Does Diversity Damage Social Capital? A Comparative Study of Neighbourhood Diversity and Social Capital in the US and Britain

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Introduction

Increases in the scale and diversity of immigration into Western democratic industrial nations have led to a renewed interest in responses to ethnic and racial diversity. While mindful of the economic and cultural contribution of immigrants, governments have become more concerned with the social integration of immigrants and the effects of increasing diversity on social cohesion. A number of scholars, including Costa and Kahn (2003), Alesina and Ferrera (2000) and Putnam (2007), have noted a negative relationship between diversity and social capital.¹ In particular, diversity has been linked with lower levels of civic engagement, participation in group activities and social trust. However, many of these studies have looked either at the effect of neighbourhood diversity within a single country, usually the US, or they have looked at national level diversity across a sample of countries. In this paper, we provide a comparative analysis of the relationship between neighbourhood diversity and social capital in England and the US. This paper makes two major contributions to this debate, one substantive and the other methodological. First, unlike other studies, we disaggregate the effects of ethnic diversity on Whites and ethnic minorities. Second, we operationalize this relationship in a multilevel structural equation modelling framework. In this way we are able to get a more nuanced picture of the relationship between diversity and social capital. We find that while diversity does have a

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negative effect on neighbourhood norms of those from the White majority in both countries, the patterns for ethnic minorities and for community participation are less clear cut.

Social Capital and Diversity

Social capital refers to social networks and their value. Perhaps the most parsimonious definition is "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition" (Bourdieu, 1986: 248). Putnam's definition of social capital extends this to include both "social networks and the associated norms of reciprocity and trustworthiness" (Putnam, 2007: 137). This captures two key components identified in previous research on the subject: the structural (social networks, associations and participation) and the cognitive or attitudinal (shared norms and habits of trust and of reciprocity). Much of the interest in social capital to favourable outcomes across a wide spectrum of areas of public and private life, including health, economic performance, political participation, crime and government effectiveness (see Putnam, 2000; Halpern, 2005).

However, there is a growing body of research on social capital (and generalized trust in particular) suggesting that social capital and trust tend to decline as racial or ethnic diversity increases (for example, Alesina and La Ferrara, 2000; Costa and Kahn, 2003, though see Marschall and Stolle, 2004, for counterevidence). This is attributed to the idea of economic or cultural "threat." Whereas the "contact hypothesis" (Allport, 1954) posits that experience of diverse populations makes us more tolerant,² "conflict theory" predicts that due to a variety of factors including conflict over limited resources, members of the majority group feel threatened by "outsiders," leading to distrust and intolerance of those outsiders and solidarity with one's own group (Blumer, 1954; Giles and Evans, 1985; Bowyer, 2009). Others have linked the size of minority groups with the perception of threat (Blalock, 1967). This variant of group conflict theory also implies that greater neighbourhood diversity should have a mobilizing effect on political activity as more is at stake (Blalock, 1967; Oliver 2001). This is consistent with a body of sociological literature which has remarked on the propensity for people to feel more secure among others of a similar ethnic or racial background (homophilly) (McPherson et al., 2001).

Probably the best-known analysis of the relationship between social capital and diversity in the US is Putnam's Skytte Prize lecture and article "*E Pluribus Unum*," in which he reports a detailed analysis of the

Abstract. A number of scholars have noted a negative relationship between ethnic diversity and social capital or social trust, especially in the US. Evidence from other countries has been more mixed and sometimes contradictory. In this paper we provide the first Anglo-American comparative analysis of the relationship between neighbourhood diversity and social capital, and show how this relationship varies across ethnic categories. We apply multilevel structural equation models to individual level data from the 2000 Citizen Benchmark Survey for the US and the 2005 Citizenship Survey for Great Britain. The findings suggest that while for attitudinal social capital among Whites the negative underlying relationship with diversity is apparent in both countries, the effect is much weaker or reversed for minority groups. For structural social capital the negative relationship is apparent for minorities but not Whites, but this is mainly attributable to other neighbourhood characteristics.

Résumé. Un certain nombre d'universitaires ont noté une relation négative entre la diversité ethnique et le capital social ou la confiance sociale, surtout aux États-Unis. D'autres pays, par contre, offrent des constats plus mitigés et parfois contradictoires. Dans cet article, nous présentons la première analyse comparative anglo-américaine de la relation entre la diversité du voisinage et le capital social et nous démontrons comment cette relation varie selon les catégories ethniques. Nous appliquons des modélisations par équation structurelle à multiniveaux à des données de niveau individuel provenant du *Citizen Benchmark Survey* de 2000 pour les États-Unis et du *Citizenship Survey* de 2005 pour la Grande-Bretagne. Les résultats démontrent que si, pour le capital social attitudinal, la relation fondamentale négative avec la diversité est évidente parmi les Blancs dans les deux pays, l'effet est cependant beaucoup plus faible ou renversé pour les groupes minoritaires. En ce qui concerne le capital social structurel, la relation négative est évidente pour les minorités, mais pas pour les Blancs, mais cette situation est principalement attribuable à d'autres caractéristiques du voisinage.

relationship between social capital and diversity in America (2007). The analysis shows that various aspects of social capital, including social trust, community co-operation, and informal socializing, are detrimentally affected by neighbourhood diversity. Furthermore, contrary to the simple conflict hypothesis, it is not only trust of people of other ethnic groups which is affected but trust of one's own group. Putnam describes this as "hunkering down," whereby residents of diverse communities do not become hostile to outsiders but rather withdraw from collective life more generally.

There have been challenges to the validity and implications of this argument. A number of scholars argue that social capital formation is contingent on racial homogeneity (Hero, 2007) and that research on social capital tends to ignore inequality and conflict in society (Hero, 2007; Stolle and Hooghe, 2005). According to these critics, social capital both derives from and causes social and ethnic inequalities. In other words, it is membership of privileged groups and networks which gives access to resources that we call social capital and, like other forms of capital, this has material value leading to a perpetuation of advantage or disadvantage (Bourdieu, 1986; Portes, 1998). Hero (2007) argues that the supposed benefits of social capital are an artifact of the more crucial role of racial diversity and inequality in America. Moreover, not only are high

levels of social capital accrued primarily in racially homogenous areas (that is, ethnic homogeneity is a pre-condition for high social capital), but that the benefits of this social capital are enjoyed primarily by the White majority population and not by racial minorities.

