Social capital, social exclusion and wellbeing

Link to publication record in Manchester Research Explorer

Citation for published version (APA):

Published in:
Public Health: Social context and action

Citing this paper
Please note that where the full-text provided on Manchester Research Explorer is the Author Accepted Manuscript or Proof version this may differ from the final Published version. If citing, it is advised that you check and use the publisher's definitive version.

General rights
Copyright and moral rights for the publications made accessible in the Research Explorer are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Takedown policy
If you believe that this document breaches copyright please refer to the University of Manchester’s Takedown Procedures [http://man.ac.uk/04Y6Bo] or contact uml.scholarlycommunications@manchester.ac.uk providing relevant details, so we can investigate your claim.
Social capital, social exclusion and wellbeing

Yaojun Li

The debate on social capital is still raging unabated. Proponents argue that there is something out there called social capital, that its stock has fallen and needs refuelling, and that this underlies many of the social problems we face today, such as growing political apathy, unsafe streets and rising crime rates, increasing truancy and teenage pregnancy, falling levels of trust in our fellow citizens, loosening bonds with our family members, fewer marriages and more divorces, and ultimately poorer health, more distress and greater dissatisfaction with life. Opponents, of course, deny all this. Neither side can convince the other. Worse still, they are more often than not unwilling to listen to each other. There is yet a third group who are not so much concerned with the polemical side of the debate but are more interested in developing informed measures of social capital and exploring its causes and effects. This chapter belongs to this third type. It seeks to develop theoretically-informed and methodologically-rigorous measures of social capital and link them to people’s wellbeing using better data than hitherto available, namely, national representative longitudinal surveys.

The chapter proceeds as follows. First, we give a brief review of the classical accounts of social capital and argue that, notwithstanding (and thanks to) the criticisms against it, it is possible to construct theoretically-inspired measures of social capital. Three measures are developed: neighbourhood attachment, social networks, and civic participation. Secondly, we analyse the interrelations between the measures of social capital, socio-demographic attributes and three indicators of perceived wellbeing: physical health, psychological distress, and overall satisfaction with life. Drawing on the best data available for this kind of research, namely, the British Household Panel Survey (BHPS), we conclude that social capital does have positive impacts on people’s wellbeing.

Social capital: a private resource and/or public good?

The concept of social capital is said to be ‘seductive, but infuriating’ (Li et al., 2005: 109). It is seductive because it has captivated the imagination of laypeople, policy makers and academics alike. One can find discussions on this topic in popular media, government documents and academic journals. Academics working in this area are found in sociology, economics, political sciences, psychology, management and business studies, epidemiology, criminology, and other social science disciplines. Indeed, it is difficult to find a research area in social science where social capital is not mentioned at all. Halpern (2005: 9) shows that since around 1995, the number of publications on this topic has increased exponentially. There are now around 300 to 400 publications in the English language alone each year. Kadushin (2004) found 500,000 hits in Google on this topic and the number was found to have increased by
nearly 20 times when this chapter was being written in April 2006. One cannot but feel amazed and ask what, exactly, it is about social capital that makes it so attractive.

Yet, the concept of social capital is also infuriating, defying characterisation, measurement or falsification in any simple, straightforward and precise manner. Unlike human capital, economic capital, physical capital or even cultural capital where both proponents and opponents have some clear idea of and consensus about what the terms refers to, social capital as a concept is elusive, nebulous and does not easily yield to empirical, especially quantitative, investigation. Some proponents actually celebrate this property, seeing it as offering the possibility to ‘extend well beyond the meso-level of traditional communities and personally known social networks into the generalized “habits of life”, or national and regional culture, that make it possible for people to get along’ (Halpern, 2005: ix). Critics, unsurprising, find the concept ‘totally chaotic, ambiguous, and general’ (Fine, 2001: 155; see also Fine, 2002; Skocpol, 1996; Edwards and Foley, 2001; Kadushin, 2002, 2004 for critiques). Even authors normally regarded as being on the pro camp voice the concern that the concept is ‘being adopted indiscriminately, adapted uncritically, and applied imprecisely’ (Woolcock, 1998: 196; see also Portes, 1998).

Given such a sharp divergence of opinions, any general-type literature review would defeat its purpose (see Field, 2003; Edwards, 2004; Keane, 1998 for good overviews). We shall thus focus on the theoretical vigour in the classical accounts of the theory, with special regard to implications for operational feasibility in quantitative analysis.

Four writers are usually seen as pioneers in social capital research: Bourdieu (1984, 1986), Coleman (1988), Lin (2001) and Putnam (2000). They are similarities and differences between them. The greatest similarity is that they all refer to social capital as some sort of resources residing in social networks. The difference lies in their different focuses. If we draw an imaginary line with instrumental value on the left and civic spirit on the right, then Lin and Bourdieu might place themselves on the left, Coleman centre left, and Putnam on the right, of the continuum. In other words, people like Lin would focus on the capital side of the term (as a private resource) whilst Putnam stress the social side (as a public virtue).

Lin’s interest in social capital is primarily concerned with explaining occupational attainment (Lin et al., 1981; Lin, 1999a, b, 2001) although he also uses it to explain depression (Lin et al., 1999). His basic assumption is that the amount of resources that an individual can assess and utilise depends on the extensity of his or her social ties, the position of the contact, and the strength of tie with the contact. Thus having access to contacts situated in higher social positions and willing to offer help would be especially advantageous to job-hunters and career-seekers. This thesis can be called ‘the strength of strong ties’, which complements the thesis of ‘the strength of weak ties’ developed by Granovetter (1973, 1974, 1985; see also Burt 1992, 2000 for a more recent application). Yet unlike the latter approach which cannot be easily adopted in large-scale social surveys, the idea of strong ties has been developed as a ‘Position Generator’ which can be economically conducted using sample surveys (see Lin, 2001: Table 6.2 on page 88 for example). Lin’s own research and that of many others in this tradition have demonstrated the research value of this approach in accounting for occupational attainment.1 Given the philophily principle in sociability,
the Position Generator is essentially a stratification measure (Li et al., 2006), and it is little wonder that it can be effectively used in explaining occupational attainment. However, since subjective wellbeing is not, or not necessarily, a stratification measure, its usefulness in this regard is doubtful (see Lin et al., 1999). There have been recent attempts to develop ‘Name Generator’ and ‘Resource Generator’ approaches (Van Der Gaag and Snijders, 2005). Some of the analysis in this chapter bears close resemblance to the latter instrument.

