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Measuring Social Capital and Mental Health in Vietnam: A Validity Study

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Young Lives
An International Study of Childhood Poverty

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Preface

This paper is one of a series of working papers published by the Young Lives Project, an innovative longitudinal study of childhood poverty in Ethiopia, India (Andhra Pradesh State), Peru and Vietnam. Between 2002 and 2015, some 2000 children in each country are being tracked and surveyed at 3-4 year intervals from when they are 1 until 14 years of age. Also, 1000 older children in each country are being followed from when they are aged 8 years.

Young Lives is a joint research and policy initiative co-ordinated by an academic consortium (composed of the University of Reading, the London School of Hygiene and Tropical Medicine, London South Bank University and the South African Medical Research Council) and Save the Children UK, incorporating both inter-disciplinary and North-South collaboration.

Young Lives seeks to:

- Produce long-term data on children and poverty in the four research countries
- Draw on this data to develop a nuanced and comparative understanding of childhood poverty dynamics to inform national policy agendas
- Trace associations between key macro policy trends and child outcomes and use these findings as a basis to advocate for policy choices at macro and meso levels that facilitate the reduction of childhood poverty
- Actively engage with ongoing work on poverty alleviation and reduction, involving stakeholders who may use or be impacted by the research throughout the research design, data collection and analyses, and dissemination stages
- Foster public concern about, and encourage political motivation to act on, childhood poverty issues through its advocacy and media work at both national and international levels

The project received financial support from the UK Department for International Development and this is gratefully acknowledged.

For further information and to download all our publications, visit www.younglives.org.uk

Introduction

The Young Lives (YL) project is committed to using high quality methods. In the quantitative survey this means using instruments that have already been validated and tested for reliability (repeatability), or carrying out such tests ourselves. In comparison to traditional studies of child poverty and wellbeing, YL is particularly innovative in two areas: the measurement of social capital and the measurement of mental health. Both these topics present particular challenges for measurement. Results in these two areas are generating a great deal of interest on the part of policy-makers and planners, and it is therefore particularly important that we assess the robustness of our instruments. The two papers contained in this working paper are concerned with the validation of social capital and adult mental health measures in Vietnam. The social capital measure (the Short A-SCAT) has been tested for reliability in Colombia (outside the realm of YL research) and has been tested for validity in the Peruvian component of the YL project. The adult mental health measure (SRQ20) has been tested for validity and reliability in over 20 developing countries (including India, Ethiopia and Peru – the other three YL countries) but has not been previously used or tested in Vietnam. Future validation studies will include an assessment of the child mental health measure (Strengths and Difficulties Questionnaire – SDQ), which YL has used across the four countries involved in the study.

Part I

Validity and Reliability of the Self-Reporting Questionnaire (SRQ20) in Vietnam

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Summary

Objective

The demand for inclusion of mental health measures in general health and wellbeing community-based surveys in developing countries is increasing. In a survey of child wellbeing in Vietnam, a measure of maternal mental health was included (Tuan et al, 2003). This was the first use of the SRQ20 in Vietnam and therefore its validity and reliability were tested. The objective was to determine the sensitivity and specificity of the SRQ20 in Vietnam, to identify a cut-off point, and to assess the inter-rater reliability.

Methods

Double-blind assessment of 66 low and middle income women who had been identified as cases and non-cases (50 per cent / 50 per cent) of mental ill health by SRQ20 in a community-based survey in 2002. In-depth Vietnamese psychiatric appraisal and SRQ20 applied. Repeat interviews with SRQ20 by three different interviewers in a 24-hour period.

Results

Using a cut-off of 7/8, sensitivity was 72 per cent and specificity was 77 per cent. Inter-rater reliability combined kappa was 0.79.

Conclusions

For the first time, we have a validated, reliable, cheap and easy-to-use community-based measure of maternal mental health for Vietnam.

