Validity of a Social Capital Measurement Tool in Vietnam

Tran Tuan and Trudy Harpham*
Department of Urban Development and Policy
London South Bank University

together with

NGUYEN THU HUONG, MARY DE SILVA, VAN THI THUY HUONG, TRAN THAP LONG, NGUYEN THI VAN HA AND DARIN DEWITT

Although there are now several instruments available to measure social capital in a quantitative manner, very few of them have been validated-and no published study has examined respondents' interpretation of the meaning of the questions. This article represents one of the first attempts to measure the validity of a quantitative social capital instrument. Young Lives is a study that includes quantitative measures of caregivers' social capital using the Short Adapted Social Capital Assessment Tool (Short A-SCAT). Vietnamese respondents' interpretations of questions on social capital were compared to the original intended meaning of the questions and to fieldworkers' interpretations. Semi-structured interviews were conducted with two interpreters who were involved in translating the original questionnaire from English to Vietnamese, two supervisors and six interviewers. In-depth interviews were conducted with 24 female caregivers similar to the original respondents. her concepts, in social capital, like trust and sense of belonging, were interpreted similarly by all actors. Support was perceived narrowly by caregivers (limited to money and goods). Most problems arose from changes originating from translation from English to Vietnamese and by the changing nature of local political structures and how one refers to them. Overall validity appeared fairly high with a "correct interpretation" rate of 77 percent. There is now a valid tool for quickly and cheaply assessing social capital in a quantitative manner in Vietnam.

Introduction

Although there is now a plethora of tools to measure social capital, hardly any of them has been validated. This is the problem that the current research addresses. This section briefly considers: why social capital has become an important topic; the definition of social capital; how it is measured in the current study in Vietnam; and the gap in the literature on validity of social capital. The objectives of the study are then presented.

There has been increasing interest in social capital in recent years as a possible explanation for the differences in health that are found between places and groups of people (Kawachi, Kennedy, Lochner and Prothrow-

* Corresponding author

Stith, 1997). In addition, Coleman (1988) believes that social capital is a new production factor along with human and physical capital, and Svendsen and Svendsen (2003) go so far as to suggest that social capital is the "missing link" that explains why some countries are rich while others are poor. Here, social capital is defined as the degree of connectedness, and the quality and quantity of social relations in a given population (Harpham, Grant and Thomas, 2002). It has two dimensions — structural and cognitive. Structural social capital refers to people's connectedness or networks (what people do, behaviours, can be objectively measured) and is measured by activity in formal and informal groups in the community. Cognitive social capital is how people feel (subjectively) about trust, reciprocity and sense of belonging in their communities.

While various social capital tools have been forthcoming in recent years, very few have been subjected to validity testing. Although there is now a clear orthodoxy regarding measurement of social capital (Roberts and Roche, 2001), Van Deth's (2003:88) plea that "assessing the validity of each measure of social capital in different settings (both cross-cultural and longitudinal) should be a standard practice among empirical researchers in this area" has not been heeded.

While psychometric validation such as factor analyses have been used by a number of studies to assess the internal validity of social capital tools (see, for example, Hean et al., 2003; Narayan and Cassidy, 2001; and Robinson and Wilkinson, 1995), as Bowden et al. argue (Bowden et al., 2002), psychometrics do not contain any analysis from the respondents' viewpoint, a perspective which is vital in order to understand how respondents interpret and, therefore, answer the questions.

A systematic search encompassing all social capital tools found only three studies, all conducted in the United Kingdom, that used cognitive validation techniques (Boreham, 1999; Earthy et al., 2000; Blaxter and Poland, 2002). These studies highlight the importance of using qualitative methods of validation in addition to more standard quantitative approaches, with significant differences reported between what the researchers believed they were asking, and the way in which the respondents interpreted the question. There is particular concern about the cultural transferability of some of the concepts used to measure social capital, for example, trust and sense of belonging. Thus, it is particularly important to assess the validity of such instruments in a setting as culturally distinct as Vietnam.