In contrast to what Coleman (1988) calls the ‘methodological individualism’ found in Lin’s work, Bourdieu’s notion of social capital is conceptually inspiring but operationally a nightmare. For him, social capital is ‘the sum of the resources, actual or virtual, that accrue to an individual or group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition’ (Bourdieu and Wacquant, 1992: 119). Bourdieu’s theoretical work has been highly influential in European research as it allows social capital, cultural capital and economic capital to be investigated together so that we can gain an insight into the intergenerational transmission of class advantages. In this sense, social capital is seen as a dimension of social exclusion such that the networks between people also involve non-ties with outsiders who are excluded from social capital (Li et al., 2003). Another thing to note about Bourdieu’s theory of social capital is, as Savage et al. (2006) argue, that he used it only as a residual category to explain how elites can use networks for instrumental gains when they do not have sufficient cultural or economic capital (see also Field, 2003). The crucial thing, for Bourdieu, is that if cultural capital and economic capital can function properly, there is no need for social capital: highly-educated parents can instil in their children the ‘habitus’ for educational attainment, and well-resourced parents can buy a good education for their mediocre offspring to ensure occupational success (Bourdieu, 1986). For present purposes, it suffices to note that while Bourdieu’s theory of social capital gives us inspiration as another angle for stratification research, it lacks the operational feasibility in large-scale survey research: how, exactly, do we measure ‘a durable network of more or less institutionalized relationships of mutual acquaintance and recognition’?

The space limit does not allow us to discuss in detail Coleman’s theory except to note that his functionalist approach has been heavily criticised as being tautological (Lin, 2001) and his empirical work is found to be flawed (Field, 2003). Conceptually, he defines social capital ‘by its functions’ (Coleman, 1990: 302), as entities with some social structure which facilitate certain actions. Methodologically, the examples he uses (1988, 1990) as evidence of social capital at work, such as the jewellery dealers in New York, the Rotating Credit Associations in Southeast Asia, the safer streets in Israel than in the US, or the intergenerational closure between pupils, parents and

survey does not contain sufficient information for this approach to be fully operable (see Li et al., 2006).

In this chapter, Lin et al. (1999) developed a new model of social support consisting of three levels: binding (marriage), bonding (friends) and belonging (civic engagement). They argued that the three levels are hierarchically associated with depression. While there is some ingenuity in this model, I believe that marriage is better treated as a covariate in the analysis. Stutzer and Frey (2006) have shown that happier people get married, and Gardner and Oswald (2006) show that divorcing couples become happier by breaking up: both selection effects though in different directions.
teachers, all serve to inspire qualitative or ethnographic research but would be of little help to quantitative analysis using national representative samples.

It is Robert Putnam’s work (1993, 2000) that has generated the most heated debate and put social capital as a priority on the research agenda across the social science disciplines. For him, social capital refers to ‘connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them’ (2000: 19). This definition is a conceptual riddle, as it combines both causes (connections) and consequences (norms of reciprocity and trust), and has been a source of much of the controversy. Yet, if we focus on the causal element, we might gain something quite often neglected in the current debate.

In his earlier work, Putnam (1993) saw civic participation as the main source of social capital. It is suggested that the experience of engagement in civic associations enables people to learn how to reconcile differences and to work cooperatively together. ‘Good government’ he writes, ‘is a by-product of singing groups and soccer clubs’ (1993: 176). Thus, in his earlier thinking, the civic spirit is the foundation stone on which democracy prospers or falters. Yet, in his later work, Putnam (2000) has realised the importance of, and accordingly placed greater emphasis upon, informal networks as the major source of social capital. ‘When philosophers speak in exalted tones of “civic engagement” and “democratic deliberation”’ he says, ‘we are inclined to think of community associations and public life as the higher form of social involvement, but in everyday life, friendship and other informal types of sociability provide crucial social support’ (Putnam 2000: 95). Borrowing from Yiddish, he calls people in formal social connections ‘machers’ and those in informal social connections ‘schmoozers’. This distinction between formal and informal social connections with the latter as the greater fountain of social capital is not yet fully appreciated in the social capital research community, but it is the starting point of the present research.

Measuring social capital, wellbeing and socio-economic factors

The discussion above shows that all major thinkers on social capital see social capital as residing in social networks and that Putnam has further differentiated between formal and informal networks as potential sources of social support. How to develop operational measures of formal and informal social capital is a challenge where Putnam’s own work does not offer much help. For instance, after making the conceptual distinction, he goes on to list data on formal organisations like ‘American Bowling Congress’ and ‘American Legion’, and on informal social activities such as visiting friends or playing cards, and finds that the proportions engaged in most of these activities have declined over time. It is clear that he does not use any formal measurement model to generate summary measures for the formal and the informal social connections, and thus cannot effectively investigate their socio-demographic determinants or assess their relative impacts on socio-economic outcomes.

Although Putnam’s work does not make methodological advances with regard to social capital measurement, it is conceptually vigorous to inspire others. I have developed social capital measures in collaboration with Mike Savage and Andrew Pickles (Li et al., 2005) drawing data from the British Household Panel Survey
The social capital questions, available in Waves 7 and 8 of the survey, can be conceptualised as falling into three types or dimensions (see Appendix). Details on constructing the latent scores for the three dimensions of social capital are given in Li et al. (2005). Here is a brief summary:

**Neighbourhood attachment** This refers to the degree to which people feel that they belong to the neighbourhood, cherish the friendships cultivated with neighbours, and perceive that having good neighbours can give them practical value like being able to obtain advice and borrow things from, or to have frequent chats with, neighbours. All these are important aspects of informal social capital.

**Social network** This measures the strength of ties with people beyond one’s immediate family with friends who may, or may not, be living in the same neighbourhood. It asks whether people have friends whose support they can rely on for practical and emotional problems. Many people nowadays may not know the names of their neighbours but may call on friends for help who are located hundreds of miles away.

**Civic participation** Existing studies on social capital generally use civic membership as an indicator of social capital (Putnam 2000; Hall 1999; Paxton 1999; Li et al., 2003; 2006). Most studies use descriptive methods by counting the number of such memberships. We measure the level of civic involvement as obtained from the underlying scores in the voluntary associations. The level of civic participation thus obtained is a reasonable measure of formal social capital emanating from involvement in voluntary associations.