Key words: Vietnam, community survey, validity, reliability, SRQ20

Introduction

The demand for the inclusion of a mental health measure in general health and wellbeing surveys in developing countries is increasing. There have even been calls for mental health to be added to the influential Demographic and Health Surveys (DHS) (Falkingham and Namazie, 2002). To meet this demand, the WHO-recommended Self-Reporting Questionnaire 20 items (SRQ20) is being more widely used and has been validated in many cultural contexts (Harpham et al, 2003). Due to low literacy levels it is usually interviewer-administered. A four country (Peru, Ethiopia, India and Vietnam) longitudinal study of child poverty entitled 'Young Lives' (YL) (www.younglives.org) includes measurement of maternal mental health by the SRQ20; no previous community-based studies of mental health have been conducted in Vietnam. There was a need to test the validity and reliability of the SRQ20 in this country where very little is known about common mental disorders and their determinants. This paper presents the results of the tests and identifies a cut-off point for future studies in Vietnam that use the SRQ20.

Methods

Instruments

The SRQ20 has 20 yes/no questions (Table 1), is recommended by WHO (1994) and has been translated into at least 20 languages (Harpham et al, 2003). The English version was translated into Vietnamese and independently back translated into English. It was then field-tested to assess appropriate use of language. The resulting Vietnamese version is available from the first author of this paper. Application of the questionnaire by interviewer takes around five minutes. The standardised in-depth psychiatric clinical interview was conducted by a male Vietnamese professor of psychiatry and averaged 20 minutes.

TABLE 1: THE SRQ20

1	Do you often have headaches?	yes/no
2	Is your appetite poor?	yes/no
3	Do you sleep badly?	yes/no
4	Are you easily frightened?	yes/no
5	Do your hands shake?	yes/no
6	Do you feel nervous, tense or worried?	yes/no
7	Is your digestion poor?	yes/no
8	Do you have trouble thinking clearly?	yes/no
9	Do you feel unhappy?	yes/no
10	Do you cry more than usual?	yes/no
11	Do you find it difficult to enjoy your daily activities?	yes/no
12	Do you find it difficult to make decisions?	yes/no
13	Is your daily work suffering?	yes/no
14	Are you unable to play a useful part in life?	yes/no
15	Have you lost interest in things?	yes/no
16	Do you feel that you are a worthless person?	yes/no
17	Has the thought of ending your life been on your mind?	yes/no
18	Do you feel tired all the time?	yes/no
19	Do you have uncomfortable feelings in your stomach?	yes/no
20	Are you easily tired?	yes/no

Sampling of respondents

As part of the longitudinal child poverty survey, the SRQ20 had been interviewer-applied to 2,000 caregivers of one-year-olds across Vietnam in 2002 (Tuan et al, 2003). One of the five provinces included in the child poverty survey was selected for the current study on pragmatic grounds – it was closest to Hanoi which is where the researchers are based. Hung Yen province (population around one million) is a typical rice farming rural area with high density: 12 per cent of its population lives below the official Vietnamese poverty line; GDP per capita per annum is US$209; 40 per cent of children under five are malnourished; and it is losing population due to urbanisation (NCSSH, 2001).

Six communes of Hung Yen had been covered in the baseline survey. Three were randomly selected for this study. Using a SRQ20 cut-off point of 7/8 (the most commonly used cut-off point in developing countries – see Harpham et al, 2003), the 200 female caregivers covered in these three communes were classified into two groups: probable cases of mental ill health (N = 39) and non-cases (N = 161). The sample for this study became the 39 probable cases and 39 randomly selected non-cases. Due to some respondents being away from home and some refusing to participate, the final sample was 32 cases and 34 non-cases. All interviews were conducted in commune health centres in May 2003.

Data collection

Verbal consent was obtained from respondents by commune health centre staff a week prior to the interviews. SRQ20 interviews were conducted by three researchers from the Research and Training Center for Community Development (RTCCD, Hanoi, Vietnam). In-depth neurotic disorder appraisal was performed by a male professor of paediatric psychiatry from the General Clinic and Health Consulting Center (Hanoi, Vietnam). Female caregivers were invited by commune health staff to the health centre for interview at a rate of three per hour. The SRQ20 interviews and psychiatric appraisals were conducted independently. A double-blind principle was maintained for the whole process of selecting study subjects, SRQ interviews, neurotic disorder appraisal and data management.

