



Mapping Social Capital: A Model for Investment

**Development of a Methodology to Map Social Capital and inform
Community Investment**

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Introduction: Weak or Strong Communities?

Government departments in Britain and Northern Ireland have signaled their intention to employ indicators based on the concept of social capital to assess the health and well being of communities and to evaluate community-based activity. Positive Steps¹, the Northern Ireland Department of Social Development's statement on the future funding of the voluntary and community sector proposed a social capital indicator framework to measure the added value of voluntary and community activity; this was also noted in the 'Northern Ireland Practical Guide to the Green Book'². The Neighbourhood Renewal Unit (NRU) based at the Office of the Deputy Prime minister has also recently published its Indicators of Strong Communities³. This focused on identifying a minimum number of indicators that would measure the overall strength of a community. Five headline outcomes with core indicators have been produced. In fact the NRU core indicators are very similar to the indicators tested by Community Evaluation Northern Ireland (CENI) and the Community Foundation for Northern Ireland (CFNI) as part of this project using the Nominal Group Technique to measure community infrastructure. The NRU first three core indicators of governance, cohesion and volunteering could be said to correspond to the linking, bridging and bonding dimensions of social capital respectively.

This project was designed to explore whether social capital was a useful construct in this respect. The project sought to develop a model that would differentiate between strong and weak communities. However, rather than using local surveys, recommended in both Positive Steps and the NRU indicators, the intention was to see if available secondary data sets and the Nominal Group Technique methodology could provide useful evidence.

The project started with the working assumption of employing a social capital framework alongside other key indicators of community capacity and capability to identify communities with weak or damaged internal relationships, that were also relatively insulated from formal programmes of support and have difficulties in building bridges with other communities. It should be noted that the concept of social capital has its critics. Fine⁴, for example, dismisses it as largely without meaning. Leonard⁵ in a Belfast case study found the bonding and bridging dimensions tended to contradict rather than complement each other. Humphries⁶ suggests that community organisations may be more consumers, rather than producers, of social capital. In the project, the concept of social capital was taken as a working assumption rather than a robust construct in order to explore the relationship between these contested concepts. Alongside social capital, community capacity and capability were assessed by looking at the density of community organisations, their effectiveness in securing support for programmes and projects and their engagement with their own communities.

The approach taken proposed generating data (in suitable format) on four kinds of variables:

- **Community quality of life** – a wide range of data is collected on many aspects of community life. However, not all the data is organised according to the same scale units.

¹ Positive Steps, The Governments response to Investing Together: Report of the Task Force on Resourcing the Community and Voluntary Sector, DSD, March 2005.

² Northern Ireland Practical Guide to the Green Book, Economic Appraisal Guide, Dept Finance and Personnel, 2003.

³ Safer Stronger Communities Fund -Indicators of Strong Communities, Neighbourhood Renewal Unit, Office of Deputy Prime minister, 2005

⁴ Fine B. and Green, F. (2000), 'Economics, Social Capital and the Colonization of the Social Sciences' in Baron, S. Field, J. and Schuller, T. (eds) *Social Capital*, Oxford, Oxford University Press

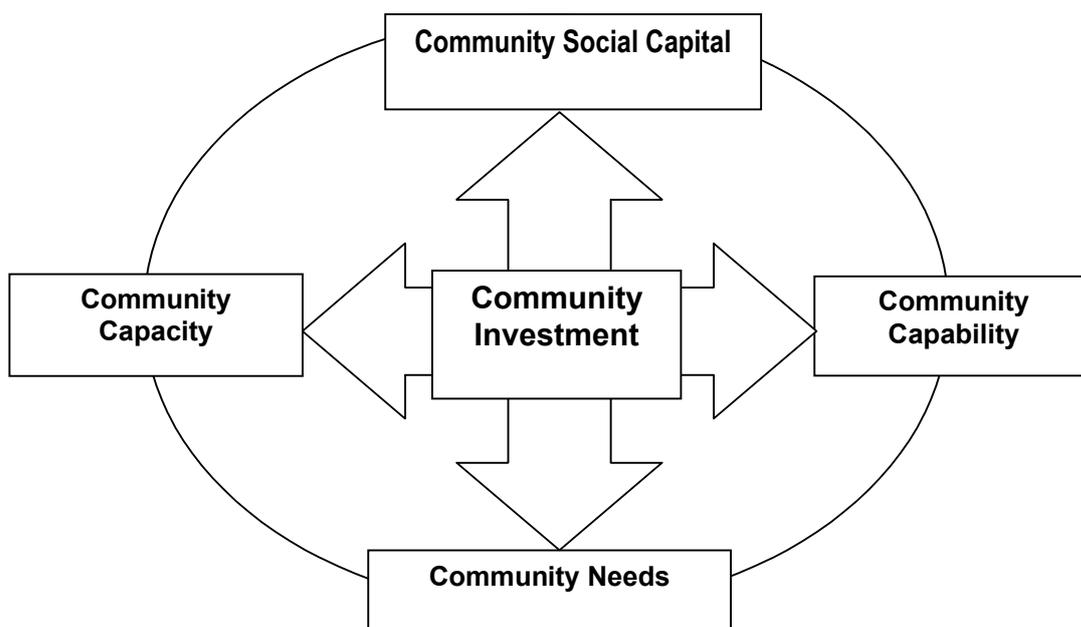
⁵ Bridging and Bonding Social Capital: Reflections from Belfast. Leonard Madeline, Sociology, 2004

⁶ Humphreys, E. (April, 2005), 'Social Capital: Mediating Conditions to Create "Successful Neighbourhoods"? First European Conference of ISTR and EMES, Paris.