A unique feature of the BHPS is that its longitudinal nature allows us to assess the effects of explanatory variables upon outcomes of interest measured at a later time. This research design is, as Helliwell and Putnam (2004: 1437) put it, ‘ultimately necessary’ if we wish to explore the causal effects of social capital on wellbeing. As our social capital data are drawn from Waves 7 and 8, we use wellbeing variables from Wave 9: general state of health, psychological distress, and overall satisfaction with life (see Appendix for question wording of these variables). All three measures are widely used in social research in the UK and other countries: for health, see Ross and Wu, 1995; Hertzman et al., 2001; Chandola et al., 2003; Pevalin and Rose, 2003; for distress, see Whelan, 1994; Power et al., 2002; Clark and Oswald, 2002; Shields and Wheatley Price, 2005; Gardner and Oswald, 2006; and for overall satisfaction with life, see Marshall et al., 1996; Diener et al., 1999; Oswald, 2002; Dovonan and Halpern, 2002.

(Figure 6.1 about here)

The framework for analysis is shown in Figure 6.1. The research design adopted here has a few advantages. Firstly, the analysis of dependent and independent variables measured at different time points will help avoid the kind of ‘reverse causality’ whereby people who are healthier, happier and more satisfied with life are more likely

---

3 The survey began in 1991 and samples around 5,000 households and 10,000 individuals each year. Although some of the original sample members left the survey, new members are added each year, and the sample remains appropriately representative of the population as a whole in each wave (Taylor et al., 2002).
to participate in formal and informal networks. Secondly, our inclusion of health status as a covariate in modelling happiness and satisfaction will help remove the confounding effect that the observed positive correlation between social capital and happiness may be both due to health, that is, healthier people are more likely both to engage in social networking and to report greater happiness or satisfaction, but the association would disappear once health status is taken into account.

We give a brief account here of our outcome variables. The health and life satisfaction measures (see Appendix for wording) are self-explanatory. With regard to the happiness measure, we use the Likert scale of the General Health Questionnaire (GHQ12), which is a summary measure of the 12 items in the GHQ and is coded with a minimum of 0 (least depressed) and maximum of 36 (most depressed). The measure has been validated (Argyle, 1989; Pevalin, 2000) and is said to be ‘widely used by medical researchers and psychiatrists as an indicator of strain or psychological distress’ (Gardner and Oswald, 2006: 322). It is noted here that, as higher scores in the satisfaction variable denote greater satisfaction with life, we have, for the sake of consistency in the interpretation of results, reversed the score so that higher values denote less depression or greater happiness, and we shall hereafter call it ‘happiness’ variable. The analysis of both happiness and life satisfaction data is necessary for exploring the relative effects of social capital. As Helliwell and Putnam (2004: 1435) put it, self-ratings of happiness tend ‘to reflect relatively short-term, situation-dependent expressions of mood, whereas self-ratings of “life satisfaction” appear to measure longer-term, more stable evaluations.’ Our analysis will allow us to assess whether life satisfaction is indeed a longer-term evaluation than happiness.

We wish to say a few words on the control variables. Apart from the social capital measures, we also assess the effects of socio-demographic attributes as are often found to exert considerable influences on people’s wellbeing. These include age, sex, marital status, ethnicity, employment status, class, education, income, and local (ward-level) social deprivation, that is, the Carstairs variable (see Carstairs and Morris, 1989; Buck, 2000). Blanchflower and Oswald (2004) show that wellbeing is U-shaped in age, that a lasting marriage is worth $100,000 per year as compared to widowhood, and that money buys happiness. Wilkinson (2002) argues having a job brings not only material rewards but, much more importantly, the esteem and self-respect crucial for one’s wellbeing. Unemployment can trigger depression, doubt of self-worth, diffidence, self-isolation, loss of social contact, etc. which will lead to distress and induce a whole range of psychological and physiological problems.

Ethnicity is rarely found in social capital and wellbeing research in Britain as most ethnic research has focused on racial discrimination in occupational and educational attainment (Karn, 1997; Modood et al. 1997; White, 2002). Lin (1999) suggests that, apart from socio-economic disadvantages, ethnic groups might have different sentiments which may prevent minority groups from forming network ties with the majority groups. We shall investigate the ethnic effects on social capital and wellbeing.

There is a long tradition of class analysis in the UK but recently this has come under attack. Pakulski and Waters (1996) proclaimed the ‘death of class’ while Beck and Beck-Gernsheim relegated it to ‘zombie categories’: dead and still alive (2002: 203). Although existing research has shown profound and persisting class differences in social capital generation in the UK (Hall, 1999; Li et al., 2003, 2005, 2006), relatively
little class analysis has been conducted on wellbeing, and it is not clear whether class has any explanatory power in this regard. We use a three-way Goldthorpe (1987) class schema which distinguishes the service class (professionals, administrators and managers), the intermediate class (petty bourgeoisie, routine non-manuals, and foremen and technicians), and the manual working class. Like most research in this area, we also assess the effects of education, and we differentiate three levels: tertiary (higher degree, first degree, and professional qualifications below degree), secondary (A/O Levels or equivalent), and primary or no qualification.

With regard to income, we use standardised household mean income, constructed by taking the total household annual income from all sources divided by the equivalence scale. This allows for the effects of household size and composition on needs in making income comparisons. This is the standard practice adopted by the government agencies and the research community in the UK (Jenkins, 1999; Li et al., 2002).

Finally, we include the ward-level social deprivation in the analysis. The purpose of this is to try to reduce the ‘atomistic fallacies’ sometimes attributed to the use of individual level data (Kawachi et al., 1997; Schwartz, 1994).

All socio-demographic and contextual variables are drawn from Wave 7, social capital data from Waves 7 and 8, and wellbeing data from Wave 9. We use Stata 9 for the data management and statistical modelling. All analysis is based on weighted data (analytical weights in descriptive analysis and probability weights in statistical modelling). All models are estimated using pseudo-likelihood to account for the weights and clustering, with standard errors, confidence intervals and p-values based on robust estimator of the parameter covariance matrices.

**Analysis**

Table 6.1 shows the correlation coefficients between the social capital dimensions and happiness and life satisfaction scores. (As a categorical variable, it is not appropriate include health for use in correlation analysis.) The three dimensions of social capital (neighbourhood attachment, social network and civic participation) are positively but weakly correlated. People with strong informal social capital tend to be happier and more satisfied with life than those with higher scores on civic participation. There is, unsurprisingly, a much stronger association between happiness and satisfaction (0.553) than between any other pairs. The patterns here support, at a general level, the hypothesis (Putnam, 2000) that social capital contributes to happiness and life satisfaction, and that informal social support tends to be more important to people’s wellbeing than formal civic engagement.

