Volunteering and Giving in England: A Multilevel Study of 313 Neighborhoods

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Abstract

This paper analyzes the individual and contextual-level predictors of volunteering and giving in England. It explores how residential stability, a relatively novel aspect of neighborhood context, affects these civic behaviours alongside prior individual and contextual explanations. Multilevel modeling is used to analyze representative data on 13,370 individuals living in 313 areas, which are merged to census contextual measures. Contrary to hypotheses stating a positive association between area residential stability and volunteering, this research finds a curvilinear relationship, whereby volunteering is more likely to occur in areas of low *and* high stability. No relationship is found between area-level stability and charitable giving. A number of other contextual characteristics also influence volunteering and giving, including neighborhood deprivation and ethnic diversity, which are strong negative predictors of both behaviours.

Introduction

Does a stable context increase the likelihood of volunteering and charitable giving over and above this individual-level characteristic? How do other contextual characteristics of neighborhoods influence volunteering and charitable giving in England? This research provides the first comprehensive analysis of the individual and contextual factors predicting volunteering and charitable giving among 13,370 adults living in 313 neighborhoods in England. It contributes to the limited literature in this area in England by analyzing the extent to which community characteristics identified in previous studies – residential stability, social class diversity, urban location, social deprivation, and ethnic and religious diversity – predict volunteering and giving alongside individual-level characteristics. It makes an original theoretical contribution by building on theory that argues stable areas increase community and social cohesion.

This research is motivated by two gaps in the literature. Firstly, no research exists that documents how a stable context influences volunteering and giving. Stable areas have been associated with lower levels of crime (Sampson 2012; Sampson and Reudenbausch 1999; Sampson et al. 1997) and higher levels of pro-community action (Oishi et al. 2007). Stable areas consist of stronger social ties among individuals and higher levels of trust, reciprocal altruism and sense of belonging to a neighborhood. While work has been done at the individual level on the link between residential stability and volunteering (Rotolo et al. 2012), nothing theorizes or tests for effects over and above this individual-level characteristic.

Secondly, there is no work documenting the contextual predictors of volunteering and giving more generally in England despite a wealth of available data, which is surprising given that cross-national (Curtis et al. 2001; Ruiter and De Graaf 2006) and American (Bielefeld et al.

2005; Borgonovi 2008; Rotolo and Wilson 2011) studies suggest that context plays a key role in individual-level involvement. While the individual-level predictors of volunteering and giving are important, these behaviours happen in a social context and the decision to volunteer or give can be effected by contextual-level characteristics (Bielefeld et al. 2005). An overview of volunteering and giving literature in the Britain follows, before a discussion of the research's theoretical explanations and contributions. Hypotheses are then derived from these explanations and tested before discussing the implications for future research.

Previous volunteering and giving research in Britain

There has been a growing number of British studies focusing on the trends and individual-level predictors of volunteering (Bryson and Gomez 2005; Geyne-Rajme and Smith 2012; Hall 1999; Kamarade 2009, 2011; Li et al. 2003a; Li et al. 2003b; Li et al. 2008a; Li et al. 2008b; Li and Marsh 2008; McCulloch 2013; McCulloch et al. 2012; Staetsky and Mohan 2011; Pattie et al. 2003, 2004; Warde et al. 2003) and charitable giving (Banks and Tanner 1999; Caroll et al 2005; Cowley et al. 2011; Jones and Posnett 1991; Li et al. 1995; Pharoah and Tanner 1997).

There is little change in the rates of volunteering and voluntary organization memberships over time (Hall 1999; Warde et al, 2003) as well as cross-survey differences and reasons for such differences (Staetsky and Mohan 2011). Kamarade (forthcoming) shows that people transition in and out of volunteering over their life course, while Geyne-Raime and Smith (2012) demonstrate that while 20% of respondents in the latest wave of the British Household Panel Survey claim to have volunteered at least once in the past month, 20% of all respondents have done so at least once over a 14-year period. McCulloch (2013) investigates cohort variations in volunteer behaviour and finds that while the number of voluntary organizations is

increasing, voluntary memberships are decreasing. He does, however, suggest that memberships may not reflect the levels of volunteering and extent to which individuals have group interests. Li et al. (2003) demonstrate that while volunteering for various groups is relatively stable over time, volunteering as part of workingmen's clubs and trade unions have declined.

Trends in giving over the past 40 years demonstrate a 15% decline between 1974 and 1996 (Pharoah and Tanner 1997), but a resurgence in giving since then (Cowley et al. 2011). Cowley et al. (2011) find that the average amount given to charity has also risen and that households comprising of more females, children and have higher levels of income are also more likely to give and also give more. The top 50% of households in terms of income gave 92% of all money, where the richest 10% account for 22% of this (Cowley et al. 2011). However, poorer households give a greater proportion of their income to charity compared to the richest − 3.6% and 1.1%, respectively (Cowley et al. 2011).

The majority of the work in the UK on giving looks at charity level data such as organizations (cf. Clifford 2012; Clifford et al. 2012). Clifford et al. (2012) find that charity organizations working in deprived areas with disadvantaged groups are more likely to receive public funding, and that funding in general varies by organization level, the beneficiaries it serves and its income, and the deprivation and poverty level of the neighborhood or local authority. Pharoah and Tanner (1997) and Cowley et al. (2012) find regional differences in household giving, however these differences were only investigated across the home countries comprising the UK in the former study and 12 government office regions in the later study. These ecological studies are thus using large measures of geographical context and are doing so purely descriptively without isolating mechanisms and testing the size of theoretical effects. This strengthens the need for investigating how geographic context influences volunteering and

giving in the current study. How giving varies across neighborhoods has never been investigated, nor have contextual effects been pursued independently of compositional effects. McCulloch et al (2012) demonstrate that levels of volunteering are lower in more deprived areas, however, the analysis is at the regional level, which does not distinguish compositional effects from contextual effects. Is the association between volunteering and region the effect of the composition of poor people in an area or does a deprived geographic unit have an additive effect on low likelihoods of volunteering?

This overview of the work in Britain also demonstrates that while research has failed to isolate individual-level effects from contextual-level effects, the work that has linked aggregated charity and volunteer work to geographies has focused in its entirety on level of deprivation. In what follows, I explain how a relatively unexplored measure of context – area residential stability – may explain volunteering and giving, as well as other explanations.

Area Residential stability as a predictor of volunteering and charitable giving

The positive link between an individual's length of residential stability and civic engagement has been reported in numerous studies outside of the UK (Dipasquale and Glaeser 1999; Highton and Wolfinger 2001; Putnam 2000; Rotolo et al. 2010; Segal and Wiesbrod 2002). The length of time spent at a residence is indicative of how embedded someone is in a community, where longer durations equal more embeddedness. New arrivals to a community are less likely to be civically engaged for two reasons related to their relatively lower levels of social integration. Firstly, new arrivals are not plugged into community social networks, limiting the likelihood that they hear about opportunities to volunteer. Second, from the point of view of the organizations and their members, they will not be able to target and recruit new arrivals to a community, regardless of

the human capital skills and desire of new arrivals to volunteer their time, because they are not on the organization's radar due to their isolation.

