networks of members of three voluntary associations in North West England. We show how network structures affect sociability and a range of recreational and leisure practices. It is, so far as we are aware, the first attempt to use social network analysis for this purpose using British data. We are able to test the extent to which recreational practices are carried out by socially homogeneous groups to assess whether bridging social capital might be generated by informal sociability.

We begin with some theoretical observations to underline the importance of studying informal recreational practices, considering how these bear on current debates about social capital. Secondly, we explain the distinctiveness of our case studies, describe our data and our research methodology. We go on to describe the recreational practices of our sample of respondents as a means of examining the extent of sociability amongst our sample. In section 3, as a means of assessing the relationship between formal and informal sociability, we examine the overlap between associational involvement and informal socialising with co-members. In the fourth section we build models of respondents' involvement in recreational practices in order to see how far

dining, drinking, and domestic invitations are structured by principles of homophily and network connection. The conclusion to our paper brings emphasis that recreational practices generally involve considerable informal social mixing, and we show that these findings have considerable relevance for debates about social capital.

1: Social capital, recreation and companionship

The study of social capital has diverse roots, mostly seeking to address issues arising out of the well-established tension between individual interests and the collective good. Thus James Coleman (1990), one of the originators of the concept, uses the concept within a rational choice perspective as a means of exploring how individual self-interest can be over ridden. Robert Putnam (1995; 2000), though not indebted to rational choice approaches, was also concerned with how social capital acts as a 'social glue' binding together individuals who otherwise might fragment. The concept of social capital has thus proved attractive as offering the latest means to explore Hobbes's very old 'problem of order'. An important concern is to investigate that ways that social capital allows contact with people unlike oneself, so promoting social integration. In *Bowling Alone*, (2000: 411), Putnam says, in a statement which sums up his political project 'To build bridging social capital requires that we transcend our social and political and professional identities to connect with people unlike ourselves'.

Neo-Tocquevillian perspectives, associated with the work of Putnam (1993), argue that the experience of engagement in civic associations leads people to be better able to reconcile differences and work co-operatively together. 'Good government', Putnam writes, 'is a by-product of singing groups and soccer clubs'. His later work (2000) broadens his interest in social capital to include informal social networks. Putnam (2000: 93-4) has emphasised the importance of 'schmoozing', spending time 'in informal conversation and communion', in activity 'less organized and purposeful, more spontaneous and flexible' than joining formal associations. There is indeed evidence that informal interactions are significant in promoting trust. Li et al (2004) show,

using data from the British Household Panel Study, that networks based on informal social relations generate more trust than involvement in formal associations, once socio-demographic variables are controlled for.

However, understanding the relationship between social capital and informal recreational practices currently faces three major problems. First, empirically, it is difficult to find robust quantitative evidence that compares, for instance, with survey data on associational involvement, such as that used by Putnam (2000), Paxton (2000; 2002) or Hall (1999). Most of this research relies on individual level data with relatively little information on the social networks of respondents. Putnam interprets trends in informal social interaction through survey measures reporting the amount of informal socialising that people undertake. There has been relatively little engagement with issues raised by social network analysts, with their structuralist concerns to examine how individuals are configured in whole networks. Social network writers, in turn, have only engaged in piecemeal fashion with the concept of social capital, and mostly deploy highly instrumentalist assumptions, seeing it as a resource allowing individuals to obtain advantage (see Lin 2000; Kadushin 2004). Burt (2000; 2002), for instance, has examined the power of bridging social capital which allows particular bankers to straddle otherwise disconnected cliques of bankers. Social capital is here used as a means of exploring how individual advantage is secured by the organisation of cliques and factions within social networks.

A second problem of extending interest in social capital to informal social relationships is that the existing orthodoxy points to sustained processes of homophily in routine recreational and leisure activities. Following Wellman (1979), and Fischer (1982), it has become commonplace to note that informal social networks need not be based on neighbourhood residence, and that people seek out others with whom they share leisure interests and who may not live nearby. Bellah et al (1996) see this as generating 'lifestyle enclaves', where people turn their back on neighbours in preference for socialising with people like themselves. Although these arguments have not been empirically examined in the British context, they are consistent with arguments pointing to

strong social selectivity in informal social relations. It is generally argued that there are high levels of class specificity in informal sociability (Allan 1979; Crow and Allan 1993), and that this may be increasing. For example, urban living is being restructured as gentrification entails people moving to neighbourhoods where they expect to find other, like-minded, people (Butler and Robson 2003; Savage, Bagnall and Longhurst 2004). Similarly it has been argued that new kinds of leisure activity based around large, corporate enterprises, such as gymnasia and leisure complexes, do not generate widespread sociability but rather promote more individualised forms of engagement and social homogeneity because the fees charged for such activities exclude significant groups in the population. Such trends towards homophily around recreational and leisure activities have clear implications for the generation of social capital. For Butler and Robson (2003) and Devine et al (2004) informal sociability sustains 'bonding' social capital amongst the middle classes rather than providing social interaction amongst a diverse population allowing 'bridging'.