(Table 6.1 about here)

Having looked at the association between social capital and wellbeing at the most general level, we would move on to explore the association between socio-demographic attributes with happiness and life satisfaction. Table 6.2 presents three main types of data. Firstly, the last column shows the sample size for different socio-economic groups. Most of the groups have large sizes but some small groups are included for theoretical reasons. For instance, existing research has shown significant differences between people of Indian and of Pakistani/Bangladeshi origins in terms of socio-economic conditions (Karn, 1997; White, 2002). We have thus listed Pakistanis and Bangladeshis as a separate category (N=33). It is noted here that as there are only
12 Chinese in the sample, they have to be combined with the ‘Other’ group. Secondly, mean scores and standard deviations for happiness and life satisfaction are presented for each of the socio-demographic groups. Thirdly, we have also shown the statistical significance between each of the other categories in a variable with the reference category as explained in the note to the table. For instance, the mean score of happiness for men is 25.8 and that for women is 24.3. Men are on the whole happier than women and their difference is significant at the 0.001 level. On the other hand, we find no statistically significant difference between men and women in life satisfaction.

(Table 6.2 about here)

With regard to happiness, the data in the last row of Table 6.2 show an overall mean score of 25 (and the median is 26, not shown in the table). This is in conformity with that reported in Gardner and Oswald (2006: 323, note that we have recoded the scores). A closer look shows patterns in support of previous findings (Helliwell and Putnam, 2004; Blanchflower and Oswald, 2004; Shields and Wheatley Price, 2005; Lin et al., 1999; Stutzer and Frey, 2006). Thus, apart from the gender differences as noted above, we find, as expected, significant differences between people with different marital and employment statuses, with different educational qualifications, in different economic situations, living in areas of differing social deprivation, and with different health conditions. Only in two aspects do we find exceptions: there are no significant class and ethnic differences in terms of happiness. We know that class and ethnicity are powerful predictors of a whole range of socio-economic outcomes such as family income, and yet it is surprising to find that the much lower incomes of working-class respondents or of Pakistani/Bangladeshi groups are not reflected in their happiness evaluations. The evidence here might be taken as a sign of ‘adaptation’ (Wilson, 1967): the working class or the ethnic minority groups may find their jobs rather unpleasant and their purses quite empty, but this does not necessarily make their life distressful. On the other hand, the differences between health groups are by far the most pronounced. People who see their health in excellent or very good state report a mean happiness score of 26.5, as against 21.5 for those with fair or poor health ratings. No other variables in the table show differences to a similar magnitude.

With regard to life satisfaction, we find patterns broadly similar to those on happiness. Thus, people who were married, employed, richer, healthier, and living in more affluent areas were more satisfied with life. We also find that Blacks, and Chinese and others, were less satisfied than the Whites. Again, there is no significant difference between people in different class positions in this respect.

We do not present descriptive data on health but a brief summary is in place here. There are notable differences between classes, with 53.6 per cent of the service class as against 36.5 per cent of the working class, reporting ‘Excellent/Very good’ health. Ethnic differences in heath are also pronounced. Overall, 45.3 per cent of our respondents reported ‘Excellent/Very good health’ but the proportions for Indians and Pakistanis/Bangladeshis were only 33.2 and 30.9 per cent respectively.

The brief analysis above suggests complicated interrelations between socio-economic conditions, social capital, and wellbeing, which cannot be unravelled in the bivariate analysis. We need statistical modelling to tackle the complexities. This we do in the following.
Table 6.3 presents three models of ordinal logit regression on health (coded as 1 = Fair/Poor, 2 = Good, 3 = Excellent/Very good, so higher values of the coefficients in the form of log odds would mean better health). In model 1, we include only the three dimensions of social capital; in model 2, we add demographic attributes – age, sex, marital status, and ethnicity; and in model 3, we further add socio-economic factors – employment status, class, education, standardised household mean income in quartiles, and ward-level social deprivation.

The data in Model 1 of Table 6.3 show that people with higher levels of neighbourhood attachment at Wave 7 were less likely to report good health in Wave 9, but having stronger social network and civic engagement scores were positively associated with good health status two years later. This, as earlier noted, could be due to confounding factors. As poorly-educated working-class respondents in poor financial situations tend to have higher scores in neighbourhood attachment (Li et al., 2005, Table 2), controlling for these factors might change the patterns. In Model 2, when the demographic attributes are added, we note that the negative association between neighbourhood attachment and health does now turn positive. Ethnic minority groups, particularly Blacks, were likely to have lower scores in neighbourhood attachment (Li, 2005), but the Blacks with similar levels of neighbourhood attachment were no less healthy. Indians, Pakistanis and Bangladeshis were found to be less healthy. With these factors controlled for, neighbourhood attachment is now positively associated with health. Men and the married tend to have better health and older people tend to have worse health, as confirming research findings in other studies (Helliwell and Putnam, 2004). Finally, in Model 3, we further add variables on employment, class, education, income and ward-level deprivation. Comparing the coefficients between Models 2 and 3, we find that the coefficients for neighbourhood attachment went up whilst those for social network and civic participation went down suggesting that, other things being equal, maintaining good neighbourly relations would, as Putnam (2000) suggests, enhance one’s health. On the other hand, gender, marital and some of the ethnic differences were much weakened or disappeared. With social capital and demographic factors controlled for, we also find, as would be expected, that people who were employed, in higher class and educational positions, having higher family incomes and resident in more affluent areas would report better health. For present purposes, the most important finding is that social capital does appear to have independent and positive effects on people’s perceived health.  

(Tables 6.4 and 6.5 about here)

Tables 6.4 and 6.5 present OLS regression analysis on happiness and life satisfaction respectively, each with four models. The first three models have the same structure as that in Table 6.3 and, in model 4, we further include health status as a control. Our

---

4 With all other variables in Model 3 controlled for, further analysis shows that Indians who were working, well-qualified, or living in affluent areas were no less healthy than the Whites in similar situations, but those Indians with top income levels were significantly less likely to report ‘excellent’ health than their White counterpart (b = -0.957, p. = 0.016).
purpose is to see whether the three types of social capital as we have conceptualised and measured would still have significant impacts on happiness and life satisfaction with the progressive inclusion of demographic, socio-cultural and health factors.

With regard to happiness data, we find, in Model 1 of Table 6.4, that higher levels of informal social capital at Waves 7 and 8, namely, neighbourhood attachment and social network, are significantly associated with greater happiness at Wave 9 whilst there is no significant association between civic engagement and happiness. When we compare the coefficients from Model 1 where only social capital types are included to those in Models 2, 3 and 4 where more variables are progressively included, we find that informal social capital measures remain highly significant in each model. The patterns here suggest that having stronger social ties with friends and neighbours does enhance people’s sense of happiness over and above other factors.