However, no work has been done at the contextual level. If residential stability and housing tenure have positive effects at the individual level, is there an additive effect of living in an area that has a higher level of geographical stability, social integration and social ties in an area? Previous studies have explored the relationship between residential stability and various measures of social cohesion. Sampson et al. (1999) find a negative association between residential stability and crime rates. Sampson et al. (1997) claim that residential instability of an area weakens collective efficacy by inhibiting social connections between residents. Stable residential areas are more cohesive because the residents in them have had longer to establish their social ties and build relationships characterized by mutual trust and solidarity (Sampson et al. 1997; Sampson 2012). Previous work demonstrates that residents of stable communities have more friends in the neighborhood than residents in less stable communities (Sampson 1988, 1991). Much of Sampson's work relates to crime, however, the argument can be applied to civic engagement given the central role played by residential stability in establishing the collective efficacy that spurs residents to mobilize for collective causes. Unstable areas will thus have lower collective efficacy, social cohesion and the mobilization for collective causes. Lee and Brudney (2010) find support for this notion as the likelihood of volunteering increases the more embedded residents feel in their communities, and suggest that volunteering is based strongly on foundations of trust within communities. Mellor et al. (2009) also find that residents are more likely to volunteer if they feel a bond with their neighborhood and neighbors.

Oishi et al. (2007) investigate the relationship between residential stability and pro-community action further in three studies. The authors find that residential stability can lead to a

stronger identification with one's community, which in turn leads to more pro-community action. They argue that reciprocal altruism should be more prevalent in stable communities because social interactions are more frequent/recurrent, increasing the likelihood that a favor is repaid. They find that residents in stable communities bought license plates supporting the environment in their home state more often than those living in less stable communities. They also found that home-game baseball attendance was less dependent on the team's record in stable cities than in unstable cities. Lastly, their experimental evidence demonstrated that there were more pro-social interactions in community-orientated tasks in stable groups compared to unstable groups. Furthermore, the effect of stability was mediated by individual community identification. This leads to the following hypothesis:

> *Area Neighborhood residential stability will be positively associated with volunteering (*H1a) *and giving* (H1b).

Causal claims are beyond the scope of the current chapter given the cross-sectional data used. For example, one could also imagine that areas where lots of people volunteer become desirable and increases the likelihood that people stay in these areas for longer. This competing claim is impossible to disentangle methodologically without longitudinal data that accurately measures neighborhood stability in years as opposed to alternate measures of "churn". Oishi et al. (2008) do, however, go some way to disentangle this relationship with two studies that have dynamic measurements of stability and pro-community action, and one further experimental design where individuals are randomly assigned to levels of community stability in a laboratory experiment. This experimental work strengthens the casual narrative outlined by Goldthorpe's (2001) "generative process" and the work in criminology (brought together in Sampson 2012).

Other previous contextual explanations of volunteering and giving

People with lower levels of socioeconomic status are less likely to volunteer and give than those from higher socioeconomic backgrounds (Bekkers and Wiepking 2011; Musick and Wilson 2008; Wiepking and Bekkers 2012; Wilson 2000) and in the UK this gap appears to be growing (Hall 1999; Warde et al. 2003). Given that socioeconomic status among people varies across localities, where some areas have more people from lower socioeconomic groups in them, controlling for this will account for some of the differences between areas. Secondly, contextual factors associated with certain characteristics of an area rather than an aggregate of individuals can explain the variation in volunteering and giving between areas. For example, it may be that having controlled for individual-level (compositional) socioeconomic status, the level of deprivation of an area may explain the variance because it promotes certain values or provides fewer opportunities. In other words, all citizens in a deprived area are affected by this context and are thus less likely to volunteer irrespective of their own socioeconomic status. To reiterate this point, Musick and Wilson (2008) argue that people from low socioeconomic groups are more likely to meet the immediate concrete needs of people as they arise, while people from higher socioeconomic groups are more likely to mobilize and commit to a community oriented outcome. Self-selection of groups into geographical areas such as neighborhoods and wards means that some areas will compose of people with more human, social, and cultural capital resources that in turn increase the likelihood that they will give and volunteer (Wilson and Musick 1997). Clifford (2012) demonstrates that the unequal composition of wards and neighborhoods in terms of socioeconomic status means that these areas are better placed to make the most of Conservative decentralization. Lastly, the British literature review suggested that volunteering and charitable giving were lower in areas of high social deprivation (cf. Banks and

Tanner 1999; Clifford 2012; Clifford et al. 2012; Cowley et al. 2011; McCulloch et al. 2012; Pharoah and Tanner 1997). However, these studies are unable to distinguish individual compositional effects from geographical contextual-level effects as they focus on aggregating data to geographical areas or data on charities. This research specifically disentangles these effects, but borrows from these prior studies to hypothesize that:

Area social deprivation will be negatively related to volunteering (H2a) and giving (H2b), over and above the compositional characteristics of areas.

Ethnic diversity has been argued to be negatively associated with trust nationally (Putnam 1993; 2000; 2007). It has been suggested that a lack of trust can undermine the foundations of civil society and engagement among its citizens to contribute to collective causes that would otherwise benefit wider society. There does appear to be a greater consensus regarding the role of ethnic diversity in the "civic engagement" literature (c.f. Costa and Kahn 2003 for an overview of single nation studies). A number of studies confirm a negative relationship between ethnic heterogeneity and volunteering: Musick and Wilson (2008) find this at the metropolitan level and Rotolo and Wilson (2011) find this at the state level.

Area ethnic diversity will be negatively related to volunteering (H3a) and giving (H3b).

Social class diversity may be associated with lower levels of voluntarism. Curtis et al. (2001) argue that a large middle class is needed to encourage the donation of money and time, while Musick and Wilson (2008) suggest that shared values and goals are harder to establish in a society where the wealth is concentrated among a relatively small amount of people. Musick and Wilson (2008) class this explanation as part of the homogeneity argument: the more similar the

level of income among members of a society, the more volunteering that will occur. Woolley (2003) found that income inequality is negatively related to volunteering in Belgium.

Area social class diversity will be negatively related to volunteering (H4a) and giving (H4b).

Borgonovi (2008) argues that religious diversity is associated with a *greater* likelihood that individuals will volunteer and give money as competition increases religious commitment and participation, and thus giving and volunteering for religious based groups. The author finds that religious competition increases the likelihood of volunteering. However, this explanation may not apply in the secular British context.

Area religious diversity will be positively related to volunteering (H5a) and giving (H5b).

Previous studies find that the rural location is positively related to volunteering and giving. A number of reasons account for this. Firstly, rural areas are more homogenous in terms of people that reside there in terms of socio-demographics and shared norms. In rural areas it is easier to monitor and sanction other members of the community for not contributing to public goods, and people are more likely to signal their status in a small community, which is more salient than it would be in a larger community (Musick and Wilson 2008 Sundeen and Raskoff, 1994, 2000).

Urban areas will be negatively related to volunteering (H6a) and giving (H6b).

Data and Methods

The hypotheses are tested using data from the 2008-2009 Citizenship Survey (CS2008), which features a large representative sample of approximately 10,000 adults from England[1], alongside a minority boost sample of 5,000 ethnic minority respondents. The data capture self-reported demographics, attitudes, and behaviors of respondents including questions on civic engagement, faith, and feelings about community. Respondents were only selected for whom complete data for the dependent and independent variables were available, accounting for 13,370 respondents living in 313 local authorities in England.

Contextual measures for religious diversity, ethnic diversity and social class diversity were collected from 2011 Census Local Authority aggregate data (ONS 2013) and matched to individuals in the CS2008. The 2011 Census data are aggregate statistics for ethnic and religious groups living in local authorities, based on all completed Census 2011 surveys in England and Wales. The average population size of a local authority is around 330,000 people, which are smaller ecological units than in previous single nation studies (see Bielefeld et al. 2005; Borgonovi 2008; Lim and MacGregor 2012; Rotolo and Wilson 2011; Sampson 1997).