A third problem is the lack of theoretical clarity about how informal recreational practices generate social engagement and participation. Putnam's theoretical account relies implicitly on the role of the public realm in allowing strangers to tolerate each other. He is able to extend his definition in recent work to include informal recreational practices only by losing theoretical precision about how social capital is supposed to work. He thus states that '(w)hen philosophers speak in exalted tones of "civic engagement" and "democratic deliberation", we are inclined to think of community associations and public life as the higher form of social involvement, but in everyday life, friendship and other informal types of sociability provide crucial social support' (Putnam, 2000: 95). But 'support' need not equate to the kind of generalised trust that he sees as important for social capital, and indeed may be more likely to generate 'bonding' social capital. He falls back on metaphors and aphorisms, such as the idea that 'bonding' social capital is a form of superglue, that bridging social capital is a form of WD40, and that there is a 'dark side' to social capital. Greater precision can be derived from ideas within network analysis regarding the 'strength of weak ties' (Granovetter 1973), and

the role of brokers in straddling 'structural holes' (Burt (1992). Social network analysis suggests a range of mechanisms which might explain patterns of participation and how connections are formed among diverse groups of people.

In this paper begin to redress these limitations by examining the way that recreational activities are implicated in webs of companionship. More specifically, our paper uses social network data and methods to examine the extent to which informal social relations allow the kind of social mixing which generates bridging social capital. Building on Wellman and Frank's (2001) advocacy of multi-level modelling as the appropriate method to explore network ties in a complex world, we consider the range and determinants of people's informal recreational practices.

2: Data and method

Our paper is based on data on the networks and recreational activities of members of three formal organisations located in North West England: a branch of the Labour Party, a branch of a national environmental organisation and a local conservation group. The fieldwork was conducted in 1999 and 2000. Our aim was to examine the nature of internal organisational networks amongst all the members of these three organisations (for which see authors 2003; 2004), and also to consider the kinds of external ties these members reported in a number of leisure and recreational practices.

Research design involved three stages, a postal questionnaire, a subsequent face-to-face interview and, for a small sample, an interview to elicit a life history. The postal questionnaire sent to all members of each of the three organisations obtained information, *inter alia*, on respondents' socio-economic position, on the extent of their participation in the organisation and in other voluntary associations. We obtained a very high response rate of around 80 per cent. [1] We asked permission to re-contact each respondent for a face-to-face interview.

The data reported here paper comes exclusively from the second stage of face-to-face interviews. This yielded a sample of 126 individuals, 53 from the party, 56 from the conservation group and 17 from the environmental organisation. [2] Full network data was obtained through respondents identifying, from a roster of named members, whom they interacted with in various specified settings including which of these co-members they met socially outside the organization. Because we used a roster, we did not rely on respondents recalling particular ties, but could ask them to look at all possible named members within the organisation and identify all salient ties. Our 126 respondents reported 697 dyadic ties within the organisation. We also inquired about people's networks outside the organization around a series of recreational practices, namely being invited to someone's house (and inviting others to their own house), having a meal at someone's house (and inviting others to their own house), drinking socially, and eating socially, during the previous fortnight. Anyone who reported any of these was asked who their companions had been, and we recorded, for the first two mentioned, the occupation, age, gender, length of time that that contact was known, how often they met and whether they would describe the person as close. We also asked what was their favourite leisure activity, and with whom, if anyone, they talked about it with. Again we asked for socio-demographic characteristics and the type of tie involved with the two first named contacts. As a result we obtained information on up to 14 named people reported for these recreational practices, which produced a total of 666 dyadic ties. Hence we have a total sample of 1363 ties based upon 126 individuals, almost 11 per respondent on average.

We should emphasise that our respondents were not representative of the British population. It is well known that members of political or quasi-political organisations are predominantly in professional and managerial jobs, and are highly educated (Parry et al 1992; Hall 1999; Li et al 2003), and this was true of our sample (see authors, 2003). Our respondents did not have especially high incomes, in large part because a significant proportion had retired. They were also predominantly white and middle-aged, but there were more or less

equal numbers of men and women. The socio-demographic characteristics of the sample are described in Table 1.

Table 1 Socio-economic characteristics of the memberships

	Case studies		
	<i>Labour Party</i> %	<i>Environment</i> Group %	<i>Conservation</i> Group %
	N=102	N=30	N=94
Occupational class			
<i>Service class</i>	84	59	72
<i>Routine non-manual and personal service workers</i>	7	24	22
<i>Petite bourgeoisie</i>	3	-	2
<i>Foremen and technicians</i>	-	10	2
<i>Skilled, semi- and unskilled workers</i>	6	7	1
Income			
<i>Less than 10,000</i>	23	31	41
<i>10-20,000</i>	28	41	38
<i>20-30,000</i>	15	28	11
<i>30-40,000</i>	11		8
<i>40,000 and over</i>	24		2
Highest educational qualification			
<i>None</i>	10	4	2
<i>CSE/ GCSE</i>	12	18	6
<i>A level</i>	13	4	14
<i>Technical (HND/ HNC)</i>	7	25	16
<i>Degree and higher degree</i>	55	43	59
Occupational group			
<i>Managers and administrators</i>	25	10	26
<i>Professionals</i>	42	24	30
<i>Assoc professionals and technicians</i>	15	28	19
<i>Clerical and secretarial</i>	5	21	15
<i>Craft and related</i>	6	3	2
<i>Personal and protective services</i>	1	3	4
<i>Sales and related</i>	3	7	3
<i>Plant and machine operatives</i>	1		
<i>Other</i>	3	3	