The other patterns in the table generally confirm findings in existing studies. Thus older people tend to be less happy but after a certain age, happiness will increase (Blanchflower and Oswald, 2004). Men consistently reported greater happiness than women. The never married (single) were happier than the once married, that is, those who were separated, or divorced, or widowed. It is interesting to note that the married were found to be significantly happier in the bivariate analysis in Table 2 but not so in the multivariate analysis here. The reason may be that, as Putnam (2000) argues, marriage is a form of social capital itself in that married people tend to have greater access to and stronger social ties with extended kin, neighbours, friends, and spouse’s colleagues and friends. Married people also tend to have higher personal earnings and family incomes (Chun and Lee, 2001). Most important of all, the once married were predominantly women: 71 per cent. Thus when all these factors were controlled for, marriage effects were much reduced or disappeared. Health status is, as expected, a crucial predictor of happiness. Other things being equal, women in service-class jobs were more distressed, for such jobs were psychologically more demanding and they also carried the dual burden. With all other factors in the models controlled for, ethnicity, employment status, levels of education and local (ward-level) social deprivation did not affect happiness.

The data on life satisfaction in Table 6.5 can be summarised in brief as the patterns are rather similar to those on happiness. Thus we find positive effects of informal social capital, curvilinear effects of age, and pronounced effects of income and health in particular. The major differences between patterns in the two tables lie in the fact that whilst the married were not significantly happier than the once married, or the employed than the unemployed, they were found more satisfied with life overall. The likely reason for this discrepancy is, as Helliwell and Putnam (2004) explain, that happiness reflects a more short-term, situation-dependent, mood while satisfaction reflects a more enduring, stable, longer-term evaluation. Other things being equal, married people in employment were much more satisfied with life than being merely happy.

Finally, a note on the few apparently surprising results with regard to happiness and life satisfaction. First, we notice that health has a much more pronounced effect on happiness than on life satisfaction (4.714 and 1.089 respectively for ‘Excellent/Very good’ versus ‘Fair/Poor’ health: Tables 6.4 and 6.5). This difference in magnitude is due to the different scales of the two measures used: happiness ranging from 0 to 36 and life satisfaction from 1 to 7. If we were to use standardised scores, the effects
would be similar (0.447 and 0.428 respectively). Secondly, service-class members were found to be less happy and less satisfied with life, as were the highly educated with life satisfaction. On the face of it, the results here are odd. We all know that the service class and the highly-educated are less likely to be unemployed, and are more likely to earn much more, to live in more affluent areas, and to enjoy better health, which are all essential elements for happiness and life satisfaction. Why, then, were they less happy and less satisfied? The answer is that we are comparing the service class with the working class, all other things being equal. Since the two classes are not equal in job security, income, health or local affluence, further analysis made the oddities disappear. Thus the service-class respondents with higher incomes or in better health were not significantly more unhappy or dissatisfied than their working-class counterparts; if anything, service-class respondents in better health status were found significantly more satisfied with life. Nor were the highly educated who were working, with higher incomes or in better health found less dissatisfied.

Conclusions
We have, in this chapter, shown that it is possible to develop measures of social capital based on theoretical insights, particularly those by Putnam (2000), and to use these measures in the analysis of subjective wellbeing. We adopted a research design that made use of the longitudinal nature of the BHPS data, which is a step forward in this area of research where most studies are based on cross-sectional data.

Our analysis shows some important findings. Firstly, as social capital theorists have constantly suggested (even though their limited data do not allow them to sufficiently demonstrate this), higher levels of social capital, particularly those in the form of informal social networks with neighbours and friends, do appear to enhance people’s healthiness, happiness and perceived life satisfaction, and this is the case even when most of the sociologically important independent variables at both individual and contextual levels are taken into account. Thus, even though social capital is socially skewed in favour of those in more advantaged socio-economic positions (Li et al., 2003, 2005, 2006), it also has an independent role to play on people’s physical and mental health over and above the socio-cultural resources. All this lends support to the social capital ‘project’, and gives credence to the distinction between formal and informal social capital and to the greater weight placed on the informal kind as Putnam (2000) argues.

Secondly, our findings also support the idea that life satisfaction is a more enduring, future-oriented property than happiness. This is reflected in the stronger association of marriage and employment status with life satisfaction (Table 6.5) than with happiness (Table 6.4). For most people, these are the two most important pillars of life: avoiding unemployment in the public arena and having a happy conjugal family life in the domestic sphere.

Apart from these, we have also got some pattern which we cannot easily explain. That is, the respondents of Indian ethnicity are less likely than the Whites to report top health status (‘Excellent/Very good’) even when they are in the top income quartiles (Table 6.4). We do not have data to make further analysis in this regard but would venture two hypotheses for possible future explorations. Firstly, there may be something in the culture and tradition which makes Indians more reserved in making responses. What passes as ‘Excellent/Very good’ health for a White person might be regarded as ‘Good’ for an Indian. Thus, in the 2001 Census of the Population and in
the General Household Survey (GHS) of 2001 where only ‘Good, Fair, Poor’ health were asked of the respondents, the Indians were no less than the Whites in answering ‘good’ health (65.6 and 62.4 per cent for Indians and Whites in the Census, and 60.3 and 59.1 per cent for the two groups in the GHS, respectively). Secondly, social capital might help raise greater awareness of health issues amongst Indians. The Indians in Britain are renowned for producing large numbers of medical experts (the famous ‘Indian doctors’). According to the 2001 census, there are more health professionals amongst Indians (3.99 per cent) than amongst any other ethnic groups (0.49 for Whites and 0.66 for England and Wales as a whole). On average, Indians have more co-ethnic medical experts among their social networks than do any other ethnic group, giving them more chances to exchange health-related information and making them more knowledgeable of health issues. What passes unnoticed for other ethnic groups might, for Indians, be viewed as something of a health concern. While these might offer channels for future exploration, our analysis does not indicate that Indians are at any health disadvantage.
ACKNOWLEDGEMENTS

I am grateful to the Economic and Social Research Council (ESRC) for funding the project ‘Social capital: developing a measure and assessing its value in social research’ (R000223671). I would like to thank Professors Mike Savage and Andrew Pickles who worked with me on this project, and many other researchers such as Professors Robert Putnam, Anthony Heath and Alan Warde with whom I have had a lot of helpful discussions. I wish to thank the Data Archive for making available the British Household Panel Survey (BHPS) data. The BHPS was originally collected by the Research Centre on Micro-social Change at the University of Essex (now incorporated within the Institute for Social and Economic Research). Neither the original collectors of the data nor the Data Archive bear any responsibility for the analyses or interpretations presented here. I am alone responsible for any errors and mistakes in the chapter.