I use dichotomous variables that account for the instance of volunteering and giving. Furthermore, the data are clustered where individuals are nested in local authorities; making multilevel logistic regression the most appropriate method to analyze the data (Snijders and Bosker 1999). The data contain two levels: level one is the lowest level and accounts for individual respondents; level two accounts for local authorities. All non-dummy variables are mean centered in the analyses

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[1] CS2008 also included cases from Wales, but these were excluded from the analysis because it was not possible to obtain local authority religious composition information for respondents living in Wales.

Dependent variables

The dependent variables in this analysis are the instance of volunteering and giving in the past month. Respondents were first asked "In the last 12 months, have you given unpaid help to any groups, clubs or organizations in any of the ways shown on this card?[2]" Respondents were then asked the frequency of volunteering for the group(s) with "at least once per week", "at least once per month " and "less often than once per month." The instance of volunteering takes the value 1 if the respondent reported any volunteering in the past month and 0 if not. The results do not change between this dichotomous measure and the ordinal measure. A measure of charitable giving was created from the question "The card shows different ways in which people can give money to charity. In the past 4 weeks, have you given any money to charity using these or any other method? Please exclude donating goods or prizes.[3]" The instance of giving takes the value 1 if the respondent reported any giving and 0 if not. Again, the results do not substantively change between the instance of giving in the past month and a continuous measure for the amount given in the past month, Table 1 displays the descriptive statistics for both dependent variables.

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[2] (1) Raising or handling money/taking part in sponsored events; (2) Leading the group/member of a committee; (3) Organising or helping to run an activity or event; (4) Visiting people; (5) Befriending or mentoring people; (6) Giving advice/information/counseling; (7) Secretarial, admin or clerical work; (8) Providing transport/driving; (9) Representing; (10) Campaigning; (11) Other practical help (e.g. helping out at school, shopping); (12) Any other help; (13) No help given in past 12 months.

[3] (1) Door-to-door collection; (2) Street collection; (3) Sponsorship; (4) Collection at church, mosque, other place of worship; (5) Shop counter collection; (6) Pub collection; (7) Collection at work; (8) Buying raffle tickets (NOT national lottery); (9) Buying goods from a charity shop or catalogue; (10) Direct debit, standing order, covenant or debit from salary; (11) Giving to people begging on the street; (12) Other method of giving; (13) Did not give to charity.

Independent variables

Contextual variables

Basic descriptive statistics for all independent variables are displayed in Table 1. Table 2 displays the correlations between the contextual-level variables and will guide the model building strategy used in this study (discussed below). The contextual-level variables are of primary interest in this study and are described first.

The Index of Multiple Deprivation (IMD) is used to indicate contextual-level poverty and is contained in the CS2008. The IMD is a composite poverty measure created using the rankings of the local authority according to the following characteristics: income; employment; health deprivation and disability; educations skills and training; barriers to housing and services; crime; the living environment.

Area residential stability was derived from individual-level data from CS2008. Respondents were asked how long they had lived in their current home with response options "less than a year", "1-2 years", "3-5 years", "6-10 years", "11-20 years", "21-30 years", and "more than 30 years". This ordinal scale is not ideal given it is not truly a continuous scale, but is the only cross-sectional data available that captures residential stability, the civic engagement dependent variables, and can be matched to local authority information. Census data are unavailable for the level of residential stability in an area, although a measure of "churn" can be used from a question that asks if respondents moved to their current residence in the past year. This, however, is qualitatively different from the average duration residents have lived in the area and fails to capture the reality that social ties take time to form. The results (discussed in detail below) suggest that there is a linear association between residential stability and volunteering and giving at the individual level, which suggests that although this is not an

accurate measure of residential stability, longer durations in a neighborhood are associated with a greater likelihood of volunteering and giving, which is consistent with all known prior studies that investigate this individual-level effect. Aggregating individual-level measures to contextual areas is a common strategy used throughout the social sciences (Sampson et al. 2002), and while this technique is contested, recent work suggests that the technique is reliable for lower level aggregations (Lim and Macgregor 2012).

Social class diversity, and religious and ethnic diversity are all measured using the 2011 Census, defined as the inverse of the Herfindahl Index. The three measures vary from 0-1, where scores of 1 indicate the highest level of diversity. A measure of rural and urban local authority location is included as a dummy variable coded 0 if the local authority is located in a rural area and 1 if located in an urban location.

Table 1. Descriptive statistics for dependent and independent variables

Dependent variables	Mean	SD	Min	Max
Volunteered in past month	0.37	0.48	0	1
Donated money in past month	0.72	0.45	0	1
Individual-level variables				
Female	0.54	0.50	0	1
age	46.85	18.11	16	97
Marital status				
Married	0.48	0.50	0	1
Cohabiting	0.06	0.24	0	1
Single	0.24	0.43	0	1
Widowed	0.09	0.29	0	1
Divorced/separated	0.12	0.33	0	1
Income	4.25	3.28	0	14
Education				
Degree	0.23	0.42	0	1
Other higher qualification	0.08	0.28	0	1
A-levels	0.11	0.32	0	1
GCSE's	0.20	0.40	0	1
No Qualification	0.19	0.39	0	1
Unknown education	0.18	0.38	0	1
Social Class				
High social class	0.33	0.47	0	1

Middle social class	0.36	0.48	0	1
Low social class	0.19	0.39	0	1
Unknown social class	0.12	0.32	0	1
Ethnicity				
White	0.55	0.50	0	1
Asian	0.20	0.40	0	1
Black	0.13	0.33	0	1
Other	0.12	0.32	0	1
Born in the UK	0.65	0.48	0	1
Employed	0.54	0.50	0	1
Number of persons in hhold	2.53	1.43	1	10
Number of children <16 yrs.	0.53	0.99	0	8
Health status				
Very bad	0.01	0.12	0	1
Bad	0.05	0.22	0	1
Fair	0.19	0.39	0	1
Good	0.37	0.48	0	1
Very good	0.38	0.48	0	1
Religious affiliation				
No religion	0.60	0.49	0	1
Christian	0.15	0.36	0	1
Muslim	0.06	0.25	0	1
Hindu	0.06	0.25	0	1
Other	0.13	0.33	0	1
Homeowner	0.62	0.48	0	1
Years resided in neighborhood	4.32	1.81	1	7
Actively practicing religion	0.46	0.50	0	1
Contextual-level variables				
Level of deprivation	6.37	2.15	1	10
Residential stability	4.32	0.45	2.88	6.80
Urban area of residence	0.88	0.33	0	1
Religious diversity	0.42	0.15	0.13	0.69
Social class diversity	0.84	0.01	0.77	0.86
Ethnic diversity	0.33	0.25	0.02	0.83

Table 2. Correlations between contextual-level variables

	Residential stability	Social class diversity	Urban area	Social deprivation	Ethnic diversity	Religious diversity
Residential stability	1					
Social class diversity	0.17	1				
Urban area	-0.22	0.01	1			
Social deprivation	-0.26	0.34	0.39	1		
Ethnic diversity	-0.50	-0.17	0.34	0.55	1	
Religious diversity	-0.55	-0.13	0.34	0.49	0.93	1

Control variables

I also control for relevant individual-level demographic variables that have been associated with volunteering and giving in past studies, capturing the sex, age, marital status, income, educational level, social class, ethnicity, birth location, employment status, number of people in the household, number of children in the household, health status, religious affiliation, housing tenure, length of residence in an area, and whether the respondent is actively practicing their religion.