The fact that this is not a random sample of the British population has analytical advantages for exploring the relationship between social capital and

recreational practices. Since all respondents are members of at least one voluntary association, we are able to examine the connections between people's formal involvement and their informal recreational practices in ways which have not been hitherto attempted. Indeed, for one question, concerning whether members socialise with other co-members, we can examine how position within an organisation, as well as the personal characteristics of a bounded sample of egos and alters, affects the relations of sociability or companionship beyond the organisation's boundary. Although the other analyses are examined using ego network data, (i.e. we have only ego's report of alter's characteristics), we are still able to examine how a person's position within internal organisation's networks may affect their recreation.

The frequencies and definitions of the dependent variables used in our analysis of recreational activities are shown in Table 2, which shows that all the six different recreational activities are undertaken by a majority of the respondents in a two week time period. We are able to examine what factors increase the likelihood of any respondent engaging in one of eight activities.

Table 2 Participation in recreational activities

	N	Per cent
Met co-member outside the organisation during previous year	71	56
Activities in last fortnight		
Had someone home for a meal	59	47
Went to someone else's house for a meal	63	50
Had someone visit at home	94	75
Visited someone else's home	74	59
Went out to a restaurant	84	67
Went out for a drink	63	50
Total	126	

We construct the explanation, and build models, in four steps, asking the questions:

- 1) What are the characteristics of those who do that activity
- 2) What are the socio-demographic characteristics of their companions
- 3) What is the structure of ego's ties
- 4) What is the nature or quality of the ties between them

The independent variables that we used in model building were of five types. The first was simply a control for which organisation the respondent (ego) was a member of. The characteristics of ego considered were sex, age, occupation, personal income and educational qualifications and the total number of associational memberships reported. Homophily was explored on three dimensions, belonging to the same sex, age group or class [3]. A particular issue with constructing a variable for class homophily was that respondents did not frequently identify an occupation for alter. We dealt with this by using multiple imputation methods [4]. Several variables measured the structure of ego's network. The size of the network was the sum of all alters reported by any one respondent. Any alter could be denoted as standing in one or more of the following relationships to ego: partner, extended family member, friend, neighbour, co-member of another voluntary association, colleague, or acquaintance. This produced a measure of range of ties, a count of how many of these relationships were reported. It also produced a measure of multiplex ties: if any given alter stood in more than one such relationship to ego (for instance friend and neighbour) then this was deemed multiplex and for modelling purposes we created a variable of the (log of the) proportion of multiplex ties among all ties for each ego. Finally we operationalised aspects of the reported affective characteristics of dyadic ties: whether the tie was multiplex, frequency of meeting, length of time known, and ego's perception of the closeness of the relationship.

Because we model dyad characteristics, i.e. ego-alter joint activities such as sharing a meal, and for each ego there is more than one alter, the data can be conceived as structured on two levels. On the first level reside egos; and for each ego there are many alters situated at another level. We cannot therefore treat these collections of ego-alter dyads as a simple random sample because dyads involving a given ego are more closely correlated than dyads involving any other ego by virtue of the fact that the given ego is, for example, a food enthusiast or has an outgoing personality. The resulting potential heteroskedasticity due to clustering around ego is corrected by using robust standard error (Rogers 1993; Williams 2002).

3: Associational membership and recreational companionship

We begin by looking at the ways that contact within the three organisations can be extended to informal engagement. This is particularly important for considering how involvement in formal associations might generate more wide ranging informal contacts, so that we can assess the degree of overlap with ‘schmoozing’ activities. We asked, using a roster, which of the other members of the organisation people met outside. 56 per cent of interviewees said that they met fellow members outside the confines of the activities of the organisation of which they were co-members. Table 3 reports the variables that predispose people to meet with other members socially (reported as odds ratios).

Table 3: Sociability and network effects.

	Model 1		Model 2		Model 3	
	Odds ratio	<i>p</i>	Odds ratio	<i>p</i>	Odds ratio	<i>p</i>
Ego’s age	1.333	0.004	1.254	0.042	1.169	0.209
Conservation	1.322	0.257	1.059	0.811	1.405	0.200
Environ. group	0.897	0.792	0.836	0.670	0.902	0.821
Ego is female	1.047	0.860	0.996	0.986	1.085	0.765
Education	1.052	0.526	0.993	0.930	0.998	0.980
Income	0.922	0.110	0.914	0.068	0.897	0.050
Same gender	1.203	0.251	1.209	0.250	1.455	0.053
Age difference	0.717	0.003	0.701	0.002	0.818	0.091
Class homophily	0.995	0.527	0.994	0.457	0.999	0.888
Ego’s Cambridge score	1.001	0.888	1.001	0.829	1.002	0.707
Network position	0.923	0.668	1.030	0.879	0.884	0.576
Prop. of multiplex ties			4.917	0.000	2.192	0.140
Range of ties			1.037	0.728	1.033	0.771
Net size			0.976	0.431	0.971	0.419
Frequency					1.429	0.005
How long known					1.013	0.366
Especially close					4.307	0.000
Multiplex tie?					2.799	0.003
N	697		697		697	

Difference of 48.1 in Bayes Information Criterion (Raftery 1995) provides *very strong* support for Model 3. See Note 5 on model selection.