Yaojun Li is a Reader in Sociological Analysis at Birmingham University, UK. His research interests are in social mobility and social stratification, social capital, political preferences, occupational and educational attainment, and religious identity. He has published widely in these areas. His papers have appeared in many leading Sociology journals such as European Sociological Review, British Journal of Sociology, Sociology, Work, Employment and Society, Sociological Review, Explorations in Sociology, Sociological Research, Sociological Research Online and Ageing and Society. He has also conducted numerous projects for the ESRC and other government bodies such as the DTI and the National Assembly of Wales.
References


Figure 1  Socio-demographic factors, social capital and wellbeing indicators

Note:
1. Data on socio-demographic factors are drawn from Wave 7 (1997), those on social capital from Waves 7 and 8, and those on wellbeing from Wave 9 of the BHPS.
2. Solid lines denote direct effects and dotted lines denote mediator effects. Thus we assume that health status is both determined by socio-demographic and social capital factors, and has an impact on happiness and life satisfaction.
Table 6.1  Correlation between social capital dimensions, subjective wellbeing and overall satisfaction with life

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighbourhood attachment</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social network</td>
<td>0.147***</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civic participation</td>
<td>0.115***</td>
<td>0.082***</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Happiness</td>
<td>0.078***</td>
<td>0.134***</td>
<td>0.018'</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Satisfaction with life</td>
<td>0.182***</td>
<td>0.164***</td>
<td>0.051***</td>
<td>0.553***</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Note
1  'p<0.10, *p<0.05, **p<0.01 and ***p<0.001 (the same below).

Source: The British Household Panel Survey
<table>
<thead>
<tr>
<th>Attribute</th>
<th>Happiness Mean (SD)</th>
<th>Satisfaction Mean (SD)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>25.761*** (4.951)</td>
<td>5.268 (1.228)</td>
<td>3,468</td>
</tr>
<tr>
<td>Female</td>
<td>24.341 (5.514)</td>
<td>5.230 (1.327)</td>
<td>4,009</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>24.939** (5.215)</td>
<td>5.334*** (1.247)</td>
<td>4,454</td>
</tr>
<tr>
<td>Single</td>
<td>25.608*** (5.211)</td>
<td>5.132 (1.213)</td>
<td>1,769</td>
</tr>
<tr>
<td>Divorced/separated/widowed</td>
<td>24.356 (5.679)</td>
<td>5.099 (1.465)</td>
<td>1,252</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>24.994 (5.278)</td>
<td>5.526 (1.275)</td>
<td>7,167</td>
</tr>
<tr>
<td>Black</td>
<td>25.044 (6.460)</td>
<td>4.847* (1.412)</td>
<td>68</td>
</tr>
<tr>
<td>Indian</td>
<td>24.135 (5.773)</td>
<td>4.952 (1.549)</td>
<td>89</td>
</tr>
<tr>
<td>Pakistani/Bangladeshi</td>
<td>25.234 (6.227)</td>
<td>5.077 (1.239)</td>
<td>33</td>
</tr>
<tr>
<td>Chinese/Other</td>
<td>24.835 (6.327)</td>
<td>4.811† (1.575)</td>
<td>60</td>
</tr>
<tr>
<td><strong>Employment status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>25.322* (5.078)</td>
<td>5.253*** (1.133)</td>
<td>4,281</td>
</tr>
<tr>
<td>Non-employed</td>
<td>24.582 (5.467)</td>
<td>5.287*** (1.441)</td>
<td>2,963</td>
</tr>
<tr>
<td>Unemployed</td>
<td>24.244 (6.846)</td>
<td>4.643 (1.590)</td>
<td>226</td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service class</td>
<td>25.221 (5.257)</td>
<td>5.285 (1.143)</td>
<td>2,248</td>
</tr>
<tr>
<td>Intermediate</td>
<td>24.880 (5.274)</td>
<td>5.247 (1.313)</td>
<td>2,792</td>
</tr>
<tr>
<td>Working class</td>
<td>24.964 (5.357)</td>
<td>5.217 (1.362)</td>
<td>2,154</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tertiary</td>
<td>25.262*** (5.259)</td>
<td>5.237 (1.164)</td>
<td>2,384</td>
</tr>
<tr>
<td>Secondary</td>
<td>25.292*** (5.086)</td>
<td>5.213† (1.192)</td>
<td>2,281</td>
</tr>
<tr>
<td>Primary/none</td>
<td>24.504 (5.491)</td>
<td>5.290 (1.440)</td>
<td>2,691</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top quartile</td>
<td>25.342*** (5.181)</td>
<td>5.367*** (1.072)</td>
<td>1,913</td>
</tr>
<tr>
<td>2nd</td>
<td>25.505*** (4.952)</td>
<td>5.302*** (1.199)</td>
<td>2,065</td>
</tr>
<tr>
<td>3rd</td>
<td>24.884*** (5.429)</td>
<td>5.221*** (1.342)</td>
<td>1,845</td>
</tr>
<tr>
<td>Bottom</td>
<td>24.105 (5.613)</td>
<td>5.067 (1.507)</td>
<td>1,632</td>
</tr>
<tr>
<td><strong>Social deprivation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affluent areas</td>
<td>25.217** (5.033)</td>
<td>5.311*** (1.193)</td>
<td>2,412</td>
</tr>
<tr>
<td>Middle</td>
<td>24.981 (5.328)</td>
<td>5.263** (1.280)</td>
<td>3,151</td>
</tr>
<tr>
<td>Deprived areas (base)</td>
<td>24.728 (5.625)</td>
<td>5.140 (1.388)</td>
<td>1,874</td>
</tr>
<tr>
<td><strong>Health</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent/Very Good</td>
<td>26.478*** (4.240)</td>
<td>5.581*** (1.043)</td>
<td>3,388</td>
</tr>
<tr>
<td>Good</td>
<td>25.148*** (4.768)</td>
<td>5.245*** (1.198)</td>
<td>2,510</td>
</tr>
<tr>
<td>Fair/Poor</td>
<td>21.519 (6.511)</td>
<td>4.520 (1.558)</td>
<td>1,578</td>
</tr>
<tr>
<td><strong>All</strong></td>
<td>25.000 (5.307)</td>
<td>5.247 (1.282)</td>
<td>7,536</td>
</tr>
</tbody>
</table>