Sex takes the value 1 if the respondent is female and 0 if male. Age is a continuous variable that ranges from 16-69 (a squared term is also included to account for the curvilinear relationship reported by the majority of previous studies). I control for marital status and include dummy variables that take the value 1 for each category: married, cohabiting, single, widowed, separated/divorced. Income is controlled for using an ordinal scale that reflects the eight categories of gross annual income provided in CS2008. I distinguish between level of education by including dummy variables coded 1 for each education level: university degree certificate or

higher; other higher education qualification; A-levels; GCSEs[4]; no qualifications. I control for

social class by collapsing Goldthorpe's class schema and including dummy variables coded 1 for

each collapsed category[5]: professional and managerial/technical occupations; skilled and non-

manual occupations; manual, partly skilled and unskilled occupations. I distinguish between

broad ethnic groups and include dummy variables that take the value 1 for each category: White,

Asian, Black, and Other. I include a control for being born in the UK, which takes the value 1 if

the respondent was born in the UK or the Republic of Ireland and 0 if born elsewhere. I include a

dummy variable to indicate employment status, coded 1 if the respondent reported currently in

employment and 0 otherwise. I control for the number of people in the respondent's household,

which ranges from 1-10, and the number of children below the age of 16 in the household, which

ranges from 0-8. I control for health status with a question that asked respondents "How is your

health in general?", allowing me to create a series of dummy variables for "very good", "good",

"fair", "bad", and "very bad". Religious affiliation was measured by the question asking

respondents which religion they belong to (Christian, Muslim, Hindu, Other, and No religion).

Housing tenure was included as a dummy variable that captured whether a respondent owned

their home or had a mortgage (coded 1), or if they did not (coded 0).

I also include the length of time spent in a neighborhood. Respondents were asked how

long they had lived in their current home with response options "less than a year", "1-2 years",

"3-5 years", "6-10 years", "11-20 years", "21-30 years", and "more than 30 years". As

mentioned, this ordinal scale is not ideal given it is not truly a continuous scale, but is the only

cross-sectional data available that captures residential stability, the civic engagement dependent

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[4] GCSEs are compulsory secondary level educational qualifications that are traditionally examined at age 16; A-Levels are post-secondary educational qualifications examined at age 18 and are traditionally a prerequisite for university admission.

[5] Social class categories were also included in prior analyses as their original categories with no significant differences between groups.

variables, and can be matched to local authority (area) information. Finally, whether a respondent is actively practicing their religion is included with a question that asked "do you consider that you are actively practicing your religion?", where a "yes" response was coded 1 and a "no" was coded 0.

Results

To test the hypotheses, I estimate similar models predicting volunteering and giving. I first specified a 'null' model with a random intercept only with no individual or local authority level parameters (not presented), which demonstrates that the rates of volunteering and giving vary across local authorities. In model 1, I include the "standard" individual-level controls for the sex, age, marital status, income, educational level, social class, ethnicity, birth location, employment status, number of people in the household, number of children in the household, health status, religious affiliation, housing tenure, length of residence in an area, and whether the respondent is actively practicing their religion. This allows me to assess how residential stability affects volunteering and giving at the individual level, before assessing its affect as a contextual variable. Lastly, this model includes important socioeconomic variables that account for the composition of local authorities, allowing me to differentiate between composition and context in later models.

In model 2, I begin to introduce the measures of context. The model building approach is influenced by the correlation matrix contained in Table 2 but also reflects the need to test the robustness of contextual findings as the models become more saturated. There is a high correlation between religious diversity and ethnic diversity, thus these variables are included separately in later models. Before discussing the results of the multilevel models, I examine the

bivariate relationships between residential stability and the average volunteering and giving levels across local authorities. This is because there could be reason to think that the relationships are not linear. For example, while the theory outlined above argues that a positive relationship will exist between area residential stability and average volunteering and giving, there may be a curvilinear relationship whereby people that have not lived in an area for long also have a higher likelihood of volunteering because they use this as an entry tool to gain social capital in a relatively new area. Similarly, these people might be young professionals or students that are highly mobile, which would increase their likelihood of being asked to volunteer or give, which may change the aggregate relationship. In such areas, networks of highly mobile people may inspire a community spirit that encourages all members of a community to engage in community projects and goals. Figure 1 demonstrates a curvilinear relationship between average residential stability and average volunteering rates across local authorities. As such I include a squared term for average residential stability for the volunteering models.

Model 3 includes the measures for the urban location and social class diversity of a local authority. Model 4 then adds the measure of social deprivation – a significant predictor of aggregate levels of Third Sector activity – to assess the robustness of prior estimates simultaneously with this measure. This measure is not included in earlier models as there is reason to assume it would mask the effects of the other contextual-level characteristics given its role as a robust predictor of Third Sector activity at the aggregate level in previous studies. Models 5 and 6 assess the effects of ethnic and religious diversity separately due to the high levels of collinearity.

Figure 1. Residential stability and levels of volunteering and giving across local authorities
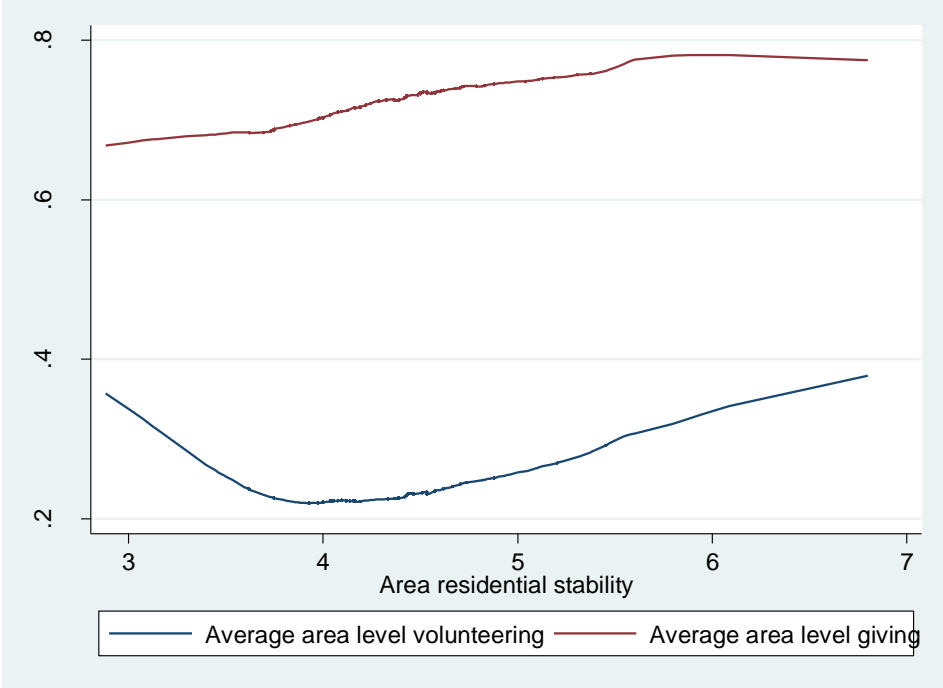
Table 3. Multilevel logit regression models predicting volunteering