A relatively short instrument to measure social capital in a quantitative manner has been formed from a longer instrument developed by a World Bank team (Krishna and Shrader, 2000). The instrument is intended for use in more general surveys where social capital is just one element of a broader study. The instrument has the advantage of separating out structural from cognitive social capital. The resulting Adapted Social Capital Assessment Tool (A-SCAT) (Harpham et al., 2002) was shortened into the

Short A-SCAT by the Young Lives (YL) research project, and was used to measure the social capital of caregivers of children of one and eight years of age in 2002 (www.younglives.org). The section on social capital is just one of 20 sections in a questionnaire that takes about an hour and a half to administer. One of the modifications was to change response categories to "yes/no/don't know", while the original had five-point Likert scale response categories. This was done in order to reduce response fatigue on the part of the respondent.

In Vietnam, the social capital questions were translated from English into Vietnamese by researchers from the Research and Training Center for Community Development (RTCCD) and were used in an interviewer-administered questionnaire with a sample of 2,000 caregivers of one-year-olds and 1,000 caregivers of eight-year-old children across 31 communes of five provinces. All the social capital questions were prefaced by the statement: "Now I would like to ask you some questions in relation to the community (commune) where your household is living". In other words, the geographical frame of reference for the definition of community was the official commune. It was the first time social capital was quantitatively measured in Vietnam. See Tuan et al. (2003) for a description of the results (that is, the levels and distribution of different components of social capital).

Consideration of the validity of A-SCAT has, so far, been limited to the traditional sub-categories of validity: "The face validity (intuitive appeal) of A-SCAT appears credible as it encompasses all components of social capital. The construct validity (convergent and discriminant; theoretically postulated links with other variables) has not yet been tested but is hypothesized to have high convergence with mental health. Content validity (representativeness of questions in instrument) is good in that all structural social capital questions concern connectedness, and all cognitive social capital questions concern feelings about others/neighbourhood. No one category is focused upon too heavily, no component is omitted and measurements of outcomes of social capital or explanatory factors are avoided. Concurrent validity (agreement with results from other instruments) is not currently possible to assess as no "gold standard" is available. Predictive validity (predictive of a future event) would be expensive to demonstrate as it would require a prospective (longitudinal) design, and is rarely measured for instruments like this though this will be possible in future rounds of the Young Lives project' (Harpham et al., 2002:110). This consideration of validity neglects any idea of checking respondents' interpretation of social capital questions. The objective of this paper is to present the first validity testing of a quantitative social capital measure to be done in a developing country context, from fieldworkers' and respondents' perspectives. The next section presents the methods used to validate the Short A-SCAT in Vietnam.

Methods

The aims were to:

- Identify any synonyms that respondents and fieldworkers (supervisors and interviewers) might have for key words in each social capital question.
- Identify particular questions or concepts which fieldworkers interpreted significantly differently to that intended by the A-SCAT authors.
- Collect fieldworkers' opinions on challenges they faced in interviewing which questions they had to repeat most, and how confident they were about respondents' answers.
- Identify whether respondents interpreted the questions as intended and, if not, how they interpreted the questions.
- Identify changes to Short A-SCAT to make it a more valid tool for use in Vietnam.

Thirty-four respondents were selected for the study:

- (1) Forty-eight female caregivers of one-year-old children were identified by commune leaders across three different locations: urban (Hanoi), rural (Hung Yen) and mountainous (Lao Cai). Caregiver's socio-economic status was assessed using a wealth index method. Twenty-four caregivers were selected using the proportion of caregivers from each wealth index group found in the YL 2002 wealth index distribution (Table 1; for more details on the wealth index distribution method and the 2002 survey, see Tuan et al., 2003). The 24 caregivers were interviewed about how they interpreted and answered the social capital questions. RTCCD staff conducted the semi-structured interviews, which lasted about two hours.
- (2) Two supervisors and six fieldworkers who carried out the original data collection. They were asked about their understanding of every item, and to identify any difficulties they faced during the 2002 survey.
- (3) Two translators involved in translating the original questious from English into Vietnamese. They were asked to explain the meaning of each question, to identify key words and propose synonyms for these, as well as to propose any changes they would like to make for the future use of the questionnaire.

Caregivers were interviewed in their homes with the questions presented in Box 1. Fieldworkers were interviewed at the RTCCD office and translators' views were obtained through email. All face-to-face interviews were tape-recorded. During the analysis, tapes were re-played but not transcribed.