*Note*

1 Statistic significance refers to the test of the bivariate relationships, with female, once married, white, unemployed, working-class, least educated, bottom quartile income, in deprived areas and fair/poor health as reference groups respectively.
<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighbourhood attachment</td>
<td>-0.023†</td>
<td>0.033**</td>
<td>0.048***</td>
</tr>
<tr>
<td>Social network</td>
<td>0.101***</td>
<td>0.071***</td>
<td>0.062***</td>
</tr>
<tr>
<td>Civic participation</td>
<td>0.139***</td>
<td>0.206***</td>
<td>0.094***</td>
</tr>
<tr>
<td>Age/10</td>
<td>-0.239**</td>
<td>-0.477***</td>
<td></td>
</tr>
<tr>
<td>Age squared/100</td>
<td>-0.002</td>
<td>0.035***</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0.188***</td>
<td></td>
<td>0.096†</td>
</tr>
<tr>
<td>Female (base)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>0.193**</td>
<td></td>
<td>0.099</td>
</tr>
<tr>
<td>Single</td>
<td>0.019</td>
<td>0.014</td>
<td></td>
</tr>
<tr>
<td>Divorced/separated/widowed (base)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White (base)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indian</td>
<td>-0.603***</td>
<td>-0.581***</td>
<td></td>
</tr>
<tr>
<td>Pakistani/Bangladeshi</td>
<td>-0.993**</td>
<td>-0.325</td>
<td></td>
</tr>
<tr>
<td>Chinese/Other</td>
<td>-0.030</td>
<td>0.029</td>
<td></td>
</tr>
<tr>
<td>Employment status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td></td>
<td>0.312†</td>
<td></td>
</tr>
<tr>
<td>Non-employed</td>
<td></td>
<td></td>
<td>-0.135</td>
</tr>
<tr>
<td>Unemployed (base)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service class</td>
<td></td>
<td>0.311***</td>
<td></td>
</tr>
<tr>
<td>Intermediate</td>
<td></td>
<td>0.298***</td>
<td></td>
</tr>
<tr>
<td>Working class (base)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tertiary</td>
<td></td>
<td>0.347***</td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td></td>
<td>0.377***</td>
<td></td>
</tr>
<tr>
<td>Primary/none (base)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top quartile</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bottom (base)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social deprivation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affluent areas</td>
<td></td>
<td></td>
<td>0.188**</td>
</tr>
<tr>
<td>Middle</td>
<td></td>
<td></td>
<td>0.065</td>
</tr>
<tr>
<td>Deprived areas (base)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept 1</td>
<td>-1.341</td>
<td>-2.333</td>
<td>-1.712</td>
</tr>
<tr>
<td>Intercept 2</td>
<td>0.192</td>
<td>0.729</td>
<td>-0.024</td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>0.012</td>
<td>0.038</td>
<td>0.059</td>
</tr>
<tr>
<td>N</td>
<td>7,187</td>
<td>7,128</td>
<td>6,799</td>
</tr>
</tbody>
</table>

*Note:*
1. Owing to the amount of data presented, standard errors and the 95% confidence intervals are not shown but are available on request (the same below).
Table 6.4  OLS regression coefficients on reported subjective wellbeing by social capital dimensions and socio-demographic attributes

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighbourhood attachment</td>
<td>0.154***</td>
<td>0.233***</td>
<td>0.235***</td>
<td>0.202***</td>
</tr>
<tr>
<td>Social network</td>
<td>0.259***</td>
<td>0.276***</td>
<td>0.262***</td>
<td>0.210***</td>
</tr>
<tr>
<td>Civic participation</td>
<td>0.020</td>
<td>0.056</td>
<td>0.006</td>
<td>-0.073</td>
</tr>
<tr>
<td>Age/10</td>
<td>-0.564'</td>
<td>-0.845**</td>
<td>-0.448'</td>
<td></td>
</tr>
<tr>
<td>Age squared/100</td>
<td>0.052'</td>
<td>0.096***</td>
<td>0.066**</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1.673***</td>
<td>1.522***</td>
<td>1.438***</td>
<td></td>
</tr>
<tr>
<td>Female (base)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>0.254</td>
<td>0.140</td>
<td>0.065</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>0.689**</td>
<td>0.645'</td>
<td>0.622'</td>
<td></td>
</tr>
<tr>
<td>Divorced/separated/widowed (base)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White (base)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>0.615</td>
<td>0.518</td>
<td>0.372</td>
<td></td>
</tr>
<tr>
<td>Indian</td>
<td>-0.732</td>
<td>-0.454</td>
<td>-0.089</td>
<td></td>
</tr>
<tr>
<td>Pakistani/Bangladesi</td>
<td>-0.100</td>
<td>0.284</td>
<td>0.293</td>
<td></td>
</tr>
<tr>
<td>Chinese/Other</td>
<td>-0.227</td>
<td>0.245</td>
<td>0.258</td>
<td></td>
</tr>
<tr>
<td>Employment status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>0.634</td>
<td>0.454</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-employed</td>
<td>0.094</td>
<td>0.361</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed (base)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service class</td>
<td>-0.236</td>
<td>-0.506”</td>
<td>-0.391’</td>
<td></td>
</tr>
<tr>
<td>Intermediate</td>
<td>-0.127</td>
<td>-0.391’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working class (base)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tertiary</td>
<td>0.199</td>
<td>-0.121</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>0.245</td>
<td>-0.099</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary/none (base)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top quartile</td>
<td>0.942***</td>
<td>0.474’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd</td>
<td>1.083***</td>
<td>0.666***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd</td>
<td>0.789***</td>
<td>0.522’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bottom (base)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social deprivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affluent areas</td>
<td>0.088</td>
<td>-0.135</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle</td>
<td>0.033</td>
<td>-0.070</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deprived areas (base)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent/very good</td>
<td></td>
<td></td>
<td></td>
<td>4.714***</td>
</tr>
<tr>
<td>Good</td>
<td></td>
<td></td>
<td></td>
<td>3.502***</td>
</tr>
<tr>
<td>Fair/poor (base)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>24.998***</td>
<td>25.208***</td>
<td>24.369***</td>
<td>20.846***</td>
</tr>
<tr>
<td>R²</td>
<td>0.021</td>
<td>0.052</td>
<td>0.060</td>
<td>0.159</td>
</tr>
<tr>
<td>N</td>
<td>7,062</td>
<td>7,005</td>
<td>6,685</td>
<td>6,684</td>
</tr>
</tbody>
</table>
Table 6.5  OLS regression coefficients on reported overall satisfaction with life by social capital dimensions and socio-demographic attributes