	model 1	model 2	model 3	model 4	model 5	model 6
Individual-level variables						
Female	0.084+	0.085+	0.083+	0.082+	0.084+	0.085+
	(0.047)	(0.047)	(0.047)	(0.047)	(0.047)	(0.047)
Age	0.016+	0.016+	0.015+	0.016+	0.016+	0.016+
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
Age squared	-0.000	-0.000	-0.000	-0.000+	-0.000+	-0.000+
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Marital status (ref. married)						
Cohabiting	-0.154	-0.153	-0.147	-0.137	-0.137	-0.139
	(0.098)	(0.098)	(0.098)	(0.098)	(0.098)	(0.098)
Single	0.107	0.106	0.113	0.124+	0.129+	0.130+
	(0.070)	(0.070)	(0.070)	(0.070)	(0.070)	(0.070)
Widowed	-0.058	-0.060	-0.054	-0.045	-0.047	-0.049
	(0.099)	(0.099)	(0.099)	(0.099)	(0.099)	(0.099)
Divorced/separated	0.055	0.056	0.069	0.076	0.075	0.075
	(0.077)	(0.077)	(0.077)	(0.077)	(0.077)	(0.077)
Income	0.004	0.004	0.002	0.002	0.003	0.003
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Education (ref. Degree)						
Other higher qualification	-0.199*	-0.197*	-0.190*	-0.196*	-0.199*	-0.199*
	(0.081)	(0.081)	(0.081)	(0.081)	(0.081)	(0.081)
A-levels	-0.217**	-0.215**	-0.211**	-0.217**	-0.219**	-0.220**
	(0.077)	(0.077)	(0.077)	(0.077)	(0.077)	(0.077)
GCSEs	-0.571***	-0.568***	-0.561***	-0.565***	-0.569***	-0.570***
	(0.071)	(0.071)	(0.071)	(0.071)	(0.071)	(0.071)
No Qualification	-1.154***	-1.150***	-1.137***	-1.136***	-1.143***	-1.144***
	(0.087)	(0.087)	(0.087)	(0.087)	(0.087)	(0.087)
Unknown education	-0.782***	-0.784***	-0.777***	-0.776***	-0.778***	-0.779***
	(0.106)	(0.106)	(0.106)	(0.106)	(0.106)	(0.106)

Social Class (ref. high)						
Middle social class	-0.259***	-0.260***	-0.247***	-0.246***	-0.247***	-0.248***
	(0.057)	(0.057)	(0.057)	(0.057)	(0.057)	(0.057)
Low social class	-0.387***	-0.386***	-0.371***	-0.366***	-0.369***	-0.370***
	(0.074)	(0.074)	(0.074)	(0.074)	(0.074)	(0.074)
Unknown social class	-0.245**	-0.245**	-0.233*	-0.230*	-0.225*	-0.224*
	(0.093)	(0.093)	(0.093)	(0.093)	(0.093)	(0.093)
Ethnicity (ref. white)						
Asian	-0.430***	-0.436***	-0.398***	-0.364**	-0.329**	-0.313**
	(0.116)	(0.116)	(0.116)	(0.116)	(0.117)	(0.117)
Black	-0.193*	-0.205*	-0.184*	-0.131	-0.097	-0.067
	(0.090)	(0.091)	(0.091)	(0.091)	(0.093)	(0.094)
Other	-0.159+	-0.171+	-0.154+	-0.112	-0.084	-0.064
	(0.091)	(0.092)	(0.092)	(0.092)	(0.093)	(0.094)
Born in the UK	0.425***	0.427***	0.426***	0.421***	0.415***	0.414***
	(0.069)	(0.069)	(0.069)	(0.069)	(0.069)	(0.069)
Employed	-0.292***	-0.291***	-0.285***	-0.291***	-0.291***	-0.291***
	(0.060)	(0.060)	(0.060)	(0.060)	(0.060)	(0.060)
Number of persons in household	0.063*	0.063*	0.061*	0.060*	0.060*	0.060*
	(0.027)	(0.027)	(0.027)	(0.027)	(0.027)	(0.027)
Number of children <16 yrs.	0.022	0.023	0.026	0.026	0.025	0.024
	(0.034)	(0.034)	(0.034)	(0.034)	(0.034)	(0.034)
Health status (ref. very bad)						
Bad	0.006	0.006	-0.011	-0.007	-0.011	-0.012
	(0.249)	(0.249)	(0.249)	(0.249)	(0.249)	(0.249)
Fair	0.400+	0.395+	0.385+	0.384+	0.383+	0.381+
	(0.226)	(0.226)	(0.225)	(0.225)	(0.225)	(0.225)
Good	0.561*	0.558*	0.533*	0.527*	0.528*	0.528*
	(0.224)	(0.224)	(0.224)	(0.224)	(0.224)	(0.224)
Very good	0.632**	0.629**	0.604**	0.597**	0.596**	0.596**
	(0.225)	(0.224)	(0.224)	(0.224)	(0.224)	(0.224)

Religious affiliation (ref. no religion)						
Christian	0.090	0.091	0.087	0.084	0.081	0.083
	(0.074)	(0.074)	(0.074)	(0.074)	(0.074)	(0.074)
Muslim	-0.234+	-0.232+	-0.231+	-0.220+	-0.217+	-0.215+
	(0.127)	(0.127)	(0.126)	(0.126)	(0.126)	(0.126)
Hindu	-0.231	-0.233	-0.248	-0.251	-0.236	-0.232
	(0.153)	(0.153)	(0.153)	(0.153)	(0.153)	(0.153)
Other	0.064	0.064	0.057	0.060	0.068	0.070
	(0.119)	(0.119)	(0.119)	(0.119)	(0.119)	(0.119)
Actively practicing religion	0.787***	0.786***	0.782***	0.782***	0.785***	0.787***
	(0.053)	(0.053)	(0.053)	(0.053)	(0.053)	(0.053)
Homeowner (ref. non-homeowner)	0.187***	0.192***	0.192***	0.174**	0.170**	0.167**
	(0.056)	(0.056)	(0.056)	(0.056)	(0.056)	(0.056)
Years resided in neighborhood	0.046**	0.046**	0.047**	0.052***	0.054***	0.056***
	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)
Contextual-level effects						
Area residential stability		-1.505*	-1.405*	-1.289*	-1.254+	-1.280*
		(0.684)	(0.661)	(0.650)	(0.646)	(0.641)
Area residential stability squared		0.164*	0.151*	0.133+	0.123+	0.127+
		(0.076)	(0.074)	(0.073)	(0.072)	(0.072)
Social class diversity			-4.885*	-1.175	-2.616	-4.091
			(2.180)	(2.345)	(2.410)	(2.493)
Urban area of residence			-0.325***	-0.255***	-0.243***	-0.246***
			(0.071)	(0.072)	(0.072)	(0.072)
Level of deprivation				-0.058***	-0.046**	-0.040*
				(0.016)	(0.017)	(0.015)
Religious diversity					-0.658*	
					(0.303)	
Ethnic diversity						-0.565**
						(0.188)

Intercept	-1.640***	-1.643***	2.738	-0.473	0.711	1.944
	(0.250)	(0.250)	(1.850)	(1.999)	(2.049)	(2.116)
Variance components						
Level 2 variance	-2.273***	-2.311***	-2.586***	-2.748***	-2.823***	-2.887***
	(0.235)	(0.240)	(0.270)	(0.289)	(0.301)	(0.313)
Level 1 Units	13370	13370	13370	13370	13370	13370
Level 2 Units	313	313	313	313	313	313
Log Likelihood	-6670.207	-6667.763	-6655.124	-6648.536	-6646.213	-6644.122
df	34	36	38	39	40	40
AIC	13412	13412	13390	13379	13376	13372
BIC	13682	13697	13690	13687	13691	13687

Predictors of Volunteering

Table 3 displays the results associated with the instance of volunteering. As discussed, I estimated a null model with random intercepts only. The results suggest that the probability of volunteering varies over local authorities.