Data analysis

Receiver Operating Characteristic (ROC) analysis was used to identify a cut-off point that maximised sensitivity (ability to detect true positive rate) and specificity (ability to detect true negative rate) (see Mari and Williams, 1986). ROC is generally employed to quantify the accuracy of a diagnostic test used to discriminate between two states or conditions (cases and non-cases). The analysis used the ROC curve, a graph of the sensitivity versus 1 minus the specificity of the diagnostic test. The sensitivity is the fraction of truly positive cases that were correctly identified by the SQR20, while the specificity is the fraction of negative cases that were correctly classified. The performance of the test is summarised by the area under the ROC curve. This area can be interpreted as the probability that the result of a diagnostic test of a randomly selected abnormal subject will be greater than the result of the same diagnostic test from a randomly selected normal subject. The greater the area under the ROC curve, the better the performance of the test (StataCorp, 2003). The ROC analysis used Stata version 8. Inter-rater reliability was measured using the combined kappa statistic from Stata version 8. Interpretation of kappa follows Landis and Koch criteria (StataCorp 2003).

Ethics

Ethical approval for the larger, over-arching longitudinal child poverty study was granted by the Vietnam Union of Science and Technology Associations (VUSTA), London South Bank University, the University of London School of Hygiene and Tropical Medicine and the University of Reading. Although the Vietnamese in-depth neurotic disorder assessor did not aim to identify causes of mental ill health, he noted that a large number of mothers were highly anxious due to perceptions that their child was seriously ill. In order to meet ethical guidelines he arranged to examine the children (he was formerly a paediatrician). Out of nine children examined, five had no health problems. The other four were treated or referred.

Results

Representativeness of the SRQ20 study sample

The main characteristics of the 66 women are summarised in Table 2. In comparison with the population of 400 female caregivers in the 2002 YL survey of Hung Yen, there are no statistically significant differences in age, education level, number of children or wealth distribution.

TABLE 2: SOCIO-ECONOMIC PROFILE OF THE SRQ20 VALIDITY STUDY SAMPLE COMPARED TO THE YL SURVEY SAMPLE 2002

Study variables	SRQ20 validity study sample (N = 66)	Survey population 2002 (N = 400)	Significance tests
Age (in years) • **Mean value** • **Min–max values**	**28.2** **[19 – 62]**	**26.6** **[19 – 66]**	**Not necessary**
No. of children born • **Mean value** • **Min–max values**	**2** **[1 – 5]**	**2** **[1 – 6]**	**Not necessary**
Education level • **% of primary or lower**	**35**	**43**	**Fisher's exact = 0.23**
Wealth index (%) • **<0.25** • **0.25 – <0.5** • **0.5 +**	**2** **54** **44**	**2** **45** **53**	**Pearson χ^2 = 1.65** **p = 0.438**

Validity

Table 3 summarises the sensitivity and specificity of the SRQ20 interviews for each of the three interviewers against the in-depth neurotic disorder appraisal. Using the SRQ20, the probability of correctly diagnosed cases is maximally 79 per cent for interviewer no.1, 82 per cent for interviewer no.2, and 76 per cent for interviewer no.3. The average for the three interviewers against the clinical appraisal gave a probability of correctly diagnosed cases of 79 per cent with sensitivity of 73 per cent and specificity of 82 per cent.