Efforts were made to identify and extract relevant data sets on a range of variables from a variety of sources including the Northern Ireland Neighbourhood Information Service, and other Departmental data.

- **Community capacity** – the number and type of community and/or voluntary organisations located within an area. Ideally, the area should specify the locus of their operations rather than just a postal address. It should be noted that such organisations are not exclusive to civil society and that many others may also help produce social capital – e.g. Churches, Orange Halls, sports clubs, etc. The project made use of databases generated by NICVA and the Department of Social Development to examine the spatial distribution of community-based organisations
- **Community capability** – one of the key measures of ‘success’ for communities and a potential component of ‘strong’ community infrastructure is the ability to attract resources to respond to development opportunities. Analysis was undertaken in relation to the level of applications to relevant funding programmes, depending on the availability of the data.
- **Social capital** – there are existing methodologies for measuring levels of social capital, but most rely on interviews or questionnaires, but these are expensive to administer across a very large number of small areas. The team utilised a method known as the Nominal Group Technique (from the Treasury ‘Magenta’ Book⁷) to obtain a score for social capital.

A Possible Model



Data collection

A variety of databases were explored to find evidence for quality of life and community capacity and capability. While these were less than perfect, there is a substantial amount of secondary data available. The social capital indicator was more difficult. While indicators of social capital at regional level can be derived from existing data sets, there is nothing at small area level and,

⁷ The Magenta Book: Guidance notes for Policy Evaluation and Analysis, HM Treasury, July 2003.

while local area surveys are possible means of measuring local social capital; these are expensive, take a substantial amount of time and consequently are not particularly useful to assist decision making.

The team utilised the Nominal Group Technique (NGT) (Davies, 2000⁸, Patton, 2002⁹, Popay and Williams, 1998¹⁰) to tap into local stakeholder knowledge about their communities based on their extensive experience. NGT is a qualitative method that can be used to illustrate more detailed interactions, factor and circumstances to supplement quantitative measurements of gross or net impact. It thus allows for understanding of policy impact and social phenomena from the perspective of individuals and groups who experience it in specific social contexts. In this instance, NGT involved working with sets of local stakeholders. These were briefed on scaling and, based on their local knowledge, were asked to allocate a score for the communities located in a particular Super Output Area and to assign a score for each form of social capital. Stakeholders were asked to score on the following criteria:

- Bonding – How did local communities trust and relate to others like themselves (intra-community relations).
- Bridging – Trust and relationships between individuals and groups who are in other communities (cross-community relations).
- Linking – The quality of relations between communities and decision makers (local government, service providers, funders, etc).

The scores ranged from 1 (low) to 5 (very high). Stakeholders were asked to score each form of social capital and then to give a score for their sense of the overall level of social capital in the area – ‘to what extent is this an area in which you would like to live?’

The project worked at the level of ‘Super Output Area’ designed for the new Northern Ireland Multiple Deprivation Measure. This had the advantage of being smaller than ward level, although as administrative entities Super Output Areas are not descriptions of actual communities. The primary advantage is that deprivation scores will be presented at this level in the new Noble index. Moreover, the Northern Ireland Statistics and Research Agency (NISRA) agreed to transform the spatial co-ordinates of other datasets to Super Output Area level in order to produce a uniform spatial format. Maps of the Super Output Areas for each of the district council areas involved in the exercise were produced and made available for the Nominal Group sessions. Individuals were asked to score all the Super Output Areas and then discuss the scores to see if a consensus amongst the group could emerge.

Finally, stakeholders were also asked to assign scores (also between 1 and 5) to community capability (Number and density of community organisations in an area) and to their overall level of capability (How able are they at drawing in resources, carrying out programmes, being representative and cooperating?). It was realised that these scores would be weak, but their purpose was to compare these with other kinds of data.

Qualitative data relating to social capital was also collected via discussions with those stakeholders involved in the scoring process throughout the research process and this has been used to add further explanatory value and detail to the findings.