Model 1 includes individual-level controls for sex, age, age-squared, marital status, income, educational level, social class, ethnicity, birth location, employment status, number of people in the household, number of children in the household, health status, religious affiliation, housing tenure, length of residence in an area. Consistent with Rotolo et al. (2010), I find that homeowners are more likely to volunteer compared to those that do not own their own home, and respondents that have lived in their home for longer period of time are more likely to volunteer. Robustness checks were conducted on the latter finding to assess whether this relationship was linear across levels of the independent variable. When included as a set of dummy variables the coefficients of each level was significant and grew in size.

Higher levels of education, social class, and health are associated with a greater likelihood of volunteering. Females are more likely to volunteer than males. Age has a curvilinear relationship with volunteering: relatively higher levels of volunteering for middle-aged people compared to younger and older respondents. Cohabiters are less likely to volunteer compared to married people. Respondents from larger households are more likely to volunteer compared to respondents from smaller households. Asian respondents are less likely to volunteer compared to those reporting a "White" ethnicity. British born respondents are more likely to volunteer compared to those born abroad. People actively practicing their religion are more likely to volunteer than the religiously inactive. Surprisingly, employment is associated with a lower likelihood of volunteering.

Model 2 includes my contextual-level measures for residential stability. Hypotheses 1a states that neighborhood residential stability will be positively associated with volunteering. However, the descriptive relationship between area residential stability and the average volunteering rates of local authorities in Figure 1 suggest that this relationship may in fact be curvilinear. An alternate theoretical explanation was also made for such a relationship. As such a quadratic term was included to model this relationship. The results support the descriptive findings and suggest that there is indeed a statistically significant curvilinear relationship between area residential stability and volunteering. Figure 4 displays this effect. This challenges hypothesis 1a and previous findings in economics (Sampson 1997; Sampson 1999) and social and experimental psychology (Oishi 2007). The results suggest that 6-10 years of average area residential stability is necessary before increases in volunteerism are seen. This raises an important question as to why rates of volunteering are higher at relatively low levels of average residential stability. As mentioned above, people that have not lived in an area for long also have a higher likelihood of volunteering because they may use this as an entry tool to gain social capital in a relatively new area. Similarly, these people might be young professionals or students that are highly mobile, which would increase their likelihood of being asked to volunteer or give, which may change the aggregate relationship. In such areas, networks of highly mobile people may inspire a community spirit that encourages all members of a community to engage in community projects and goals. Urban areas, such as London, will be overrepresented in the data and thus this effect in unstable communities may reflect the mobility of young professionals. The analysis does, however, control for the urban location of local authorities, which should control for this effect. In other analyses I also included a control for London local authorities, which was not significant and did not change the residential

stability results. As stressed in the methods section, these results should be interpreted with caution as the theory should be tested with independent measures of residential stability.

Research in psychology that focuses on attachment and familiarity may be able to provide a better understanding of this contextual-level relationship. On the one hand, the scale of place (i.e. apartment, house, neighborhood, city, and country) has been found to have a curvilinear U-shaped relationship with attachment to these places (Hernandez et al. 2007; Hidalgo and Hernandez 2001; Lewicka 2010). This may have implications for the current findings if residents in an unstable community have a heightened attachment to their new residence (apartment or house), which then causes them to collectively engage for causes in a local area. On the other hand, Oishi et al. (2012) demonstrate that residential mobility breeds familiarity-seeking behaviour among people. This finding may also contribute to the understanding of the curvilinear relationship between residential stability and volunteering if people self-select into voluntary groups to regain the familiarity of similar groups, with similar goals, comprised of similar people, from their previous voluntary groups. The instance of volunteering in this study is created by collapsing a diverse range of groups into one indicator for the instance of volunteering. These organizations in the CS2008 include sports clubs, religious groups, political parties, labor unions. The codes of practice among these organizations and group heuristics are relatively stable from organization to organization regardless of geographic location. For example, one's preferred political group would comprise of similar people with similar interests and certainly similar party identification. Further research needs to be done, with alternative measures of geographic residential stability, before exploring some of these attachment and familiarity ideas.

Figure 2. Effect of area residential stability on likelihood of volunteering
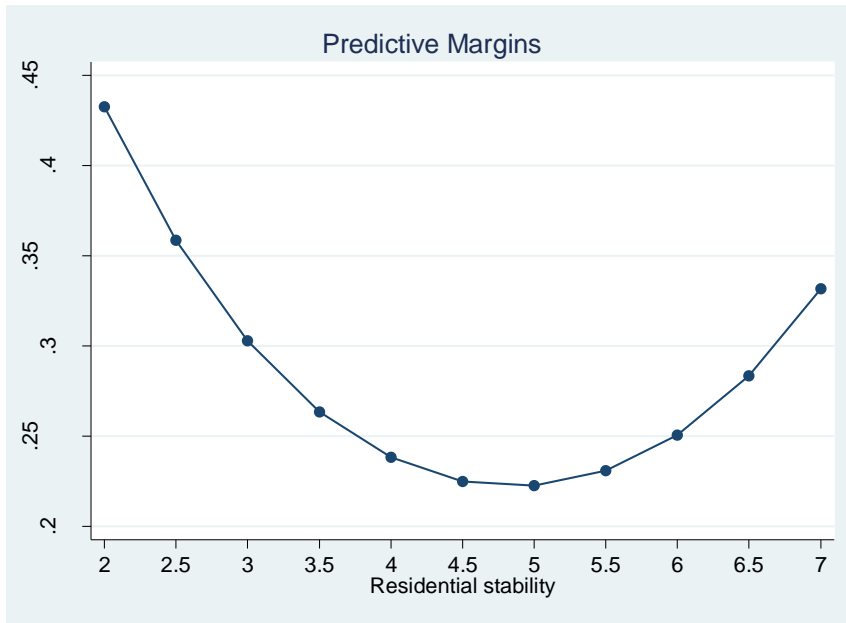
Model 3 contains measures of urban location of local authority and the level of social class diversity in a local authority. People living in urban areas are have a 28% lower probability of volunteering compared to those living in a rural area (exp[-.325]). Social class diversity is a strong negative predictor of volunteering. These findings support hypotheses 6a and 3a, respectively.

Model 4 includes the area level of social deprivation. According to hypothesis 2a, higher levels of deprivation will be associated with a lower likelihood of volunteering. The results indeed demonstrate that the likelihood of volunteering is greatest in an area of low deprivation and lowest in an area of high deprivation. Thus, I find support for hypothesis 2a. This effect is independent of compositional effects in the model, i.e. the social class, education and income of individuals, which, for the most part, are also significant predictors of volunteering. Prior studies have failed to distinguish the above individual compositional effects from geographical contextual-level effects as they focus on aggregating data to geographical

areas or data on charities (cf. Banks and Tanner 1999; Clifford 2012; Clifford et al. 2012; Cowley et al. 2011; McCulloch et al. 2012; Pharoah and Tanner 1997). Figure 3 displays this effect. The effect of social class diversity disappears controlling for residential stability, however, the other contextual-level effects substantively remain, demonstrating the robustness of these effects in England.