Question: In the last year, who on this list [Roster of organisation’s members] have you met with outside of the activities of [Organisation]?

Model 1 considers the socio-demographic attributes of ego and alter, so that we are able to see whether homophily is important to people socialising beyond the confines of the organization. Two characteristics are statistically significant. The chances of meeting someone from the organisation socially are significantly higher if one is older, and also significantly lower the greater the age difference between ego and other. There is, however, no evidence that class or gender homophily matter. Nor did the position of ego within the internal organisational network make any difference: external sociable engagement was not a function of being core or peripheral in the official activities of the association. Nor did the number of different types of association to which respondents belong have any significance. There thus appears to be no overlap between internal organisational networks and networks of sociability between members.

Model 2 adds characteristics of the structure of respondent's network ties. Having a larger number of multiplex ties, where respondents said that they knew a fellow member in two or more capacities, (family and neighbour, or colleague and friend) considerably increases the likelihood of joining in sociable activities. The more complex the range of the personal ties with other members, the more they engage in sociable activities. Age and income continue to be significant as indicators of engagement once the character of ego's network is taken into account, and it also then matters rather more which organisation is being examined. It was much less likely that a member of the conservation group would engage in sociable activities.

In model 3 the particular nature of the tie between ego and alter is examined. The additional variables were frequency of contact, number of years known, feeling close and knowing each other in more than one capacity (measured as having a multiplex tie with a particular alter). These ties matter. Feeling close to alter increases fourfold the likelihood of engaging in a sociable activity with that person. Having a multiplex tie to alter also increases the likelihood almost threefold. Greater frequency of meetings between ego and alter also has some effect. Once the nature of ties is taken into account only income remains significant and age effects drop out of the model. The Bayes-

Schwarz Information Criterion indicates very strong support for the third model.[5] The final model shows that the nature of the mutual tie between ego and alter is the main source of differences in the likelihood of members of an organisation engaging in sociable activities beyond the bounds of its official activities. Measures of homophily, appear much less important.

4: Ego networks in six popular recreational activities

Let us now consider the determinants of people's involvement in six specific recreational activities. When examining these activities (see Tables 4 - 9), we proceeded in the same way as before, building models in three steps - socio-demographic and homophilic characteristics, then network structure, then nature of network ties. In general the components of the models were not very good at explaining the variance in behaviour. We only comment on the findings referring to the first and second steps where relevant, concentrating rather on the description of the full model 3, though the tables report each step for the sake of completeness.

As regards inviting people home for a meal (Table 4), conservation group members were significantly less hospitable than those from the other two organisations. We also see that age based homophily is significant, with much less hospitality when age differences are greater. Once we took into account the quality of ties only network size remains significant; the larger the network the more likely an invitation will be extended to someone else to eat a meal. Two features of the quality of dyadic ties appear important. Most important is the length of time ego and alter have known one another, with a shorter relationship increasing the likelihood of an invitation. In addition, the more frequently ego and alter meet, the more likely is ego to invite alter home for a meal.

Table 4: Consumption and network effects: invited alter to meal at own house.

	Model 1		Model 2		Model 3	
	Odds ratio	<i>p</i>	Odds ratio	<i>p</i>	Odds ratio	<i>p</i>
Ego's age	0.790	0.032	0.871	0.235	0.935	0.571
Conservation group	0.369	0.001	0.492	0.023	0.505	0.029
Environmental group	0.478	0.126	0.610	0.299	0.608	0.299
Ego is female	1.152	0.571	0.981	0.936	0.919	0.728
Education	0.964	0.678	0.945	0.518	0.955	0.601
Income	0.993	0.894	1.011	0.804	1.006	0.894
Same gender	0.724	0.105	0.699	0.076	0.740	0.166
Age difference	1.287	0.041	1.339	0.017	1.328	0.021
Class homophily	1.007	0.498	1.007	0.529	1.008	0.485
Ego's Cambridge score	1.013	0.116	1.008	0.317	1.007	0.374
Network position	0.759	0.270	0.901	0.681	0.890	0.652
Prop. Of multiplex ties			0.378	0.088	0.379	0.105
Range of ties			0.966	0.772	0.988	0.923
Net size			1.303	0.007	1.296	0.010
Frequency					1.215	0.096
How long known					0.987	0.148
Especially close					1.454	0.241
Multiplex tie?					0.877	0.670
N	666		666		666	

Difference in BIC (Raftery 1995) of 26.9 provides *very strong* support for Model 3. See Note 5 on model selection.

Question: Can you tell me which of these social activities you have done in the last two weeks? Had someone to your house for lunch or dinner? Can you tell me the names of the peoples you did these thing with?

Analysing the answers to the question of whether ego had been invited out to someone else's home for a meal showed that only one variable was ever statistically significant, network size (Table 5). The larger ego's network the more likely s/he was to accept an invitation. Since we would expect that the giving and receiving of invitations to take meals in domestic surroundings are mostly reciprocal, it is perhaps surprising that quality of tie was not also relevant. However, we might conclude that the exchange of invitations among people like those in our sample is almost entirely a function of how many people a person knows: a simple function of network structure.