Critics have also argued that much of the work on social capital has focused on generalized trust and this is much more likely to be negatively related to diversity than other forms of social capital (Hooghe, 2007). According to the social psychology literature, trust is more prevalent among people who resemble each other and is therefore more widespread in more homogeneous communities (Cook, 2005). It is widely found that dominant groups in societies tend to be more trusting than minorities (Uslaner, 2002). Both these factors mean that increasing diversity (for example, from immigration of minority groups) will be likely to be linked to declining trust. However, other forms of social capital-for example, social networks or norms of reciprocity-may be less sensitive to diversity. Hooghe (2007) argued that diverse societies may build different forms of social capital than homogeneous ones. While this argument rightly warns of too much reliance on a single indicator of social capital, others have shown that other forms of social capital (such as interaction and reciprocity) also tend to be inversely related to diversity. For example, using experimental methods Glaeser and colleagues show lower levels of honesty and reciprocity in inter-racial exchanges (2000). In this paper we will use a range of indicators to avoid this pitfall.

Comparative Evidence

Much of the evidence concerning the relationship between diversity and social capital emanates from the US, but can the findings of Putnam and others be generalized to other settings? Many critics have challenged both the universality and the inevitability of this relationship. We might expect to find differences for a number of reasons. The US has a very different history of immigration and diversity than Britain and there are also important and significant differences in the size of ethnic minority populations and relative levels of inequality. Moreover, Britain has a more extensive welfare state, while the US has more civil rights protections, and the US assimilationist model of integration is different to the British model of multiculturalism. The apparent negative relationship between social capital and diversity may be a reflection of government policies and not generalizable to countries beyond the US (Kesler and Bloemraad, see this issue).

To date, research from around the globe, including from Britain, suggests rather mixed results. In Australia, Leigh (2006) found that linguistic heterogeneity reduced localized trust for both natives and immigrants but reduced generalized trust only for immigrants. In Canada, research found that once individual characteristics were taken into account, there was no significant relationship between diversity and a range of social capital indicators (Aizlewood and Pendakur, 2005). In a study of 44 countries world wide. Anderson and Paskeviciute (2006) found that indicators of country-level population heterogeneity did not have uniformly positive or negative effects on individual-level measures of civil society. However, they did find that ethnic and linguistic diversity decreased levels of interpersonal trust. In Europe, Hooghe and colleagues (2009) found no significant relationship between country-level immigration and diversity and generalized trust. Kesler and Bloemraad (see this issue) argue that there is no general link between diversity and collective-mindedness and, using country-level data, show how the relationship is contingent upon particular institutional arrangements. Cross-national variation has also been attributed to social inequality and good governance (Delhey and Newton, 2005) Perhaps the closest replication of Putnam's work to date is Lancee and Dronkers' study (2008) of ethnic diversity in the Netherlands. Following Putnam, they examined the impact of neighbourhood diversity controlling for individual and neighbourhood characteristics. The findings confirmed a negative relationship between diversity and trust but showed no negative effect on the level of *inter-ethnic* trust.

In the UK, the evidence is also mixed. A Home Office report examined the issues of "diversity, trust and community participation in England" and found that generalized trust was lower in areas of greater ethnic diversity (Pennant, 2005). Letki (2008), by contrast, suggested that socio-economic factors exert a greater bearing on "community" and interpersonal trust than racial heterogeneity. Letki concluded that "when the association between racial diversity and economic deprivation is accounted for, there is no evidence for the eroding effect of racial diversity on interactions within local communities.³ There is no deficiency of social capital networks in diverse communities, but there is a shortage of them in disadvantaged ones" (21). This conclusion is shared by Laurence and Heath (2008) who reported that "once other factors are accounted for ethnic diversity is, in most cases, positively associated with community cohesion" and that "deprived, diverse areas have higher average cohesion scores than deprived, homogeneous white areas. It is thus deprivation that undermines cohesion, not diversity (41)."

Finally, like most work on the topic to date, the British research described above looks at the effect of diversity across the population as a whole. There is reason to think that diversity will impact on minorities and majority groups differently. For example Portes and Rumbaut (2001) have argued that children of immigrants benefit educationally in areas of high co-ethnic concentration, measured by the proportion of the local population from the same ethnic group as the subject. Studies of voting

and registration in Britain have shown co-ethnic density has positive effects for the participation of minorities but zero or even negative effects for Whites (Fieldhouse and Cutts, 2008a and 2008b). Similarly in the US, Oliver (2001) shows opposite effects of the percentage of Whites in the population on Black turnout and organizational involvement (negative) and on White turnout and organizational involvement (positive); but the same (positive) effect on instrumental forms of participation (such as contacting officials). Thus, it is possible that ethnic networks in more diverse areas have the effect of dampening any negative impact on social capital.

Hypotheses

In order to evaluate the strength of competing theories in a British context, we test a number of alternative hypotheses. As described above the conflict/threat hypothesis and Putnam's "constrict hypothesis" (2007) anticipate similar outcomes with respect to diversity, while the opposite relationships are anticipated by contact theory. A further possibility is that the impact of diversity on social capital will be different for majority and minority groups. This has seldom been explored and, as far as we are aware, never in comparative context. One study which does consider this possibility in a single country (the US) is by Marschall and Stolle, (2004) which shows that trust by Blacks of other people in general is higher in more diverse area and where inter-ethnic interactions are more commonplace, but there is no such effect for Whites. In the UK, where the ethnic minority population is much smaller than the US and segregation levels are relatively low, the differential effects may be accentuated. More diverse environments may display higher levels of tolerance and opportunities for building bridging social capital than predominantly White areas, giving rise to higher levels of social capital among minorities. Moreover, there may be a positive effect on social capital among ethnic minorities living among others who share their ethnic origins, which is more likely in diverse areas. These areas are likely to have greater levels of bonding social capital among minorities and a greater concentration of ethnic organizations (Fennema and Tillie, 1999). As the ethnic community model suggests, co-ethnic concentration may be associated with greater efficacy and interest for those minorities (Shingles, 1981; Guterbock and London, 1983; Bledsoe et al., 1995). In Britain, where the ethnic minority population is quite small (around 8 per cent) compared to the US (34 per cent), diversity and ethnic density are usually highly correlated.

Arising from this we therefore have a number of alternative hypotheses that we can test.

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Conflict hypothesis H1 Effect of diversity on social capital is negative

Contact hypothesis

H2 Effect of diversity on social capital is positive

Multi-cultural neighbourhoods thesis

- H3 Effect of diversity on social capital is negative for Whites
- H4 Interaction effects of diversity for minority groups are positive, offsetting or even reversing the main negative effect of diversity.