Model 5 and 6 suggest that the likelihood of volunteering is lowest in an area of high ethnic and religious diversity, respectively. This supports hypothesis 3a and the findings of Putnam (2007), but challenges hypothesis 5a, the supply-side theory adopted by Borgonovi (2008). The latter compliments a lot of work in the Sociology of Religion that claims supply-side theories of religion are only applicable to the US case.

Table 4. Multilevel logit regression models predicting charitable giving.

	model 1	model 2	model 3	model 4	model 5	model 6
Individual-level variables						
Female	0.356***	0.356***	0.355***	0.354***	0.355***	0.356***
	(0.044)	(0.044)	(0.044)	(0.044)	(0.044)	(0.044)
Age	0.016*	0.016*	0.016*	0.017*	0.017*	0.017*
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Age squared	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Marital status (ref. married)						
Cohabiting	-0.046	-0.046	-0.045	-0.038	-0.038	-0.041
	(0.093)	(0.093)	(0.093)	(0.093)	(0.093)	(0.093)
Single	-0.027	-0.027	-0.025	-0.019	-0.017	-0.015
	(0.066)	(0.066)	(0.066)	(0.066)	(0.066)	(0.066)
Widowed	-0.100	-0.100	-0.099	-0.093	-0.095	-0.096
	(0.089)	(0.089)	(0.089)	(0.089)	(0.089)	(0.089)
Divorced/separated	-0.066	-0.065	-0.063	-0.060	-0.061	-0.062
	(0.072)	(0.072)	(0.072)	(0.072)	(0.072)	(0.072)
Income	0.056***	0.056***	0.055***	0.056***	0.056***	0.057***
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Education (ref. Degree)						
Other higher qualification	-0.187*	-0.187*	-0.187*	-0.192*	-0.192*	-0.194*
	(0.090)	(0.090)	(0.090)	(0.090)	(0.090)	(0.090)
A-levels	-0.044	-0.044	-0.044	-0.047	-0.048	-0.050
	(0.084)	(0.084)	(0.084)	(0.084)	(0.084)	(0.084)
GCSE's	-0.245***	-0.245***	-0.245***	-0.248***	-0.250***	-0.252***
	(0.073)	(0.073)	(0.073)	(0.073)	(0.073)	(0.073)
No Qualification	-0.674***	-0.674***	-0.673***	-0.672***	-0.675***	-0.679***
	(0.076)	(0.076)	(0.076)	(0.076)	(0.076)	(0.076)
Unknown education	-0.657***	-0.657***	-0.657***	-0.658***	-0.659***	-0.661***
	(0.096)	(0.096)	(0.096)	(0.096)	(0.096)	(0.096)

Social Class (ref. high)						
Middle social class	-0.244***	-0.244***	-0.241***	-0.240***	-0.241***	-0.242***
	(0.058)	(0.058)	(0.058)	(0.058)	(0.058)	(0.058)
Low social class	-0.413***	-0.413***	-0.410***	-0.407***	-0.408***	-0.411***
	(0.068)	(0.068)	(0.068)	(0.068)	(0.068)	(0.068)
Unknown social class	-0.516***	-0.516***	-0.513***	-0.511***	-0.510***	-0.507***
	(0.084)	(0.084)	(0.084)	(0.084)	(0.084)	(0.084)
Ethnicity (ref. white)						
Asian	-0.151	-0.149	-0.141	-0.113	-0.098	-0.069
	(0.102)	(0.102)	(0.103)	(0.103)	(0.104)	(0.104)
Black	-0.437***	-0.435***	-0.429***	-0.393***	-0.379***	-0.343***
	(0.083)	(0.084)	(0.084)	(0.085)	(0.086)	(0.087)
Other	-0.271**	-0.269**	-0.264**	-0.235**	-0.223**	-0.194*
	(0.083)	(0.083)	(0.084)	(0.084)	(0.085)	(0.085)
Born in the UK	0.247***	0.246***	0.246***	0.241***	0.239***	0.233***
	(0.064)	(0.064)	(0.064)	(0.064)	(0.064)	(0.064)
Employed	0.100+	0.100+	0.100+	0.095+	0.095+	0.095+
	(0.057)	(0.057)	(0.057)	(0.057)	(0.057)	(0.057)
Number of persons in household	0.077**	0.077**	0.077**	0.076**	0.076**	0.077**
	(0.025)	(0.025)	(0.025)	(0.025)	(0.025)	(0.025)
Number of children <16 yrs.	0.003	0.003	0.003	0.004	0.003	0.002
	(0.033)	(0.033)	(0.033)	(0.033)	(0.033)	(0.033)
Health status (ref. very bad)						
Bad	0.123	0.123	0.120	0.123	0.123	0.122
	(0.175)	(0.175)	(0.175)	(0.175)	(0.175)	(0.175)
Fair	0.426**	0.426**	0.423**	0.421**	0.421**	0.419**
	(0.160)	(0.160)	(0.160)	(0.160)	(0.160)	(0.160)
Good	0.467**	0.467**	0.462**	0.458**	0.459**	0.459**
	(0.159)	(0.159)	(0.160)	(0.160)	(0.160)	(0.160)
Very good	0.355*	0.355*	0.350*	0.345*	0.345*	0.345*
	(0.161)	(0.161)	(0.161)	(0.161)	(0.161)	(0.161)

Religious affiliation (ref. no religion)						
Christian	0.223***	0.223***	0.222***	0.221***	0.220***	0.220***
	(0.066)	(0.066)	(0.066)	(0.066)	(0.066)	(0.066)
Muslim	0.192+	0.192+	0.192+	0.199+	0.201+	0.205+
	(0.106)	(0.106)	(0.106)	(0.106)	(0.106)	(0.106)
Hindu	-0.317*	-0.316*	-0.317*	-0.318*	-0.311*	-0.300*
	(0.126)	(0.126)	(0.126)	(0.126)	(0.126)	(0.126)
Other	0.004	0.004	0.004	0.004	0.007	0.013
	(0.109)	(0.109)	(0.109)	(0.109)	(0.109)	(0.109)
Actively practicing religion	0.623***	0.623***	0.622***	0.624***	0.625***	0.628***
	(0.051)	(0.051)	(0.051)	(0.051)	(0.051)	(0.051)
Homeowner (ref. non-homeowner)	0.204***	0.204***	0.203***	0.191***	0.189***	0.185***
	(0.050)	(0.050)	(0.050)	(0.050)	(0.050)	(0.050)
Years resided in neighborhood	0.030*	0.030*	0.030*	0.034*	0.034*	0.036*
	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)
Contextual-level effects						
Area residential stability		0.011	0.008	-0.026	-0.054	-0.081
		(0.065)	(0.066)	(0.067)	(0.072)	(0.069)
Social class diversity			-0.887	2.008	1.278	-0.950
			(2.327)	(2.515)	(2.622)	(2.690)
Urban area of residence			-0.070	-0.014	-0.007	-0.001
			(0.078)	(0.081)	(0.081)	(0.081)
Level of deprivation				-0.046**	-0.040*	-0.035*
				(0.017)	(0.018)	(0.017)
Religious diversity					-0.320	
					(0.315)	
Ethnic diversity						-0.561**
						(0.192)
Intercept	0.436*	0.435*	0.494*	0.431*	0.414*	0.384+
	(0.191)	(0.191)	(0.203)	(0.204)	(0.205)	(0.205)

Variance components						
Level 2 variance	-2.408***	-2.408***	-2.405***	-2.454***	-2.454***	-2.539***
	(0.212)	(0.212)	(0.213)	(0.216)	(0.215)	(0.224)
Level 1 Units	13366	13366	13366	13366	13366	13366
Level 2 Units	313	313	313	313	313	313
Log Likelihood	-7254.164	-7254.150	-7253.661	-7249.924	-7249.407	-7245.737
Df	34	35	37	38	39	39
AIC	14580	14582	14585	14580	14581	14573
BIC	14850	14860	14878	14880	14888	14881

Predictors of charitable giving

Table 4 displays the results associated with the instance of charitable giving. As discussed, I estimated a null model with random intercepts only, which demonstrated that the probability of charitable giving varies across local authorities.