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighbourhood attachment</td>
<td>0.097***</td>
<td>0.085***</td>
<td>0.088***</td>
<td>0.080***</td>
</tr>
<tr>
<td>Social network</td>
<td>0.071***</td>
<td>0.082***</td>
<td>0.077***</td>
<td>0.066***</td>
</tr>
<tr>
<td>Civic participation</td>
<td>0.023</td>
<td>0.004</td>
<td>-0.008</td>
<td>-0.026†</td>
</tr>
<tr>
<td>Age/10</td>
<td>-0.269***</td>
<td>-0.366***</td>
<td>-0.271***</td>
<td></td>
</tr>
<tr>
<td>Age squared/100</td>
<td>0.034***</td>
<td>0.046***</td>
<td>0.039***</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0.116***</td>
<td>0.091**</td>
<td>0.072*</td>
<td></td>
</tr>
<tr>
<td>Female (base)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>0.365***</td>
<td>0.331***</td>
<td>0.311***</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>0.216***</td>
<td>0.207**</td>
<td>0.197**</td>
<td></td>
</tr>
<tr>
<td>Divorced/separated/widowed (base)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White (base)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>-0.188</td>
<td>-0.134</td>
<td>-0.172</td>
<td></td>
</tr>
<tr>
<td>Indian</td>
<td>-0.252</td>
<td>-0.218</td>
<td>-0.130</td>
<td></td>
</tr>
<tr>
<td>Pakistani/Bangladeshi</td>
<td>-0.062</td>
<td>0.073</td>
<td>0.081</td>
<td></td>
</tr>
<tr>
<td>Chinese/Other</td>
<td>-0.286</td>
<td>-0.153</td>
<td>-0.170</td>
<td></td>
</tr>
<tr>
<td>Employment status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>0.394***</td>
<td>0.337**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-employed</td>
<td>0.272†</td>
<td>0.320**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed (base)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service class</td>
<td>-0.034</td>
<td>-0.097*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate</td>
<td>-0.024</td>
<td>-0.085*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working class (base)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tertiary</td>
<td>-0.103‘</td>
<td>-0.180***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td>-0.082’</td>
<td>-0.165***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary/none (base)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top quartile</td>
<td>0.362***</td>
<td>0.258***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd</td>
<td>0.255***</td>
<td>0.163**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd</td>
<td>0.159‘</td>
<td>0.100‘</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bottom (base)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social deprivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affluent areas</td>
<td>0.016</td>
<td>-0.035</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle</td>
<td>0.030</td>
<td>0.005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deprived areas (base)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent/very good</td>
<td></td>
<td></td>
<td>1.089***</td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td></td>
<td></td>
<td>0.777***</td>
<td></td>
</tr>
<tr>
<td>Fair/poor (base)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.223***</td>
<td>5.312***</td>
<td>5.020***</td>
<td>4.229***</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.053</td>
<td>0.076</td>
<td>0.091</td>
<td>0.192</td>
</tr>
<tr>
<td>N</td>
<td>7,094</td>
<td>7,038</td>
<td>6,715</td>
<td>6,714</td>
</tr>
</tbody>
</table>
Appendix: Questions on social capital and wellbeing

Neighbourhood attachment

*I'm going to read out some statements about neighbourhoods. Please look at this card and tell me how strongly you agree or disagree with each statement. (Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree)*

1. I feel like I belong to this neighbourhood.
2. The friendships and associations I have with other people in my neighbourhood mean a lot to me.
3. If I needed advice about something I could go to someone in my neighbourhood.
4. I borrow things and exchange favours with my neighbours.
5. I would be willing to work together with others on something to improve my neighbourhood.
6. I plan to remain a resident of this neighbourhood for a number of years.
7. I like to think of myself as similar to the people who live in this neighbourhood.
8. I regularly stop and talk with people in my neighbourhood.

Social networks

*If you had any of the following problems, is there anyone you could rely on to help you from outside your own household? (Yes, No, Not sure)*

1. If you were feeling depressed
2. If you needed help finding a job for yourself or a member of your family
3. If you needed to borrow money to pay an urgent bill like electricity, gas, rent or mortgage

*Here are a few questions about people in your life who can provide you with help or support. (Tick on only) (Yes, one person; Yes, more than one person; No-one)*

1. Is there anyone you can really count on to listen to you when you need to talk?
2. Is there anyone who you can really count on to help you out in a crisis?
3. Is there anyone who you can totally be yourself with?
4. Is there anyone who you feel really appreciates you as a person?
5. Is there anyone who you can really count on to comfort you when you are very upset?

Civic participation

*Are you currently a member of any of the kinds of organisations? (Yes; No)*:

(1) Political party; (2) Trade unions; (3) Environmental group; (4) Parents/School Association; (5) Tenants’/Residents’ Group or Neighbourhood Watch; (6) Religious group or church organization; (7) Voluntary service group; (8) Other community or civic group; (9) Social Club/Working men’s club; (10) Sports Club; Women’s institute/Townswomen’s Guild; (11) Women’s group/Feminist Organization; (12) Other group or organization; (13) Professional organization; (14) Pensioners group/organization; (15) Scouts/Guides organization.
Health
In general, would you say that your health is
(1 = Excellent; 2 = Very good; 3 = Good; 4 = Fair; 5 = Poor)

Subjective wellbeing
Have you recently
1: been able to concentrate on whatever you are doing?
   (better than usual; same as usual; less than usual; much less than usual)
2: lost much sleep over worry?
   (not at all; no more than usual; rather more than usual; much more than usual)
3: felt that you are playing a useful part in things?
   (more so than usual; same as usual; less so than usual; much less than usual)
4: felt capable of making decisions about things?
   (more so than usual; same as usual; less so than usual; much less than usual)
5: felt constantly under strain?
   (not at all; no more than usual; rather more than usual; much more than usual)
6: felt you could not overcome your difficulties?
   (not at all; no more than usual; rather more than usual; much more than usual)
7: been able to enjoy your normal day-to-day activities?
   (more so than usual; same as usual; less so than usual; much less than usual)
8: been able to face up to your problems?
   (more so than usual; same as usual; less so than usual; much less than usual)
9: been feeling unhappy and depressed?
   (not at all; no more than usual; rather more than usual; much more than usual)
10: been losing confidence in yourself?
    (not at all; no more than usual; rather more than usual; much more than usual)
11: been thinking of yourself as a worthless person?
    (not at all; no more than usual; rather more than usual; much more than usual)
12: been feeling reasonably happy all things considered?
    (more so than usual; same as usual; less so than usual; much less than usual)

Overall satisfaction with life
How dissatisfied or satisfied are you with your life overall?
(1 = not satisfied at all … 7 = completely satisfied)