Table 1.	Distribution of socio-economic status of the 24 caregivers
	for the validity study compared with the 2002 YL survey

Validity Study	Poorest WI<0.25	Very poor WI: 0.25-<0.5	Less poor WI: 0.5-<0.75	Better-off WI: >=0.75	Total
Rural	1	3	4	0	8
Urban	0	2	3	3.	8
Mountainous	4	3	. 1	0	8
TOTAL	5	8	8	3	2.4
0/0	21%	33%	33%	13%	100%
The 2002 survey $(N = 3000)$	21%	38%	32%	9%	100%

Box 1 — Caregiver in-depth interview

- · Please answer this question: (researcher reads one social capital question)
- Is this question difficult to answer?
- If no,
- o could you explain what the question means?
- which word in the question is the key word that made you give the answer you provided?
- · If yes, why?
- Could you explain what you thought of when you heard this question?
- · Which word made it difficult to give an answer?
- · When you heard that word, what did you think of?
- How should the question be in order to enable you to answer more easily/correctly?

(then move to next social capital question)

The analysis identified particular questions or concepts that were interpreted by the community members in a different way to that intended by the researchers who designed A-SCAT. The source of these errors was identified (that is, by a translation phase from English into Vietnamese or vice versa, selection and training supervisors and interviewers, or from interviews).

Results

Table 2 presents the original questions, intended meaning of the questions and what they were intended to measure/discover (that is, referential and connotative meaning). These meanings were obtained by one of the authors of this paper (De Silva) while interviewing the original author of A-SCAT (Harpham) in late 2003. Note that the original numbering of questions has been maintained so that readers can relate this section of the Young Lives questionnaire to the whole content of the questionnaire as presented on the website (www.younglives.org.uk).

Table 3 summarizes the results from the validation in Vietnam. The first column is the back translation of the Victnamese used in the main survey questionnaire. Note that there are some differences between the original English wording and the back translation from Vietnamese. For example, question 11.1 now refers to "organizations" instead of "groups" as in the original English version, and, the reference to "in your community" has been lost. These problems were independently picked up by the translators, and the recommendation for future wording in the final column reverts to "groups in your community". The second column of Table 3 gives the fieldworkers' and translators' (referred to below as "workers", n = 10) interpretation of the questions. For example, with question 11.1, only four workers (all fieldworkers) interpreted the question accurately. Six of the workers failed to distinguish the concept of actively participating from mere membership. Similarly, only 10 of the 24 caregivers interpreted the question absolutely correctly; two stated they did not understand the word "active" and 12 interpreted the question as relating to participation whether active or not. Non-active participation would, for example, include attending a meeting but not contributing (that is, playing a passive role).

Overall, across all questions, the 10 workers accurately interpreted 77 percent of the questions (69 responses out of 90) and had a different interpretation 22 percent of the time (20 out of 90 responses). On one occasion, the question was not understood at all. The level of correct interpretation was exactly the same for caregivers (166 responses out of 216–77 percent), and 19 percent of responses indicated a different interpretation of the question. On eight occasions (out of 216), the question was not understood. We consider the responses to each question in turn.

Table 2. Intended meaning of	f YL social	capital o	questions
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Question	Meaning intended by quetionnaire designer (Trudy Harpham)
Definition of community	Aleaning: Spatial definition of community based on administrative boundaries. Actual administrative boundaries to be decided by each country, but roughly equivalent to electoral wards in England. All social capital questions refer to relationships within the respondents' community and not to those outside
11.1 In the last 12 months have you been an active member of any of the following types of groups in your community?	their community. 11 hat question is measuring: Actual current connections among people in a community. Meaning of specific words/phrases: Active = Respondents have to actually connect with other people in the group they are a member of in order to have structural connections. Live, current connections as opposed to dormant ones where there is no social interaction.
11.1.2 In the last 12 months did you receive from the group any emotional help, economic help or assistance in helping you know or do things?	What question is measuring. The currency/quality of connections to groups. Quality measured by the support received from a group. Meaning: Respondents should think widely about types of support received, not just economic, hence the inclusion of different types of support in the question wording. How question should be administered: Question should only refer to support received from groups respondent is a member of.
11.2 In the last 12 months, have you received any help or support from any of the following (individuals)?	What question is measuring. The currency/quality of connections to individuals. Quality measured by the support received from individuals. Meaning: Respondents should define the groups of individuals (i.e. "family") however they want. Could be overlap among individuals listed here and the groups listed in 11.1 (i.e. politicians/political groups)

11.3 In the last 12 months, have you joined together with other community members to address a problem or common issue?

11.4 In the last 12 months have you talked with a local authority or governmental organisation about problems in this community?