TABLE 3: SRQ20 SENSITIVITY AND SPECIFICITY BY INTERVIEWER AGAINST CLINICAL NEUROTIC DISORDER APPRAISAL ON 66 RURAL FEMALE CAREGIVERS

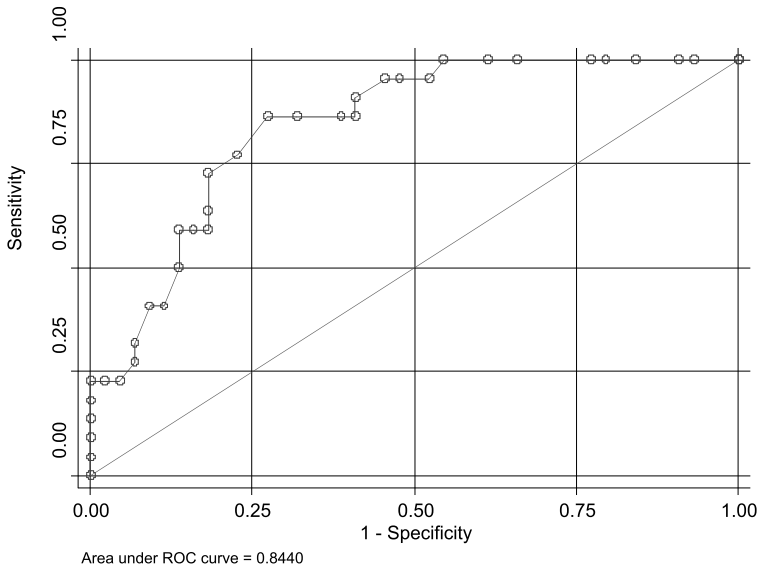
Interviewer identifier	Sensitivity (%)	Specificity (%)	Correctly classified (%)	Cut-off point
1	68	84	79	8/9
2	86	80	82	7/8
3	73	77	76	7/8
Average	73	82	79	7/8

The areas under the ROC curves and their 95 per cent confidence intervals are presented in Table 4. The best performance of the SRQ20 across the three interviewers is seen for interviewer 2, with the area under the ROC curve at 0.86 (95%CI: 0.77-0.94). The overall performance of SRQ20 across the three interviewers is high, between 0.80 and 0.86, and not statistically different (χ^2 = 5.45). The ROC curve of the average of the three interviewers is 0.84 (95%CI: 0.75-0.94). Again, no statistically significant difference is found when the four ROC curve areas are compared (χ^2 = 7.43).

TABLE 4: ROC ANALYSIS FOR SRQ20 WITH REFERENCE TO IN-DEPTH NEUROTIC DISORDER APPRAISAL

Interviewer identifier	Observations	ROC area	Standard error	95%CI
1	66	0.84	0.05	0.74 – 0.93
2	66	0.86	0.05	0.77 – 0.94
3	66	0.80	0.06	0.69 – 0.91
Average	66	0.84	0.05	0.75 – 0.94

Figure 1 illustrates the average ROC curve. The cut-off point of the SRQ20 Vietnamese version is 7/8 with 73 per cent sensitivity and 82 per cent specificity.



Reliability

Using a cut-off point of 7/8, each female caregiver is defined as 'non-case' (<8 points) or 'case' (>8 points). The kappa statistic to measure rating agreement among the three interviewers is 0.79 (Z = 11.13; p=<0.001), which is an acceptable level ('substantial' – the category below 'almost perfect' – according to Landis and Koch [1977] as quoted by StataCorp, 2003).

Discussion

Other SRQ20 validation studies have found sensitivity coefficients that range from 63 to 90 per cent and specificity coefficients that range from 44 to 95 per cent (WHO, 1994). The sensitivity of 73 per cent and specificity of 82 per cent in the current study are around the middle of these ranges. The current study's area under the ROC curve (0.84) compares favourably with a validation of the SRQ20 in Brazil using ROC (0.9) (Mari and Williams, 1986), which means that the SRQ20 is acceptably valid in Vietnam as assessed against in-depth psychiatric interviews. The inter-rater reliability kappa score of 0.79 suggests that the SRQ20 is also acceptably reliable.

Interest in mental health in Vietnam is slowly growing. With a major focus by the Vietnamese National Government and international donors on poverty reduction, it is likely that the association between poverty and mental health (Patel, 2001) will be recognised. If that happens, the need for valid, reliable, cheap, easy-to-administer methods of measuring mental health at the community level will increase. The use of the SRQ20 in Vietnam is recommended, using a cut-off point of 7/8 to determine caseness.