Table 5: Consumption and network effects: being invited for meal by alter

	Model 1		Model 2		Model 3	
	Odds ratio	<i>p</i>	Odds ratio	<i>p</i>	Odds ratio	<i>p</i>
Ego's age	1.029	0.793	1.163	0.205	1.125	0.363
Conservation group	1.071	0.818	1.389	0.329	1.398	0.315
Environmental group	1.813	0.123	2.264	0.049	2.240	0.053
Ego is female	1.243	0.427	1.039	0.882	1.021	0.933
Education	0.994	0.947	0.987	0.888	0.978	0.819
Income	1.087	0.125	1.099	0.089	1.103	0.079
Same gender	1.171	0.455	1.159	0.484	1.135	0.566
Age difference	0.979	0.846	1.005	0.967	1.022	0.851
Class homophily	0.991	0.382	0.990	0.349	0.991	0.366
Ego's Cambridge score	1.000	0.962	0.996	0.558	0.996	0.577
Network position	0.928	0.706	1.102	0.620	1.119	0.565
Prop. Of multiplex ties			0.479	0.206	0.374	0.131
Range of ties			0.947	0.607	0.936	0.544
Net size			1.321	0.005	1.328	0.005
Frequency					0.878	0.332
How long known					1.003	0.787
Especially close					1.344	0.377
Multiplex tie?					1.330	0.341
N	666		666		666	

Difference in BIC (Raftery 1995) of 24.2 provides *very strong* support for Model 3. See Note 5 on model selection.

Question: Went to someone else's house for lunch or dinner?

Receiving people at home just for a visit was influenced rather more by social and network features (see Table 6). In model one being female and being of the same age were statistically significant. Gender did not affect hospitality once network structure was taken into account. Those with a comparatively narrow range of ties had more visitors; as did those with a large number of people in their network; and to a lesser extent, those who had a greater proportion of multiplex ties among their network associates. Taking account of the quality of dyadic ties made no difference. Thus we must conclude that it is only features of network structure, and homophily by age, among the variables we have measured, which affect who is received at home. Predicting influences on paying a visit to another's house was even less well explained. Only two factors mattered at all, network size, where the larger the network the more likely a visit, and range of ties, where again those with a narrower range of ties were more likely to be the recipients of hospitality

Table 6: Consumption and network effects: had alter to house for visit

	Model 1		Model 2		Model 3	
	Odds ratio	<i>p</i>	Odds ratio	<i>p</i>	Odds ratio	<i>p</i>
Ego's age	0.917	0.232	0.972	0.705	1.004	0.966
Conservation group	0.867	0.514	0.910	0.640	0.911	0.646
Environmental group	1.361	0.374	1.523	0.186	1.526	0.170
Ego is female	1.525	0.029	1.486	0.050	1.467	0.064
Education	0.981	0.790	1.010	0.857	1.017	0.765
Income	1.008	0.847	1.026	0.465	1.022	0.542
Same gender	0.839	0.350	0.818	0.301	0.835	0.352
Age difference	1.291	0.009	1.324	0.004	1.316	0.005
Class homophily	1.001	0.879	1.005	0.541	1.005	0.531
Ego's Cambridge score	0.995	0.315	0.994	0.229	0.993	0.206
Network position	0.913	0.531	0.915	0.561	0.899	0.480
Prop. Of multiplex ties			1.575	0.227	1.631	0.274
Range of ties			0.700	0.000	0.706	0.000
Net size			1.172	0.021	1.168	0.023
Frequency					1.152	0.132
How long known					0.996	0.607
Especially close					0.905	0.669
Multiplex tie?					0.905	0.732
N	666		666		666	

Difference in BIC of 35.7 provides *very strong* support for model 3. See Note 5 on model selection.

Question: Had someone to your house for a visit?

Table 7 indicates net size increased the chances of being invited to alter's house, but that the range of times reduced the chance, as if invitations were most likely to be between those from similar social domains. In general, private hospitality does not appear understandable in terms of people's social connections. This kind of private sociability does not appear to be particularly closely linked to people's intimate social networks, in ways which would be consistent with the idea that people's informal sociability is linked to their activity in 'lifestyle enclaves' with 'people like us'. One explanation may be that some of this private hospitality may be structured by people's relationships to other household members (for instance when respondents entertain their partner's friends or acquaintances). This suggests that private hospitality may be conducive to a significant degree of contact with relevant strangers. Younger people are less likely to invite others to their homes, and generally we see little evidence for homophilic processes here.

Table 7: Consumption and network effects: went to visit alter's house.