Data

In his study of diversity and social capital in the US, Putnam (2007) employs individual data using the Social Capital Community Benchmark Survey (SCBS) in combination with census tract data to explore the relationship between neighbourhood diversity and individual-level indicators of social capital. In this study we use the same US data, including the census tract information. For Britain we use data from the 2005 Citizenship Survey in combination with census data at the neighbourhood level.

The SCBS was carried out in 2000 with a total sample size of approximately 30,000. Embedded within the nationwide sample is a representative national sample of 3,000 as well as smaller samples representative of 41 different communities across the US. These range from large metropolitan areas like Los Angeles and Chicago to small towns and rural areas such as rural South Dakota.⁴ Because all respondents' addresses were geo-coded, we know the demographic characteristics of the census tract within which they live. This allows us to look at relationships between individual characteristics, such as ethnicity, age and social trust, and neighbourhood characteristics, like crime rates, poverty and crucially racial diversity. We use a fivefold categorization of race and ethnicity similar to that used in the census but to retain sufficient numbers for analysis we combine "other" racial/ethnic groups with Native Americans in a single category. The categories are therefore Hispanic, non-Hispanic White, non-Hispanic Black, Asian, and Native American/other.

In the UK, since 2001, the Citizenship Survey has been commissioned every two years. Approximately 10,000 adults in England and Wales plus an additional booster sample of 5,000 adults from minority ethnic groups are asked questions covering a wide range of issues about their community, volunteering and participation. In 2005, the Citizenship Survey included questions relating to community-based social norms and values that are appropriate to measuring social capital. As for the SCBS, by special arrangement, it was possible to match neighbourhood characteristics of the respondents from the 2001 Census of Population, allowing us to explore the impact of neighbourhood diversity and other contextual influences on social capital. Neighbourhood level variables are all measured at the middle layer super output area (MSOA) which is a suitable geographic unit to represent the neighbourhood. They are designed to be relatively socially homogeneous and roughly equal in size (approximately 7,000). For Britain we also use a simplified fivefold classification of ethnicity based on the main census categories. These are White, Black, Asian,⁵ mixed ethnicity and other ethnic groups. While missing some of the subtleties of a more detailed classification available in the survey, this has the advantage of providing reasonable sample sizes for each group, allowing direct matching with census-area level variables and is comparable in the level of specificity to that available for the US.

Measuring and Modelling Social Capital

As noted above, most definitions of social capital have a structural or objective component and an attitudinal or subjective component (for instance, Paxton, 1999). The structural component is made up of social networks and other aspects of social organization, such as civic participation. It is argued that denser and more extensive networks are associated with higher levels of trust and co-operation and, in turn, a wide variety of public and private benefits (Putnam, 1993). Networks are therefore closely linked to the second component of social capital: the attitudinal or cognitive component. These are the shared norms and habits of trust and reciprocity that provide the foundation for co-operation and help create a more efficient and smooth running society. We capture both these aspects of social capital in our model. In particular we focus on community or local-based aspects of social capital since we are primarily interested in the effect of neighbourhood diversity.

In recognition of the fact that social capital is a complex phenomenon that we cannot observe directly, we include various indicators of social capital in an integrated modelling framework (structural equation models) which recognizes each indicator as an underlying or latent trait with a measurement error. For comparative research where questions inevitably vary between countries, each variable is required to be an indicator of the same underlying trait. The structural equation models (SEM) combine a confirmatory factor model (capturing the latent variables) and a path analysis allowing the hypothesized causal paths to be modelled.

Indicators of the attitudinal dimension of social capital for the UK include the sense of belonging to the neighbourhood; whether people believe theirs is a close knit neighbourhood; whether neighbours can be

relied on to work co-operatively to solve problems, have shared values or get on well together; and the extent to which they trust neighbours. We refer to this dimension as "norms." Indicators of the structural dimension capture people's civic activities and participation (voluntary group activities, informal helping, civic activities and neighbourhood committee memberships). We refer to this dimension as "participation." For the sake of comparability and sample size, we adopt a slightly smaller number of indicators for the US.⁶ For the attitudinal component these are community rating, neighbourhood belonging and trust in neighbours. For the structural component they are involvement in community projects, being an officer on neighbourhood committees and participating in groups. The latent variables are measured and tested using a confirmatory factor analysis (CFA).⁷

Social capital was originally construed as a property of individuals derived from their membership of social networks (for example, Bourdieu, 1986) but has since been developed and used as a property of communities and geographical areas (for example,. Putnam, 2000; but see also Portes, 1998). Here we adopt an approach which recognizes both aspects, treating social capital as a multilevel construct which varies between individuals and between areas. This is particularly important as we wish to understand not only the individual drivers of social capital (such as race) but also the contextual drivers (such as neighbourhood diversity). Multilevel structural equation modelling is relatively new to social scientists and has not previously been used in the analysis of the diversity and social capital. It is the most appropriate method for tack-ling the relationship between a multilevel latent construct (social capital) and individual and area level covariates (Muthén and Muthén, 2007; Skrondal and Rabe-Hesketh, 2004).

Results

The details of the measurement model are shown in the appendix Tables A1 and A2. The analysis confirms the existence of distinct attitudinal and structural dimensions of social capital and the model fit statistics are all good by conventional definitions (cfi > 0.95).⁸ Moreover, most of the indicators are fairly well predicted by the model, that is, they all make significant contributions to the latent variable scores. In the US, the neighbourhood norms latent variable correlates most closely with trust and neighbourhood rating. In Britain, this variable is highly correlated with people's willingness to help neighbours, to "pull-together," and with the feeling of living in a close-knit neighbourhood. Meanwhile, the attitudinal latent variable's correlation with trust in neighbours is slightly lower than in the US. In both countries though, this dimension effectively

captures the idea of shared norms and sense of community cohesion and we refer to it as "neighbourhood norms."

The participation latent variable is strongly correlated with all three indicators in the US. For Britain, the latent variable captures group activity, civic activism and involvement in community consultation and, to a lesser extent, involvement in unpaid activities (helping neighbours, and so forth). We refer to this dimension as "community participation." There is statistically significant neighbourhood variation for both neighbourhood norms and community participation.