11.6 In general, can the majority of people in this community be trusted?

11.7 Do the majority of people in this community generally get along with each other?

What question is measuring: The actual connections between people that are formed when people join together. Not hypothetical joint action.

Synonyms: Co-operation, citizenship, participation.

Meaning of specific words/phrases: Joined together = Definition deliberately left open for the respondent to decide what activities they consider "joining together". Intended to cover a broad range of things from just talking to other people in the community about a problem, to setting up a formal action group.

Problem or common issue = Left to respondent to decide which issues constitute a problem or common issue. The important thing is that people are making connections.

What question is measuring: Actual connections formed through citizenship activities.

Meaning of specific words/phrases: Talked = Exact meaning left to respondents, but intended to have a broad meaning ranging from a phone call, writing a letter or having meetings with. Any form of connection/communication. Does not include voting.

What question is measuring: Quality of social relationships, how people feel about the social relationships in their community (cognition). Also history of trust in community.

Meaning of specific words/phrases: Trust = Giving access to things that you care about to other people in the community because you know that respect, fellow feeling and reciprocity is such that they would not harm the things that you care about.

Synonyms: Fellow feeling, reciprocity, fairness, kindness, fidelity, friendliness, co-operation.

What question is measuring: Quality of social relations in terms of extent of social harmony. Lower-order concept than trust as trust is not a prerequisite for people to get along with each other.

Menning of specific words/plnases: Generally get along = Left to respondents own interpretation. No order of magnitude specified, and personal contact between people not required for people to get along with each other.

Synonyms: Fellow feeling, friendliness, reciprocity.

What question is measuring. Sense of belonging.

Meaning of specific words/phrases: Feeling part of community = Left to respondents own interpretation.

What question is measuring: Quality of social relationships in community in terms of whether they are exploitative or reciprocal.

11.8 Do you feel as if you are really part of this community?

11.9 Do you think the majority of people in this community would try to take advantage of you if they got the chance?

Table 3. Fieldworkers' and caregivers' interpretations of the Vietnamese social capital questions

	Question as back translated into English from Vietnamese	Fieldworkers' responses (n = 10)	Caregivers' responses (n = 24)	Recommended future wording
11.1	During the last 12 months, have you been an active member in the following organizations?	4v, 6* the concept of member as whether or not someone participates in an organization	10√, 2x active, 12* as merely participate	In the last 12 months, have you been a leader or an active member of any of the following types of groups in your community?
11.1.2	During the last 12 months, have you received any aid/support/ (spiritual or physical) from this organization?	V01	10√, 14* benefits as simply financial or material (money and rice)	In the last 12 months, did you receive from the group any emotional or cconomic help or assistance in

Table 3 (cont.)

	Question as back translated into English from Victnamese	Fieldworkers' responses (n = 10)	Caregivers' responses (n = 24)	Recommended future wording
				helping you know or do things?
11.2	During the last 12 months, have you received any support/help from any one of the following individuals, including foreigners?	V01	10√, 14* benefits as simply financial or material (money and rice)	In the last 12 months, did you receive from the group any emotional or economic help or assistance in helping you know or do
11.3	During the last 12 months, have you met with other households in the village/commune in order to raise general issues in the commune?	8√, 2* as participation rather than raising issues	24√	things? In the last 12 months, have you joined together with other community members to address a problem or common issue?
11.4	During the last 12 months, have you talked with commune leaders about the problems occurring in the commune?	10* the question to include whether or not the person has physical access to local government apparatus and whether someone is likely to call upon local	24√	In the last 12 months, have you talked with a local authority or governmental organization about problems in this community?
11.6	Do you think that a majority of the people in the commune is trustworthy?	government 71, 2* as social relationships of trust, safety, friendliness and faith-	21√ however caregivers don't relate to a 'majority' as they associate	In general, can the majority of people in this community be trusted?

Table 3 (cont.)