⁸ Davies, P.T. (2000) “Contributions From Qualitative Research” in Davies, H.T.O., Nutley, S.M. and Smith, P.C. (eds) *What Works: Evidence Based Policy and Evidence Based Practice in Public Services*, Bristol: The Policy Press

⁹ Patton, M.Q. (2002) *Qualitative Research and Evaluation Methods*, 3rd Ed. Thousand Oaks: Sage

¹⁰ Popay, J. and Williams, G. (1998) “Qualitative Research and Evidence Based Healthcare” *Journal of the Royal Society of Medicine*, Vol. 191. No. 35, pp 32-37

Quality of life indicators were derived from the 2001 Census data at Super Output Area level and from the 2005 Measure of Multiple Deprivation. Data on the number of community-based organisations and their funding incomes were taken from the NI Council for Voluntary Action State of the Sector survey and the Voluntary and Community Sector database at the Department of Social Development.

A final data set was constructed that consisted of:

- Fifty four Census variables (based on the percentage of the relevant population of the Super Output Area) that related to demographic and socio-economic characteristics (including 'community background' - attributed religion);
- Six variables from the Northern Ireland Measure of Multiple Deprivation;
- Four social capital variables (bonding, bridging, linking and overall social capital);
- Two variables (generated by Nominal Group Technique) on community capacity and capability;
- A variable on the number of community-based organisations per 1,000 population, constructed from the Department of Social Development database.¹¹

Utilising these data, statistical techniques were used to identify those variables that best predicted the level of social capital and weak community infrastructure as indicated by a low density of community-based organisations.

Findings

Analysis of the dataset suggested that:

- The associations amongst the four social capital variables did not indicate an internally coherent concept. For example, there was an inverse correlation between bonding and bridging social capital. Bridging and linking social capital correlated more closely with the overall social capital score than bonding;
- Variables relating to the highest level of qualification in the Super Output Area significantly correlated with both the bonding and bridging variables, but in different ways. Areas with high percentages of no qualifications correlated with bonding whereas areas with high percentages of level four and level five qualification correlated significantly with bridging;
- The bonding variable correlated positively with high unemployment rates, the bridging variable with low unemployment rates;
- Similarly, the bonding variable correlated positively with high multiple deprivation scores and the bridging with low multiple deprivation scores.

Such findings point to the possibility of a social class gradient in the social capital domains, in particular between bonding and bridging. There was also an indication that levels of bonding social capital are not necessarily associated with bridging. Curiously, the linking domain was more 'neutral' to social class differences.

Of some interest in Northern Ireland is the relationship between levels of social capital and community background. Analysis of this data set pointed to small, but significant differences in

¹¹ The database contained postcodes for just over 5,000 organisations. These were translated by NISRA in Super Output locations. 4884 postcodes were successfully translated

the relationships between Protestant and Catholic community backgrounds respectively and levels of social capital – indeed, there was an inverse relationship between Protestant community background and all four social capital scores. Since this finding tended to contradict previous research (see, for example, Cairns et al 2003), the relationship between the community background and social capital variables was explored further – i.e. were the differences observed on community background a reflection of other variables? To test this, differences by community background were explored for occupation, unemployment and highest level of qualification – significant differences were found between areas characterised as high Protestant or Catholic community background and unemployment, though not occupation nor highest level of qualification. A new variable (residential segregation) was constructed with five values:

- 40 – 60 per cent of the population of either Protestant or Catholic community background;
- 75- 90 per cent Catholic community background;
- Greater than 90 per cent Catholic community background;
- 75-90 per cent Protestant community background;
- Greater than 90 per cent Protestant community background.

Higher scores for the bonding social capital variable were associated with higher levels of residential segregation. The converse was true for bridging social capital. It is thus possible that the degree of concentration is as important as the actual community background of the area.

One of the central concerns of the team was that using Nominal Group Technique would generate a set of scores that were more reflective of the mindset of the stakeholder participants than of the communities they were attempting to score. To explore this, some checks were undertaken using part of the Continuous Household Survey 2003/04 dataset that included a number of questions related to social capital. From the set of questions, it was difficult to identify one that was fully representative of bridging social capital. However, two questions were chosen as reflecting bonding (How much would you agree that is areas is a close, tight-knit community) and linking (Do you agree that by working together, people can influence decisions affecting the area).

In the CHS the close, tight-knit community variable showed significant differences by: highest educational qualification; occupation; car ownership; and religion. While the influence variable showed significant differences by: highest educational qualification; occupation; and car ownership. Significant differences on both variables appeared by religion.

Conclusions

The project set out to explore a model of community infrastructure using a four variable model, mindful that the term community infrastructure and the concept of social capital are both contested. The central challenge was to see if the model could be populated from existing data sets and whether an indicator of social capital could be derived without the expense of multiple local surveys. While the effort to find appropriate secondary data was less than completely successful, substantial relevant amounts of data were obtained. Also, the use of the Nominal Group Technique did offer a relatively low cost method of developing social capital indicators for small spatial areas and checks using CHS data suggested that the results were not completely arbitrary.

The relationships between the variables did raise some questions about the coherence of the community infrastructure construct. In particular, the bonding and bridging variables correlated inversely with each other and differently with important social variables, raising questions about whether the social capital domains do, collectively, form a single concept.