The Structural Model: The Impact of Diversity

The focus of this paper is to understand the relationship between the characteristics of neighbourhoods, particularly ethnic diversity, and social capital, while taking into account individual attributes. One of the key findings of Putnam (2007) is that reductions in various aspects of social capital associated with diversity are experienced not only by immigrants but more generally. In other words, social capital reflects contextual as well as individual characteristics. The key neighbourhood variable for testing our hypotheses is diversity as measured by an index of fragmentation⁹. This is based on the racial/ethnic profile of the census tract/ MSOA population drawn from the respective censuses. One advantage of using a standard diversity index is that is comparable with most of the research cited above (such as Alesina and La Ferrara, 2000; Putnam, 2007). However, there are a number of shortcomings of the diversity index, chiefly, that it may not reflect the size of the ethnic minority population. To counter this we fitted alternative models which also take into account the ethnic composition (see Discussion below).

Here we test whether the attitudinal and structural dimensions of social capital, measured by the two latent constructs described above (neighbourhood norms and community participation) vary according to the ethnic concentration or diversity of the neighbourhood. We started with a simple variance components model (see Intra Class Correlations of factors in Tables A1 and A2) and moved to a simple model where the latent variables were regressed on diversity on its own. Before fitting this model, we examined the relationship between the separate indicators and diversity to test whether the aggregation of indicators was obscuring the relationships of interest. The pattern in both the US and the UK consistently showed that, as diversity increases, levels of social capital (trust, group membership and so forth) fell, though the relationship was weaker for minority groups than it is for Whites.

The regressions of the latent variables on diversity in a null model tell us the simple form of the relationship before controlling for various individual and neighbourhood characteristics. The unstandardized coefficients (-0.24 in the UK and the US) tell us that the overall effect of diversity on both participation and norms is negative (more diversity means less social capital) and of similar magnitude in both countries. This suggests some provisional support for the conflict/constrict hypotheses. However, these models do not allow the relationship between diversity and social capital to vary between ethnic groups and, as our multicultural neighbourhood hypothesis predicts, we might expect a different relationship for Whites and for minority groups. We therefore added interactions between diversity and racial/ethnic group and found that for neighbourhood norms there were positive interaction effects for British Blacks and Asians and Black Americans. This tells us that the negative effect of diversity is reduced for these populations. This is illustrated in Figures 1 and 2 which show the predicted neighbourhood norms scores according to the diversity of the area.

Figures 1a and 1b show that as diversity increases neighbourhood norms scores decrease for all groups in the UK and the US. However, neighbourhood norms scores decrease at a slower rate for Blacks and Asians in Britain, and for Blacks and Hispanics in the States, than for their White counterparts. In the UK, it is only in the least diverse areas where minorities have less social capital than Whites. The overall average score for White Britons is slightly higher than that for minorities, and this is reflected in the higher starting point for the trend line of Whites. Although at most levels of diversity the predicted scores for both Blacks and Asians exceed those of Whites, we should remember that most British Whites live in relatively homogenous areas. In the US, Blacks and Hispanics score lower whatever the context but the gap diminishes as diversity increases. This gap (or deficit) reflects a significant negative main effect for "Black" and "Hispanic."

The picture for participation is somewhat different. There were significant negative diversity-ethnicity interactions for British Asians and Black Americans. This suggests that, compared to Whites, these groups withdraw from community participation at a faster rate as diversity increases, and are therefore more sensitive to diversity. This is illustrated in Figures 2a and 2b, which show that as diversity increases White community participation actually drops off less quickly. At first glance, this appears somewhat surprising given other research linking political participation of minorities to the concentration of minority groups (for example, Schlichting et al., 1998; Leighley and Vedlitz, 1999; Fieldhouse and Cutts, 2008b). Here, though, we are looking at the effect of diversity, not co-ethnicity, and, as we have noted, there is a complex relationship between these two phenomena which varies across ethnic groups and countries. Furthermore, the nature of the activities under scrutiny is different—community participation rather than political engagement.

FIGURE 1 Unadjusted Predicted Scores (Reference Group)—U.K and U.S. Norms

Unadjusted predicted scores (reference group) - U.K Norms



Unadjusted predicted scores (reference group) - U.S Norms



Moreover, this pattern may well reflect the social make up for more diverse areas which tend to be more urban and contain higher levels of social deprivation, poverty and other features associated with low levels of community participation. This is explored further below where we introduce other factors into the model. Nevertheless, on the face of it, these results indicate that while greater diversity in such areas might make minorities feel more part of the neighbourhood, it does not produce more civic activity but the reverse.

Controlling for Individual and Neighbourhood Characteristics

So far we have only examined the gross effect of diversity on social capital. However, we know that a lot of other factors might come into play, either the characteristics of the individual or characteristics of the area. Richer or more educated people may live in less diverse areas, whereas

FIGURE 2 Unadjusted Predicted Scores (Reference Group)—U.K and U.S. Participation



Unadjusted predicted scores (reference group) - U.K participation

Unadjusted predicted scores (reference group) - U.S. participation



more diverse areas may have higher crime levels. To explore this, the relationships in the SEM are conditioned by a series of covariates: age, sex, income, education, housing tenure, years lived in the neighbourhood and so forth. These individual-level control variables are consistent with those used by Putnam (2007) and are commonly associated with variations in social capital. We also control for neighbourhood-level contextual variables which approximately replicate those used by Putnam (2007). Neighbourhood-level variables in the model are diversity (fragmentation index), co-ethnic density (selected models only), poverty (US) or income deprivation (UK), inequality or class fragmentation,¹⁰ nonviolent crime, population turnover, elderly population and the percentage living at same address for more than five years. Both the latent variables (norms and participation) are regressed on these sets of individual and neighbourhood covariates in a structural equation model. The full model is illustrated in Figure 3.



FIGURE 3 Diagrammatic Representation of Model

Note. X_i represent individual level covariates, X_j represent neighbourhood level covariates. Small boxes represent indicator variables (y), circles represent latent variables. Arrows represent unobserved effects (residual variance)

The regression estimates derived from the full model are provided in Tables 1 and 2. The figures in parentheses are standardized coefficients which allow us to see the relative importance of the different covariates as well as the magnitude of the effect (the slope). As we would expect, in keeping with previous research on social capital, we find that both norms and participation are affected by a range of socio-economic and demographic variables in both countries including education, income, age, sex, housing tenure and employment status. It was notable however, that for neighbourhood norms these individual-level social factors appear to play a greater part in the US than in Britain. Participation is particularly affected by education in both countries, which is consistent with most previous research (see Helliwell and Putnam, 2007). None of these findings is particularly surprising and they require no further comment here as our primary interest is in diversity.