	Model 1		Model 2		Model 3	
	Odds ratio	<i>p</i>	Odds ratio	<i>p</i>	Odds ratio	<i>p</i>
Ego's age	0.827	0.039	0.873	0.153	0.873	0.184
Conservation group	0.851	0.531	0.855	0.573	0.888	0.671
Environmental group	0.667	0.333	0.700	0.363	0.695	0.352
Ego is female	1.366	0.142	1.229	0.332	1.184	0.422
Education	0.948	0.533	0.978	0.765	0.987	0.858
Income	0.999	0.977	1.003	0.938	1.002	0.972
Same gender	0.889	0.517	0.884	0.514	0.909	0.628
Age difference	0.894	0.303	0.916	0.416	0.931	0.513
Class homophily	0.989	0.203	0.992	0.359	0.993	0.401
Ego's Cambridge score	0.993	0.199	0.992	0.122	0.991	0.101
Network position	1.033	0.845	1.051	0.759	1.042	0.801
Prop. of multiplex ties			1.810	0.115	1.293	0.535
Range of ties			0.762	0.001	0.764	0.002
Net size			1.198	0.009	1.196	0.010
Frequency					1.164	0.230
How long known					1.002	0.870
Especially close					1.107	0.712
Multiplex tie?					1.338	0.353
N	666		666		666	

Difference in BIC of 32.8 provides *very strong* support for model 3. See Note 5 on model selection.

Question: Went to somebody else's house for a visit?

Tables 8 and 9 examine the determinants of participation for recreational practices involving meeting in public on commercial premises – eating out and going for a drink. As regards going out for meal (Table 8), neither demographic variables, nor measures of homophily, register significant. This reflects a practice which involves people of all ages and both sexes, a comparatively neutral site symbolically for middle class people. Network size is significant, the larger the network the more often ego eats out. In the absence of any knowledge about the quality of dyadic ties, the greater the proportion of ego's ties which are multiplex the more often s/he eats out. This effect disappears once it is registered that frequency of meeting and how long ego and alter have known one another is taken into account. Once again eating together seems to be a feature of relationships of shorter duration, but also of those relationships where meeting one another is comparatively frequent. Thus knowing a lot of people, and seeing frequently those whom

ego has met relatively recently gives the best statistical prediction of who goes out together for a meal.

Table 8: Consumption and network effects: went out for meal with alter.

	Model 1		Model 2		Model 3	
	Odds ratio	<i>p</i>	Odds ratio	<i>p</i>	Odds ratio	<i>p</i>
Ego's age	0.961	0.678	1.027	0.793	1.174	0.153
Conservation group	0.682	0.176	0.725	0.269	0.735	0.312
Environmental group	1.193	0.660	1.289	0.499	1.219	0.610
Ego is female	1.225	0.420	1.091	0.723	0.987	0.959
Education	0.961	0.664	0.978	0.775	0.996	0.962
Income	1.031	0.569	1.034	0.493	1.025	0.621
Same gender	0.896	0.588	0.888	0.565	0.945	0.781
Age difference	0.944	0.617	0.968	0.786	0.963	0.744
Class homophily	0.985	0.133	0.987	0.181	0.987	0.203
Ego's Cambridge score	0.995	0.424	0.993	0.293	0.992	0.241
Network position	0.881	0.491	0.943	0.757	0.935	0.733
Prop. of multiplex ties			1.280	0.566	1.045	0.933
Range of ties			0.826	0.059	0.848	0.131
Net size			1.228	0.009	1.216	0.016
Frequency					1.484	0.006
How long known					0.977	0.013
Especially close					1.410	0.179
Multiplex tie?					0.997	0.993
N	666		666		666	

Difference of 18.7 in Bayes Information Criterion (Raftery 1995) provides *very strong* support for Model 3. See Note 5 on model selection.

Question: Went out with someone to eat to a restaurant or café?

The second activity, going out for a drink, does give a more thoroughly interpretable model (see Table 9). Here we report all three steps in the model in detail. Model 1 shows that those who go drinking are about twice as likely to be male, but their companions might be either male or female. A drinking partner is also very likely to be in the same age category. Respondent's income doesn't matter, taking a drink being a relatively inexpensive activity. Model 2 continues to show homophily by age as a significant determinant. It also shows that network size is significant; again those with a larger network participate more. Model 3 shows that the nature of the ties between ego and alter are also highly significant. Gender, age and network size remain significant but any pair of individuals going out frequently for a drink is likely to

meet more frequently than average, to have known each other for a relatively short period of time, and also to feel close to one another. Going drinking together is a way of building relationships of affect quickly, perhaps because it can conveniently be repeated relatively often. This is quite a strong model indicating that ego's characteristics, age homophily, network structure and quality of ties matter in determining who will be a drinking companion. The implication is that the relationships established are ones based on relatively regular meetings but without the relationship having lasted very long. Insofar as going for a drink is a comparatively casual form of engagement it is interesting that the selection process is much more predictable than that for potentially more deeply obliging forms of involvement. Arguably, going out for a drink stands proxy for the most accessible and least restricted form of sociability and yet it is the most socially differentiated of the six activities under examination. Is this some indication of the separation of the public and the private sphere, some indication of the context for the establishment of dyadic relationships?

So, the ego going out for drink is probably male, with a large social network, has companions of the same age, who have been known for a comparatively short time, but who are seen frequently and who are considered to be fairly close. This model gives a strong explanation of the process whereby people select their companions to go out for a drink.