Model 1 again includes individual-level controls for sex, age, age-squared, marital status, income, educational level, social class, ethnicity, birth location, employment status, number of people in the household, number of children in the household, health status, religious affiliation, housing tenure, length of residence in an area, and religious activity. As with the volunteering analyses, I also find that homeowners are more likely to give to charity compared to those that do not own their own home, and respondents that have lived in their home for longer period of time are more likely to give money to charity, both of which support Rotolo et al. (2010). Again, robustness checks were conducted on the latter finding to assess whether this relationship was linear across levels of the independent variable. When included as a set of dummy variables the coefficients of each level was significant and grew in size.

Higher levels of age, social class, income and health are associated with a greater likelihood of giving money. All education levels lower than degree-level were associated with a lower likelihood of giving money with the exception of A-levels. Females were also more likely to give to charity. There were no differences between marital status and the likelihood of giving money. As with the volunteering analysis, respondents from larger households are more likely to give money compared to respondents from smaller households. Black and Other respondents were less likely to give to charity compared to those reporting a "white" ethnicity. British born respondents are more likely to give compared to those born abroad. I find that Christians are more likely to give, while Hindus are less likely to do so, than the non-religious.

Those who actively practice religion are more likely to give money. Being employed was associated with a greater likelihood of giving compared to the unemployed.

Model 2 includes my contextual-level measure of residential stability. Hypotheses 2b states that neighborhood residential stability will be positively associated with giving, however, I failed to find support for this, challenging previous findings in economics (Sampson 1997; Sampson 1999) and social and experimental psychology (Oishi 2007).

Model 3 includes an indicator for the urban location of the area and the level of social class diversity in the area. Unlike in the volunteering analysis, both measures are insignificant of charitable giving, thus failing to support hypotheses 6b and 3b, respectively.

Model 4 includes the measure of social deprivation in an area. According to hypothesis 2b, higher levels of deprivation will be associated with a lower likelihood of giving money. The results indeed demonstrate that the likelihood of giving money is greatest in an area of low deprivation and lowest in an area of high deprivation. Thus, I find support for hypothesis 2b. This effect is independent of compositional effects in the model i.e. the social class, education and income of individuals, which, for the most part, are also significant predictors of volunteering. Prior studies have failed to distinguish the above individual compositional effects from geographical contextual-level effects as they focus on aggregating data to geographical areas or data on charities (cf. Banks and Tanner 1999; Clifford 2012; Clifford et al. 2012; Cowley et al. 2011; McCulloch et al. 2012; Pharoah and Tanner 1997). Figure 4 displays this effect.

Model 5 and 6 include measures for ethnic and religious diversity, respectively. Religious diversity is insignificant, however, ethnic diversity does have a negative effect on the likelihood of giving money, over and above the effect of area deprivation. The latter finding

supports Putnam's (2007) notion that residents in diverse neighborhoods hunker down and retreat from collective civic life.

Conclusion

This paper uses a multilevel framework and investigates the impact of individual-level attributes and contextual-level attributes on volunteering and charitable giving in England. The first substantive contribution of this paper built on previous studies and the role of area residential stability. Rotolo et al. (2010) found that length of time living in a neighborhood at the individual level was associated with a greater likelihood of volunteering. This research built on the work of Sampson et al. (1999) and Sampson et al. (1997) who theorized that lower crime rates in areas of high residential stability were due to stronger collective efficacy and social connections between residents. Similarly, Oishi et al. (2007) find that residential stability can lead to a stronger identification with one's community, which in turn leads to more pro-community action. There was no support for this theory as the current research, which found a curvilinear relationship between area residential stability and volunteering whereby higher rates of volunteering occur in relatively unstable *and* stable communities. There was no relationship between area stability and charitable giving. The former finding is puzzling but can perhaps be explained in a number of ways. Firstly, volunteering can be used as an entry device into social networks. Individuals in relatively unstable communities may use volunteering to plug themselves into new social pipelines. Second, high residential stability may be associated with areas that comprise of students or young professionals. This highly educated population is more likely to engage in volunteering and may create a "culture" of volunteering or a more expansive network of volunteer opportunities. Third, the link between attachment and scale of place may

result in a heightened attachment to a new residence (apartment or house) (Hernandez et al. 2007; Hidalgo and Hernandez 2001; Lewicka 2010), which causes new movers to engage for causes in a local area. Fourth, if residential mobility breeds familiarity seeking behaviour among people (Oishi et al. 2012), people may self-select into voluntary groups to regain the familiarity of similar groups, with similar goals, comprised of similar people, from their previous voluntary groups. According to social network theory, more opportunities to volunteer would arise in areas where a higher proportion of these individuals live because they are more likely to be network ties. As such, they would increase the information of volunteering opportunities for all people living in the same locality.

An important caveat must be identified in terms of data limitations. It was not possible to use an external data source to create aggregate levels of residential stability. The data that were available were contained in the CS2008 and were coded ordinally, which may create a degree of measurement error that would not exist in a richer continuous scale. As such, these findings should be interpreted with caution, although the patterns across individual-level stability and the measures of volunteering and giving do increase linearly as predicted by the theory and findings from previous studies.

The second substantive contribution focused on differentiating between compositional and contextual-level effects of social deprivation. Previous studies in the UK have demonstrated that both of these factors are important predictors of volunteering and giving but until now have not considered these effects simultaneously at the individual and contextual levels. Are these negative associations between deprivation and these behaviours due to the composition of individuals in an area or does a deprived context provide an additional negative effect over and above individual-level traits? This study demonstrates that both factors are at

work: individuals with low socioeconomic characteristics are less likely to volunteer and give, but living in a deprived area also has an extra negative effect on everyone within that geographic area, regardless of socioeconomic background.

People living in an urban location are less likely to volunteer relative to those living in a rural area, but this was not associated with charitable giving. Contrary to Borgonovi (2008), religious diversity was not associated with a higher probability of volunteering and giving, but indeed a lower likelihood of volunteering. Given the high correlation between religious diversity and ethnic diversity, and the negative relationship that these measures have with volunteering and giving, it supports the ideas of Putnam (2007) and previous studies that have explored the link between diversity and civic engagement (c.f. Costa and Kahn 2003; Musick and Wilson 2008). Indeed, this finding has also been reported in the British context investigating a broader construct of "social capital" that does not include volunteering or giving (Laurence 2011).

This study demonstrates that volunteering and giving occur within a context and that those measurable attributes matter, but to different degrees. For example, the level of social deprivation and ethnic diversity in an area both had significant negative effects on volunteering and giving. This research provides academics and policy makers with information that can increase volunteer and giving participation. This research also demonstrates that volunteering is sensitive to multiple aspects of context, whereas giving behaviour is less so. This research leads to a number of important questions for future study. Firstly, do people who have not lived in an area for long volunteer more in areas of high residential stability? How does education vary by area deprivation? Are the highly educated more likely to volunteer in more deprived areas due to a greater need? Are people less likely to volunteer and give in highly stable urban areas?

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