Even after allowing for individual characteristics many neighbourhood-level variables still make an additional impact on the levels of social capital. In both countries we find that neighbourhoods with greater

TABLE 1

U.K. Multilevel Model of Diversity (with Controls):
Significant Variables Shown Only-Unstandardised Coefficients and
Standardised Coefficients in Brackets

	With Controls		
Diversity with Interactions	Norms	Participation	
Key Variables and Interactions			
Level 1			
Black	-0.04 (-0.04)	0.30 (0.06)	
Asian	0.01 (0.01)	0.06 (0.02)	
Mixed	-0.01 (-0.00)	0.32 (0.04)	
Other	-0.01 (-0.01)	-0.40*(-0.05)	
Black * div	0.26* (0.14)	-0.73* (-0.08)	
Asian * div	0.26* (0.17)	-0.97*(-0.12)	
Mixed * div	0.11 (0.03)	-0.69 (-0.04)	
Other * div	0.10 (0.03)	-0.59(-0.03)	
Level 2	. ,	. ,	
Diversity	-0.20* (-0.42)	0.03 (0.17)	
Significant Covariates			
Level 1			
Female	0.01^* (0.02)	0.34* (0.11)	
Not Born in the UK	0.02* (0.03)		
Renting	-0.08* (-0.12)	-0.16*(-0.05)	
Students		0.31* (0.03)	
Unemployment	-0.05* (-0.03)	0.33* (0.04)	
Never Worked	—	-0.43*(-0.07)	
Degree	—	0.52* (0.14)	
College	—	0.28* (0.08)	
Unknown Qualifications	0.03* (0.04)	-0.46* (-0.11)	
No Qualifications	—	-0.62*(-0.16)	
Foreign Qualifications	—	-0.22*(-0.02)	
Upper class	—	0.55* (0.17)	
Working class	—	-0.27*(-0.08)	
Lived more than 5 years in the neighbourhood	—	0.24* (0.07)	
Age <29	-0.06* (-0.08)	-0.13* (-0.03)	
Age >60	0.04^* (0.05)		
Level 2			
% Inflow	-0.003*(-0.08)	_	
Poverty	-0.33*(-0.35)	—	
Crime score	-0.02* (-0.10)	—	
% Age 65 or more	0.003* (0.12)	—	
Inequality	-0.43* (-0.21)		
Between Area Variation	0.003* (0.001)	0.001 (0.002)	
Intra-class correlation	0.04		
CFI	0.91		
RMSEA	0.02		
AIC	135079.82		
BIC	135975.42		
Log Likelihood	-67415.91		

*Sig at the 0.05% level. CFI and RMSEA are for the full model with 2 latent factors.

	With Controls		
Diversity with Interactions	Norms	Participation	
Key Variables and Interactions			
Level 1			
Black	-0.08*(-0.17)	0.10* (0.10)	
Asian	-0.00 (-0.00)	-0.09 (-0.05)	
Hispanic	-0.08* (-0.13)	0.01 (0.01)	
Black * div	0.06 (0.05)	-0.09 (-0.04)	
Asian * div	0.02 (0.01)	0.01 (0.00)	
Hispanic * div	0.04 (0.03)	-0.02 (-0.01)	
Level 2			
Diversity	-0.07* (-0.19)	-0.07* (-0.26)	
Significant Covariates			
Level 1			
Female	0.01* (0.04)	_	
Renting	-0.06*(-0.18)	-0.05* (-0.07)	
Students	—	0.06* (0.04)	
Unemployment	-0.03* (0.03)	-0.04* (0.03)	
Less High School	-0.07*(-0.11)	-0.10* (-0.08)	
Some College	0.02* (0.05)	0.10* (0.16)	
Degree	0.04* (0.13)	0.24* (0.37)	
U.S. Citizen	0.03* (0.04)	0.04* (0.03)	
Household Income Low	-0.03*(-0.08)	-0.06* (-0.09)	
Household Income High	—	0.08* (0.08)	
Lived more than 5 years in the neighbourhood	0.02* (0.06)	0.05* (0.08)	
Age <29	-0.04*(-0.09)	-0.06* (-0.08)	
Age >60	0.03* (0.08)	_	
Level 2			
% Inflow	—	_	
Poverty	-0.57*(-0.85)	_	
Non-Violent Crime	-0.25* (-0.06)	-0.41* (-0.12)	
% Age 65 or more	—	0.12* (0.15)	
Inequality	0.20* (0.15)	_	
Lived more than 5 years in the neighbourhood	-0.16* (0.30)		
Between Area Variation	0.001 (0.001)	0.003* (0.001)	
Intra-class correlation	—	0.04	
CFI	0.96		
RMSEA	0.02		
AIC	114948.55		
BIC	115533.08		
Log Likelihood	-57396.28		

U.S. Multilevel Model of Diversity (with Controls): Significant Variables Shown Only—Unstandardised Coefficients and Standardised Coefficients in Brackets

*Sig at the 0.05% level. CFI and RMSEA are for the full model with 2 latent factors.

TABLE 2

population turnover, higher crime and more income poverty tend to have lower levels of attitudinal social capital, as measured by neighbourhood norms scores¹¹. Neighbourhood covariates tend to have less effect on community participation with no neighbourhood characteristics being statistically significant in the UK, including diversity. Nevertheless, after allowing for individual characteristics there is no significant neighbourhood-level variance in community participation in Britain. In the US, neighbourhood norms are stronger where there is a more elderly population but are damaged by crime in the neighbourhood. Diversity also plays a significant role in community participation in the US, a point to which we will return to below. Some between-area variation remains after allowing for these neighbourhood features, although it is relatively small. Overall, it would seem that attitudinal social capital (neighbourhood norms) is affected more by neighbourhood context while behavioural social capital (participation) is more affected by individual characteristics.