If we reflect on the findings regarding these six activities we see that they are not easy to explain in terms of social characteristics, positions and ties. Nevertheless age homophily matters with respect to three activities. Being from a different age group increased the likelihood of being a host, for a meal or a visit; but going out for a drink was an activity undertaken with people of the same age. There was evidence that ego's network structure was a primary facilitator of these sorts of activity. For each of the activities having a larger network size increased the likelihood of participation. In addition, those with a smaller range of ties were more likely to be involved in domestic visits and going out for a drink. The nature of the tie made no difference to any of the four domestic activities, but both for dining out and going for a drink was

more likely if the people involved met frequently and if they had known each other for a comparatively short time. This suggests that going out to eat or drink on neutral territory may be a way of getting to know someone better. It seems likely that if we sought to extrapolate to other sorts of leisure activity there would be considerable variation between practices with regard to the effects of participation and social contact.

Table 9: Consumption and network effects: went out for drink with alter

	Model 1		Model 2		Model 3	
	Odds ratio	<i>p</i>	Odds ratio	<i>p</i>	Odds ratio	<i>p</i>
Ego's age	0.700	0.000	0.715	0.001	0.786	0.023
Conservation group	1.049	0.881	0.945	0.869	1.034	0.927
Environmental group	1.244	0.712	1.217	0.699	1.194	0.750
Ego is female	0.524	0.037	0.413	0.006	0.360	0.003
Education	0.859	0.078	0.885	0.196	0.894	0.262
Income	0.968	0.505	0.949	0.326	0.942	0.280
Same gender	1.119	0.590	1.132	0.558	1.241	0.344
Age difference	0.663	0.001	0.683	0.003	0.686	0.004
Class homophily	0.999	0.929	1.003	0.791	1.004	0.724
Ego's Cambridge score	0.996	0.624	0.997	0.666	0.995	0.588
Network position	1.150	0.497	1.171	0.433	1.176	0.455
Prop. of multiplex ties			3.139	0.055	1.789	0.399
Range of ties			0.775	0.026	0.784	0.045
Net size			1.247	0.024	1.226	0.034
Frequency					1.635	0.000
How long known					0.981	0.037
Especially close					1.373	0.181
Multiplex tie?					1.414	0.247
loglikelihood						
N	666		666		666	

Difference of 5.9 in Bayes Information Criterion (Raftery 1995) provides *positive* support for Model 3. See Note 5 on model selection.

Question: Went out for a drink with someone to a bar, café or club?

6: Discussion

In this paper we have analysed and explained the social bases of engagement in a number of recreational activities. We have explored the behaviour of our 126 interviewees across several different domains of recreational practice, and examined the impact of networks on these. We have shown that differences in network structures and nature of network ties

are an important part of an explanation of who engages in which types of recreational activity. An individual's network characteristics are at least as likely as their personal characteristics to explain engagement in sociable activities, and these network characteristics are independent of socio-demographic characteristics of individuals. To the extent that interpersonal contact is a prerequisite of the existence of social capital, then networks clearly affect the generation and reproduction of social capital.

Regarding debates about social capital, a number of points can be made. Firstly, there is little relationship between informal recreational practices and membership or involvement in formal organisations. There is no relationship between respondent's position within their organisation and their sociability, even in areas, such as socialising with fellow members, where one might expect to find this. In addition, the actual organisation of which the respondent was a member rarely made any difference to their routine informal sociability: the only exception being where respondents were invited to a meal at someone else's house. This supports the arguments of Li et al (2004) that informal sociability is fundamentally different to membership of associations.

Secondly, we can see clear evidence that people's personal networks make a significant difference to their informal sociability, the implication being that people's own personal communities are important and salient. People's informal sociability is not simply a product of their social location or situation. The closeness of their ties to others matters, as does the multiplexity and nature of their ties to them. Variables estimating the nature of relationships (features of the dyadic tie itself) often gave improved explanations of sociable engagement, and models which included these factors were shown to be significant improvements on those without. At first sight this might appear merely tautologous – because we would expect, say, frequent meeting and multiplexity of a given tie to be as much a consequence as a cause of participating in a given activity. Nevertheless the implication is that it is affective qualities, as much as anything else, that justifies and supports social relationships of leisure and recreation.

Thirdly, we found homophily relatively unimportant. Contrary to expectation, participation in most of the recreational activities that we examined was not conducted in the company of persons with highly similar social characteristics. Of our three measures, on no occasion did gender or class homophily register as significant at the 95 per cent confidence level. Age did however matter with respect to three activities. In general, however, we do see considerable evidence for social mixing in all the recreational practices we examined. We see our findings as suggestive of the importance of companionship. Here, rather than boundaries to ties erected around gender, age and class, we see people sharing more of their leisure time with a diverse range of people. To the extent that this is the case, then there would be something to celebrate for those who are concerned to foster social capital in the contemporary world, for it would seem that these informal connections are promote bridging capital of the strategic kind that Szreter (2003) identifies as 'boundary-spanning'. That is to say, people with different social characteristics, and therefore different social experience, are regularly coming together in situations which might increase tolerance and understanding.

The absence of any indication of class homophily is surprising in the UK. This might be thought to be the result of the sample being so thoroughly middle class. When considering the whole network data inside the organisations there were so few working class people in the sample that it would be difficult to achieve a statistically significant indication of homophily. However, we measured social distance between occupations using the Cambridge Scale which does differentiate positions within the middle class. Although the evidence suggests that while members of associations in Britain are becoming increasingly uniform in class terms, that is not the case with informal recreational activities.