	Question as back translated into English from Vietnamese	Fieldworkers' responses (n = 10)	Caregivers' responses (n = 24)	Recommended future wording
. 11.7	Do you think that a majority of the people in the commune have good relationships with	fulness, 1x the term 'commune' 10√ although interviewers find this question hard to distinguish from 11.6	with nearest neighbours only, 3x 24 V	Do the majority of people in this community generally get along with
11.8	one another? Do you think that you are really part of the community?	10√ but also included the caregivers fondness/liking of the community	22√ but can be improved to 24 if the term 'community' is replaced by 'village/	cach other? Do you think that you are really part of the commune?
11.9	Do you think that a majority of the people in the commune would take advantage of you if given the opportunity?	10√	commune' 21√, 3x phrases 'take advantage of' and 'given the opportunity' not understood	Do you think that a majority of the people in the commune would taker- advantage of you if they got the <u>chance</u> ?

 $\sqrt{\ }$ = correctly interpreted, x = did not understand, * = interpreted differently Underline = wording change from original Vietnamese version

The questions on support from organizations and individuals (11.1.2 and 11.2) were meant to tap into all kinds of support (informational, emotional and instrumental). While fieldworkers understood this, over half the caregivers assumed the interviewer meant financial or material help only (money and rice). Emotional help was not perceived by caregivers to be a form of support. It also appears that the original question was too long, and respondents were not hearing all the different types of support listed in the question. This is a classic example of multiple questions within one question and although the study objectives did not need separate responses to each form of support, it may be better to split up this question in future.

The question on co-operation (11.3) was well understood by all caregivers but a couple of the fieldworkers conceived of the question as tapping into participation again. The use of the (Vietnamese equivalent) concept of "raising issues" was problematic, and "joining together to address a problem or issue" will be clearer for future application.

The translation into Vietnamese of the question on citizenship resulted in an excessive orientation to "commune leaders", and this led to all the fieldworkers interpreting this question as relating to a person's access to the very formal and traditional political structures in Vietnam. This might be explained by the fact that the fieldworkers were government employees — regular interviewers who worked on large-scale household surveys implemented by the Vietnamese General Statistics Office (GSO). Their previous experience was related to asking questions about government structures, so their narrow interpretation of this question is understandable. Note that all the caregivers interpreted the question as intended and did not limit its reference point to local government apparatus only. The future wording opens out the meaning again to relate to more than just commune leaders. With a rapidly changing, and loosening, of Vietnamese political structures at the local level, this distinction is important.

The classic question on trust is vital in any study of social capital. Here (question 11.6), problems were not related to the concept of trust as that was clear to all, but to concepts of "commune" and "majority". Most caregivers spontaneously commented that they did not know about most people in their commune as they only knew their neighbours. Thus, there were difficulties in abstracting to the commune as a whole.

Social harmony (question 11.7) was understood by all but workers found it hard to distinguish social harmony from trust. Thus, the suggested future wording refers to "getting along with each other" rather than to "having a good relationship".

The meaning of sense of belonging (question 11.8) wandered into concepts like fondness/liking of the community. Note that here there was also confusion about the reference geographical area with the future recommended wording being "commune" as opposed to "community". Commune is a resilient and highly meaningful geographical construct in Victnam although the power and role of political structures within the commune are changing.

Finally, we turn to the now classic question (11.9) that appears in nearly all quantitative social capital tools: "do you think that the majority of people in this community would try to take advantage of you if they got the chance" (as in the original English). This is a useful question in that it provides a check that respondents are not on "auto-pilot" as it requires a "no" response for high levels of social capital while all other questions require a "yes" response for high levels of social capital. All workers understood the question but three out of 24 caregivers did not understand

the phrases "take advantage of" and "given the opportunity" (which appeared in the Vietnamese translation). The future wording more strictly reverts to the original, and an example will be given to respondents (for example, "do you feel people around here would return any money they borrowed from you?").

Discussion and Conclusion

Concepts that many of the English and Vietnamese researchers thought might cause problems — like those on trust and sense of belonging — were understood by fieldworkers and respondents in a way that was consistent with the original intention of the question. Most problems were related to changes in translating from English to Vietnamese. Although independent back translation into English showed that the original wording had not been maintained in some instances, prior to fieldwork, both the English and Vietnamese researchers were happy to maintain the translation as there was an assumption that the slight change in wording would case respondents' understanding. This has proved, however, not to be the case. Most of the changes suggested in the last column of Table 3 involve reverting to the original English version of the questionnaire (that is, Column One of Table 2).