The coefficients of most interest to us however, are those for diversity and their interaction with ethnicity. For neighbourhood norms the main effect of diversity (that is, the effect for Whites) is significant and negative in the both the UK and US when we control for other individual and neighbourhood characteristics. However, the size of the effects is considerably reduced compared to the null models, suggesting that part of the relationship between diversity and neighbourhood norms for Whites can be attributed to individual and neighbourhood characteristics. Looking now to the interactions which show the different effect for different ethnic groups, we saw that for Britain's two largest minority groups-Blacks and Asians-there were significant positive interactions which counteract the main effect. Just as predicted by the multicultural neighbourhoods hypothesis, neighbourhood norms among British ethnic minorities are not affected in the same way as that of Whites. This is illustrated in Figure 4a which clearly shows predicted rates for Whites dropping sharply as diversity increases, while the rates for minorities actually rise slightly. The overall (average) level for minorities is not significantly different to that of Whites after controlling for other factors (reflected in the crossing lines in Figure 1 and the insignificant ethnicity coefficients in Table 1).

In the US, once individual and neighbourhood compositional differences are taken into account, there are no significant interactions between diversity and ethnic status. There are ethnic differentials as represented by the main effects for "Black" and "Hispanic" but the effect of increasing diversity does not vary across groups. This is seen in Figure 4b which shows parallel lines for each group albeit at a lower level for Blacks and Hispanics.

As already noted, the picture for community participation is somewhat different. Above, we saw that before taking other factors in to account there was a negative effect for diversity for Whites and that this was, if





anything, stronger for minority groups. Adding in control variables does not change this picture very much in Britain, at least. Even after controlling for these, there are still significant negative interactions for Blacks and Asians. This is seen in Figure 5 which shows the non-existent diversity effects for whites, contrasted with the falling scores for Black and Asian community participation as diversity increases. The equivalent picture for the US shows the lines are all but parallel. Table 2 confirms a negative overall effect but no significant interactions¹². Thus the multicultural neighbourhood hypothesis seems to hold for the UK but not the US.

Discussion

At one level the above evidence confirms that in both the US and in the UK, diversity is negatively associated with social capital. However, the FIGURE 5 Adjusted Predicted Scores (Reference Group)—U.K and U.S. Participation



Adjusted predicted scores (reference group) - U.K participation





relationship is complex, and we believe this research uncovers a number of important findings. First, neighbourhood norms among the White majority are negatively affected by diversity, just as Putnam claims, even after allowing for a large number of individual and neighbourhood characteristics¹³. Second, however, a very large proportion of this effect is attributable to these other characteristics, particularly in the US.

The observation that diversity is only one of a number of factors that are equally important in accounting for variations in social capital is consistent with other research in the US (for instance, Putnam, 2007) and in the UK (for instance, Laurence and Heath, 2008) which both demonstrates the important role played by other neighbourhood characteristics associated with diversity, especially poverty—a point clearly illustrated in Figure 6. The importance of controlling for other factors is no more evident than in the case of American minorities. Levels of racial inequality are more pronounced in the US than in Britain, and so are levels of



FIGURE 6 Diversity in Perspective

racial segregation. In understanding the low levels of social capital among American racial minorities it is important to allow for the particular characteristics of more diverse and "less White" neighbourhoods. We saw above that once other neighbourhood conditions were taken into account, the minority deficit in social capital all but vanished across neighbourhoods, right from the least to the most diverse. Here we see the crucial role poverty plays with the magnitude of the effect outweighing that of diversity by some distance.

Third, minority groups respond to diversity in a very different way to the White majority, especially in Britain. When we disaggregated by ethnic or racial groups, we found that the effect of diversity on neighbourhood norms was smaller for minorities than the majority population. This suggests Britain's ethnic minorities are considerably more comfortable living in diverse areas¹⁴ even where that diversity is primarily derived from the presence of people of other ethnic groups. This was demonstrated by the presence of significant interaction effects (illustrated visually in Figure 4) and implies support for the multicultural neighbourhood hypothesis. In the US, the differential effect of diversity on neighbourhood norms is less apparent once other factors-particularly neighbourhood poverty-are taken into account (that is, the lines in Figure 4 were almost parallel and the interactions non-significant). A likely explanation of this is that the US neighbourhoods with higher levels of diversity and larger Black and minority populations are predominantly and substantially poorer and less desirable to all groups than affluent White neighbourhoods. In Britain, the socio-economic contrast is rather less accentuated and, for minority groups at least, diverse areas may be more desirable. This, in turn, explains a paradox: for American liberalprogressives, ethnic concentration (usually reflecting segregation) is universally seen as undesirable, but in the UK ethnic concentration (creating more diverse areas) may sometimes be regarded positively (for example, Finney and Simpson, 2009).

Previous research on political participation in the US (for example, Oliver, 2001; Schlichting et al., 1998; Leighley, 2001) and Britain (Fieldhouse and Cutts, 2008a) has shown that more diverse, ethnically mixed areas to have higher levels of participation. Community participation however, is driven by different incentives than political participation. While diversity and competition generate conflicts of interest and increased political participation, they can have the opposite effect on civic activities which are based on voluntary association and consensus (see Oliver, 2001; Campbell, 2006). Our model shows that community participation of minorities is indeed negatively related to diversity, though in the US this is almost entirely due to neighbourhood characteristics. In other words, it is poor neighbourhoods that have low levels of minority participation rather than more diverse ones. However, in the UK this relationship persists after allowing for neighbourhood deprivation and other factors. How participation is distributed geographically also reflects opportunities for involvement as well as demand for involvement. These opportunities tend to be more common in White, middle-class neighbourhoods than poor inner city diverse neighbourhoods.

To some extent the explanation behind the multicultural neighbourhood hypothesis may simply be that the diversity index captures some other aspect of ethnic composition. Ethnic community theory would predict that minorities in places with higher levels of ethnic density should participate in greater numbers and be more community-minded. Certainly for Britain, in particular, more diverse areas are ones in which people are more likely to live among a greater number of their own ethnic group. We noted above that the effect of diversity is often confused with the impact of co-ethnic density. Very often co-ethnic density and diversity are simple mirror images of each other and therefore highly correlated. This is particularly true of the White population: areas with a smaller White population are usually more diverse (because in Britain, at least, they are rarely homogenously Black, for example). In our data the correlation between diversity and co-ethnic density for Whites (that is, percentage of Whites) is -0.96 in England and -0.86 in the US, while for non-Whites the equivalent correlations are +0.43 in England and -0.10in the US. This suggests that in Britain most ethnic minorities live in relatively diverse areas, which is not the case in the US while more Whites live in homogenous White areas (see Clark et al., 2010; Simpson, 2004). In keeping with ethnic community theory (Guterbock and London, 1983) and the multicultural neighbourhood hypothesis, we suggested that co-ethnic density might have a positive effect on social capital.