What should we make of this? People engaged in routine recreational activities do not appear likely to be close friends. Sociological research shows that best friends do tend to be of the same social class (Goldthorpe et al, 1987), also that the social characteristics of best friend generally gives a fair prediction of the engagement of ego in social activities of different types

(Warde & Tampubolon, 2002). However, going for a drink, or joining a co-member after a meeting with in some form of entertainment, is not likely to require particularly close friendship. All the measured affective qualities of ties (longevity, frequency, closeness, multiplexity) do matter intermittently, but closeness is rarely significant. Perhaps, then, these unexpectedly negative findings should be considered evidence of the 'ordinariness' of the activities we have inquired about. Had we picked ones that were more symbolically marked, then we might have uncovered greater evidence of class being a part of the process of selecting companions. Nevertheless, these are activities frequently undertaken by most people and thus indicative of widely shared experience in the UK.

It would appear that informal recreational practices involve the transcending of social and professional identities, and that one can detect the kinds of routine 'bridging' social interaction that Putnam would see as central to the generation of social capital. The networks of people involved seem to be less socially uniform than those of associations and therefore more promising ground for building social capital. It is for this reason that we think more attention might be paid to the concept of companionship. The types of activity we examined do not seem to require the degree of social similarity that is associated with close friendship or marriage. Yet to describe the relationships of fellow participants as acquaintanceship does not seem to capture the essence of the relation. As we noted above, by far the most frequent response to our closed questions identifying what type of relationship ego had with alter was friendship (60%). Very few alters were described as 'mere' acquaintances. This suggests a need to refine the concept of friendship to better distinguish its forms or degrees. It is unlikely that offering respondents to a survey the choice of describing someone as a companion would increase our capacity to interpret the quality of mutual attachment or affect. However, there seems to be some potential value in making a distinction between the properties and functions of close friendship and those of routine co-participation in recreational activities. Networks of companionship, intermediate between friendship and acquaintanceship, may be central both to recreational practice and social capital.

Footnotes

1 We received 226 replies in total, 102 from the Labour Party, 94 from the Conservation group and 30 from the much smaller Environmental organisation. Complete response rates for the first phase postal questionnaire were for the Conservation Group 79%, for the Environmental Organisation 78%, and for the Labour Party 80%.

2 In this second stage, the response rate for the conservation group was 46% of all members (58% of those who had returned postal questionnaires), for the party 41% (52%), for the environmental organisation 46% (57%).

3. As a measure of occupation and of class homophily we coded in accordance with the Cambridge scale (see Stewart et al, 1983) which generates a continuous hierarchical measure of social distance between occupations.

4. A note on multiple imputation. Missing data often present difficulty in empirical investigation. The solution adopted most often is to restrict the sample included in the analysis by dropping all observations when *any* of the variables of interest is missing, the default mode of most statistical packages. Obviously, with a model of reasonable number of variables or complexity, this omission can significantly reduced the size of the sample. A handful of variables with missing proportion of less than a tenth can lead to a reduction of a third of the original sample. Two unwelcome effects can stem from this: first, this so-called complete case analysis can plausibly introduce bias as those dropped observations might be different in important respect from those observations kept. Secondly, it can render inclusion of a certain variable of interest impossible because of the total proportion of missingness might be prohibitive. Recent developments in statistical methods to deal with missing data, especially multiple imputation or Markov Chain Monte Carlo-based methods, often have provenance in Bayesian methods (Schafer 1997; Little and Rubin 2002; Schafer and Graham 2002) although they often have good frequentist interpretation (Little and Rubin 2002; Kenward and Molenberghs

1998; Robins and Wang 2000. Wang and Robins 1998). Little and Rubin (2002) is a comprehensive text providing good coverage of solutions to missing data whereas Horton and Lipsitz compares different software packages for this purposes. See also the web site put together by Stef van Buuren: www.multiple-imputation.com.

This paper uses multiple imputation to generate 10 set of imputed data and uses Rubin's rule to derive estimates and inferences from the estimates and inferences on these imputed data. Because of the limited experience of the use of this method in the literature we conducted both MCMC-based multiple imputation with SAS version 8.2 (SAS Institute 2001) and chained equation-based multiple imputation with Stata (Royston 2004; van Buuren et al 1999). Both gave comparable results. Although the convergence properties of chained equation-based multiple imputation is still to be worked out, limited experience and simulation have pointed to its flexibility and reasonable performance (Kenward, personal communication 2004; Brand 1999 referenced in Schafer and Graham 2002). We opted for its use in this analysis.

5. A note on model selection. There is not yet an established measure of model selection for the purpose of comparing models involving multiple imputations comparable to Bayes-Schwarz Information Criterion for comparing non-nested model (Raftery, 1995). The important question relating to model selection in this set of models is what is the support for including network structures (Model 2) or ties qualities (Model 3)? Or is the inclusion of more complexities or variables warranted, compared to a simple model with only socio-demographic and homophily variables (Model 1)? To that extent, we compared Model 1 and most parsimonious Model 3 (i.e. model with networks and ties variables which are significantly different from zero at 10% level) using observed-only data in terms of BIC. These are reported for each table; all points to the importance of including network structures and ties qualities. The results reported here are of course the full results because we choose not to restrict ourselves to only to the most parsimonious model.

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