Some problems stemmed from references to narrow and traditional forms of political leadership at the commune level. While citizenship in Vietnam 10 years ago might have only involved interaction with official party members, the number of actors at the local level has now increased with the establishment of more community-based organizations, non-governmental organizations and even private sector enterprises in some areas. Thus, when considering community members' "connectedness" to vertical structures, these additional actors need to be included in the frame of reference. This study identified that respondents' interpretations can sometimes be more "correct" than fieldworkers' interpretations.

The support that might flow from connectedness is often regarded as one component of social capital. A-SCAT tries to separate emotional, instrumental and informational support. This failed in Vietnam with respondents only considering material support (rice, money, etc). In poverty-related studies, it is important to separate these different types of support as the poor often have high levels of emotional support but low levels of instrumental support. It can be hypothesized that different types of support have different forms of relationships with various outcome indicators (for example, mental as opposed to physical health).

Overall, the validity as measured by respondents' interpretations of the questions appeared fairly high with questions being correctly interpreted 77 percent of the time. We can conclude that Short A-SCAT is a valid tool for measuring social capital quickly and cheaply in multipurpose surveys in Victuam. Appropriate pilot testing and back translation is needed, however, before it is applied in new cultural settings. This study makes an original contribution to the literature in that it represents one of the few attempts to measure the validity of a social capital instrument, and to do so using cognitive interviewing techniques. We urgently need additional studies to assess the validity of the social capital "measurement orthodoxy" in different cultural settings.

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References

Blaxter, Mildred and Poland, Fiona (2002) "Moving beyond the Survey in Exploring Social Capital", in Catherine Swann and Antony Morgan, eds., Social Capital for Health: Insights from Qualitative Research. London: Health Development Agency.

Boreham, Richard (1999) "Social Capital and Health: Cognitive Pilot Report." Personal communication.

Bowden, Annabel, Fox-Rushby, Julia, Nyandieka, Lillan and Wanjau, John (2002) "Methods for Pre-testing and Piloting Survey Questions: Illustrations from the KENQOL Survey of Health-related Quality of Life", Health Policy and Planning 17: 322–330.

Coleman, James (1988) "Social Capital in the Creation of Human Capital", American Juntal of Sociology 94:95-121.

Earthy, Sarah, Maltby, Sarah, Arber, Aara, and Gooper, Helen (2000) "The Use of Cognitive Interviewing to Develop Questions on Social Capital for the 2000/1 General Household Survey", Survey Methodology Bulletin 46: 24-31.

Harpham, Trudy, Grant, Emma and Thomas, Elizabeth (2002) "Measuring Social Capital in Health Surveys", Health Planning and Policy 17(10): 106-111.

Kawachi, Ichiro, Kennedy, Bruce, Lochner, Kimberley and Prothrow-Stith, Deborah (1997) "Social Capital, Income Inequality and Mortality", American Journal of Public Health 87: 1491-8.

Krishna, Anisudh and Shrader, Elizabeth (2000) Cross-cultural Measures of Social Capital: A Tool and Results from India and Panama. Social Capital Initiative Working Paper No. 21. Washington, DC: World Bank.

Roberts, Martin and Roche, Martin (2001) "Quantifying Social Capital: Measuring the Intaugible in the Local Policy Context, Radical Statistics 76: 15–28.

Robinson, David and Wilkinson, Derek (1995) *Sense of Community in a Remote Alining Town: Validating a Neighbourhood Cohesion Scale", American Journal of Community Psychology 22: 137-148.

- Svendsen, Gunnar Lind Haase and Svendsen, Gert Tinggaard (2003) "The Wealth of Nations: Bourdieueconomics and Social Capital", Theory and Society 32 (5/6): 607-631.
- Tuan, Tran, Lan, Pham Thi, Harpham, Trudy, Huong, Nguyen Thu, Thach, Tran Duc, Tod, Bill, Dua, Tong Thi and Ha, Nguyen Thi Van (2003) Toung Lives Preliminary Country Report: Vietnam. Young Lives An International Study of Childhood Poverty. Save the Children UK: London. URL: www.younglives.org.uk
- Van Deth, Jan (2003) "Measuring Social Capital: Orthodoxies and Continuing Controversies", Int. J. Social Research Methodology 6(1): 79–92.