In fact, this is only partly born out in our data: in alternative models (not shown here), co-ethnic density has a positive effect on neighbourhood norms in both countries but a negative effect on community participation in the US. But how does this affect our interpretation of the diversity effect? When we included co-ethnic density in the models we found that the main effect of diversity on neighbourhood norms in the US was no longer significant (see appendix, Tables A3 and A4). That is the effect can be attributed to the presence or absence of people of one's own ethnic group rather than diversity per se. When we looked at community participation however, we found that diversity still had a negative effect which was considerably greater than that of co-ethnicity.

The findings for Britain were relatively unaffected by the inclusion of co-ethnicity; the positive effect of living among one's own ethnic group on neighbourhood norms was offset by the negative effect of diversity. Furthermore, the positive interaction effects for Blacks and Asians were still statistically significant and indicate that even after allowing for co-ethnicity, ethnic minorities are less averse to the presence of diversity than Whites. In other words, the benefits felt by British minorities in diverse neighborhoods are not just a product of living among co-ethnics. In Britain, where diversity and ethnic density seem to go hand in hand, this presents a paradox for policy makers: as minorities get larger and diversity increases, neighbourhood norms may be damaged for Whites but improved for minorities. When it comes to community participation, neither co-ethnicity nor the main effect for diversity was significant. However, Blacks and Asians are still less likely to participate in community activities in more diverse areas than less diverse ones.

The distinction between co-ethnic density and diversity and other potential measures of ethnic composition is both complex and important. Certainly diversity does not capture the various dimensions of ethnic composition that might affect social capital. For example, communities with similar levels of diversity could be predominantly White or predominantly non-White. While we have attempted to start exploring this issue by looking at co-ethnic density as well as diversity, it is beyond the scope of this article to forensically analyze all the possible permutations of ethnic composition and their effect on social capital. That should be the focus of further work which should avoid the temptation to rely on tried and tested but essentially limited measures of neighbourhood context.

So what are the implications of our research? For one, it is important to better understand the challenges and opportunities posed by increasing levels of diversity in our societies, yet it is also crucially important to consider the unequal effects of diversity on different parts of the population, in particular differentiating between majorities and minorities. When doing so, it is also important to be clear as to what diversity is measuring and to distinguish between the potential positive effects of co-ethnic density from those of diversity. Notwithstanding the complexities and subtleties of this cross-national comparison, we should not underplay the similarity of findings in the two countries. Despite substantial political, economic, cultural, demographic and historical difference between the UK and the US, many of the fundamental messages are the same, not least that White majority neighbourhood norms seem to be negatively related to diversity. However, there are clear differences, in particular, in the way minorities respond to diversity. Other things being equal, community participation among British minorities is lower than expected in diverse areas, while attitudinal social capital is substantially enhanced. Our research suggests reducing neighbourhood poverty will do more than anything else to build social capital. Furthermore, in some circumstances immigration and ethnic concentration may have potential benefits for social capital as well as dangers, most notably where meaningful interaction between groups takes place, and especially among those groups that need it most.

Notes

- 1 This argument and evidence extend to economic and social diversity as well as ethnic or racial diversity.
- 2 Allport (1954) claimed that prejudice was reduced when four features of the contact situation are present: equal status between the groups in the situation; common goals; intergroup co-operation; and the support of authorities, law or custom. Inter-group contact typically reduces inter-group prejudice and more generally show that, while not necessarily, establishing Allport's optimal conditions in the contact situation enhances the positive effects of inter-group contact (see Pettigrew and Tropp, 2006).
- 3 Letki (2008) uses "actual neighbourhoods" based on sample design as a level of analysis in her models, though she doesn't specify the precise scale at which neighbourhood diversity is matched to these. Laurence and Heath (2008) use middle super output areas to capture the "local area." These are statistical areas defined by the UK Office for National Statistics and have a minimum population of 5,000 residents and have an average population of 7,200.
- 4 Further details of the sample design for the SCBS can be found in Putnam (2007).
- 5 The "Asian" category in Britain refers to South Asian groups, the largest of which are Indian, Pakistani and Bangladeshi. The Chinese group is included in the "other" category. In contrast the Asian category in the US is predominantly made up of East Asians and is not directly comparable with British Asians. Indeed, all ethnic categories are necessarily nationally specific and reflect the commonly used ethnic categories of the US and the UK respectively.
- 6 Some of the questions related to community-based social capital in the Benchmark survey which were most comparable to those adopted in the UK were asked on different versions of the questionnaire. In order to preserve sample size and representativeness we dropped some indicators not asked of all respondents.
- 7 An exploratory factor analysis confirmed our (theory-driven) grouping, suggesting attitudinal and structural dimensions identical to those described here.
- 8 For the Comparative Fit Index, anything above 0.92 is regarded as a "good fit." According to Hu and Bentler (1999), the root mean square of approximation estimate (RMSEA) should have values below .06 to indicate a good fit and the 90 per cent CI

should be less than .08. Similarly, the standardized root mean square residual (SRMR) value should be less than .05. Our models satisfy all these criteria.

- 9 This is the ethnolinguistic fragmentation index (ELF); the formula is: $D = 1 \sum_k P^2 ki$ where *D* is diversity and *P* is the proportion of *k* ethnic groups in neighbourhoods *i*.
- 10 Gini coefficient for income in US and social class fragmentation index in England.
- 11 As in Putnam (2007), the coefficient for inequality in the US is negative in the full model, but this reflects co-linearity with poverty. When poverty is excluded from the model inequality is associated with less social capital. Inclusion or exclusion of the inequality variable has little impact on the coefficients of interest.
- 12 To confirm these results were not an artefact of the measurement model (that is, the aggregation) we ran equivalent regression models with each indicator variable as the outcome. In England, these analyses confirm the above findings with diversity having a negative or insignificant effect for all the attitudinal indicators, with positive interactions for Black and Asian for most indicators. For participation, the main effect for diversity is consistently insignificant and the interaction with Asian is significant for two out of four indicators. Similar patterns exist in the US. Diversity has a negative effect for all attitudinal indicators, with positive interactions for Hispanic and Black. For participation, diversity is insignificant for two of the three indicators, although it is positive for being active in groups and clubs, although this is only just significant at the 5 per cent level. Only the interaction with Blacks is significant and negative for groups and clubs, while all the others are insignificant. These analyses provide reassurance that the aggregation is not obscuring the relationship which potentially could have been running in opposite effects for different indicators.
- 13 One possibility we should consider is that neighbourhood selection is affected by preferences for or against diversity, and therefore the direction of causality could plausibly run from attitudes to neighbourhood characteristics rather than the reverse. However, this is unlikely to produce the negative relationship demonstrated here, as this would require individuals with distaste for diversity (and scoring lower on social norms) to choose to live in more diverse areas (see Putnam 2007).
- 14 This is consistent with findings in the social psychology literature (see Berry, 1997; Van Oudenhoven et al., 1998) that members of minority groups are more positive towards integration, and less positive towards assimilation, than are members of the majority group.

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	•)			
Variables-Within Level	Estimates (β)	SE	StdYX	\mathbb{R}^2
Neighbourhood Norms				
Pull Together	1.00	0.00	0.65	0.42
Solve Problem	0.70	0.02	0.50	0.25
Do not Share the Same Values	-0.54	0.02	-0.33	0.11
Close-Knit Neighbourhood	1.07	0.02	0.68	0.46
Neighbourhood Trust	0.49	0.02	0.38	0.15
Belong to Neighbourhood	0.60	0.02	0.43	0.18
Willing to Help Neighbours	0.72	0.02	0.63	0.39
Participation				
Active in Groups/Clubs	1.00	0.00	0.60	0.36
Civic Activity	0.14	0.01	0.57	0.32
Unpaid Activities	0.11	0.01	0.30	0.09
Local Consultation	0.16	0.01	0.49	0.24
Variables-Between Level	Estimates (β)	SE	StdYX	R ²
Neighbourhood Norms				
Pull Together	1.00	0.00	0.95	0.90
Solve Problem	1.00	0.07	0.90	0.81
Do not Share the Same Values	-1.14	0.09	-0.86	0.74
Close-Knit Neighbourhood	0.93	0.06	0.86	0.74
Neighbourhood Trust	1.11	0.08	0.88	0.77
Belong to Neighbourhood	0.38	0.05	0.65	0.42
Willing to Help Neighbours	0.88	0.06	1.00	1.00
Participation				
Active in Groups/Clubs	1.00	0.00	1.00	1.00
Civic Activity	0.01	0.01	0.69	0.47
Unpaid Activities	0.07	0.01	0.62	0.38
Local Consultation	0.05	0.01	0.56	0.31
	Norms		Particip	oation
Between Area Variation	0.011* (0.001)		0.498* (0.108)
Intra-class correlation	0.1	1		0.25
CFI	0.9	98		
RMSEA	0.02			
SRMR	0.0)2		
AIC	137208.5	53		
BIC	137612.9	98		
Log Likelihood	-68548.2	26		

TABLE A1

-+ Madal (III) ΝЛ.

*Note-CFI, RMSEA and SRMR applies to the whole model with two latent factors

TABLE A2

Measurement Model (U.S.)

Variables-Within Level	Estimates (β)	SE	StdYX	\mathbb{R}^2
Neighbourhood Norms				
Community Rating	1.00	0.00	0.50	0.25
Neighbourhood belonging	0.90	0.05	0.39	0.15
Neighbourhood Trust	1.36	0.07	0.63	0.40
Participation				
Worked on a Community Project	1.00	0.00	0.63	0.40
Served on a Community Committee	0.70	0.02	0.54	0.29
Active in Groups/Clubs	6.40	0.19	0.74	0.54
Variables-Between Level	Estimates (β)	SE	StdYX	\mathbb{R}^2
Neighbourhood Norms				
Community Rating	1.00	0.00	0.99	0.99
Neighbourhood belonging	0.43	0.07	0.97	0.95
Neighbourhood Trust	1.17	0.09	0.99	0.99
Participation				
Worked on a Community Project	1.00	0.00	0.99	0.98
Served on a Community Committee	1.04	0.20	0.99	0.97
Active in Groups/Clubs	2.93	1.61	0.99	0.99
	Norms		Participat	tion
Between Area Variation	0.009* (0.001)		0.004*(0.001)	
Intra-class correlation	0.25		0.04	
CFI	0.99			
RMSEA	0.01			
SRMR	0.01			
AIC	120846.33			
BIC	121041.47			
Log Likelihood	-60397.16			

*Note-CFI, RMSEA and SRMR applies to the whole model with two latent factors

TABLE A3

U.K Key Coefficients after Allowing for Co-Ethnicity (with Controls)

	With Controls		
Diversity with Interactions	Norms	Participation	
Key Variables and Interactions			
Level 1			
Co-ethnicity	0.11* (0.14)	0.22 (0.05)	
Black	0.08* (0.08)	0.52* (0.10)	
Asian	0.12* (0.16)	0.27 (0.07)	
Mixed	0.10 (0.06)	0.52 (0.06)	
Other	0.10 (0.06)	-0.19 (-0.02)	
Black * div	0.15* (0.08)	-0.89*(-0.09)	
Asian * div	0.13* (0.08)	-1.18*(-0.15)	
Mixed * div	0.06 (0.02)	-0.77 (-0.04)	
Other * div	0.05 (0.01)	-0.67 (-0.04)	
Level 2			
Diversity	-0.16* (-0.36)	0.06 (0.21)	
Between Area Variation	0.002* (0.000)	0.001 (0.002)	
Intra-class correlation	0.02		
CFI	0.91		
RMSEA	0.02		
AIC	135073.20		
BIC	135983.24		
Log Likelihood	-67410.60		

	With controls		
Diversity with Interactions	Norms	Participation	
Key Variables and Interactions			
Level 1			
Co-ethnicity	0.06* (0.12)	-0.05*(-0.06)	
Black	-0.07*(-0.15)	0.09* (0.10)	
Asian	0.05 (0.04)	-0.13*(-0.07)	
Hispanic	-0.04*(-0.07)	-0.02 (-0.02)	
Black * div	0.05 (0.05)	-0.09* (-0.04)	
Asian * div	-0.01 (-0.01)	0.03 (0.01)	
Hispanic * div	-0.00 (-0.00)	0.01 (0.01)	
Level 2			
Diversity	-0.01 (-0.02)	-0.09* (-0.32)	
Between Area Variation	0.000 (0.001)	0.003* (0.001)	
Intra-class correlation	_	0.04	
CFI	0.96		
RMSEA	0.02		
AIC	114850.90		
BIC	115450.42		
Log Likelihood	-57345.45		

TABLE A4

U.S. Key Coefficients after Allowing for Co-Ethnicity (with Controls)