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Part 2

Validity of a Social Capital Measurement Tool in Vietnam

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Abstract

Although there are now several instruments available for measuring social capital in a quantitative manner, very few of them have been validated and no published study has examined respondents' interpretations 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 (YL) 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 translators who were involved in translating the original questionnaire from English to Vietnamese, and with two supervisors and six interviewers (fieldworkers). In-depth interviews were conducted with 24 female caregivers with similar characteristics to the original YL respondents. Key concepts in social capital, such as trust and sense of belonging, were interpreted similarly by all actors. Support was perceived narrowly by caregivers (limited to money and goods). Most problems were due to changes originating in the translation from English to Vietnamese and to the changing nature of local political structures and how they are referred to. Overall validity appeared fairly high with a 'correct interpretation' rate of 77 per cent. There is now a valid tool for quickly and cheaply assessing social capital in a quantitative manner in Vietnam.

Keywords: social capital, validity, Vietnam

Introduction

Although there is now a plethora of tools for measuring social capital, hardly any of them have been validated. This is the problem 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.

There has been increasing interest in recent years in social capital as a possible explanation for the differences in health that are found between places and between groups of people (Kawachi et al, 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' explaining 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 is people's connectedness or networks (what people do/behavioural/ can be objectively measured) and is measured by activity in informal and formal groups in the community. Cognitive social capital is how people feel (subjectively) about trust, reciprocity and sense of belonging in their community.

While various social capital tools have been developed 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 measures 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; 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 for measuring 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, and it has the advantage of separating out structural from cognitive social capital. The resulting Adapted Social Capital Assessment Tool (A-SCAT) (Harpham, Grant and Thomas, 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 one-year-olds and eight-year-olds in 2002 (www.younglives.org). The section on social capital is just one of 20 sections in a questionnaire that takes around an hour and a half to administer. One of the modifications was to change response categories to yes/no/don't know from the original 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-olds across 31 communes in 5 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 lives'. 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 results (ie, levels and distribution of different components of social capital).

Consideration of the validity of the A-SCAT has, so far, been limited to the traditional subcategories 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 hypothesised 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. 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, Grant and Thomas, 2002:110). This consideration of validity neglects any idea of checking respondents' interpretations of social capital questions. The objective of this paper is to present the first validity testing of a quantitative social capital measure in a developing country context, from fieldworkers' and respondents' perspectives.

Methods

The objectives 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 that fieldworkers interpreted significantly differently to the way intended by the A-SCAT authors
- Collect information from fieldworkers 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 did interpret them
- Identify possible changes to the Short A-SCAT to make it a more valid tool for use in Vietnam.

Thirty-four respondents were selected for the study:

- 24 caregivers. 48 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). The caregiver's socio-economic status was assessed using a wealth index method. Twenty-four of these caregivers were then 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, each one lasting around two hours.
- 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.
- Two translators involved in translating the original questions from English into Vietnamese. They were asked to explain the meaning of each question, to identify key words and propose synonyms for these, and to propose any changes they would like to make for future use of the questionnaire.

Caregivers were interviewed in their homes using the questions in Box 1. Fieldworkers were interviewed at the RTCCD office and translators' views were obtained by email. All face-to-face interviews were tape-recorded. During 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**	**24**
Percentage	**21%**	**33%**	**33%**	**13%**	**100%**
The 2002 survey (N = 3,000)	***21%***	***38%***	***32%***	***9%***	***100%***

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 the A-SCAT. The source of these errors was identified (ie, translation from English into Vietnamese or vice versa, selection and training of supervisors and interviewers, or interviews themselves).

BOX 1

Caregiver in-depth interview

- **Please answer this question: (researcher reads one social capital question)**
- **Is this question difficult to answer?**
- **If no,**
  - ➢ **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)**

Results

Table 2 presents the original questions, the intended meaning of the questions, and what they were intended to measure/discover (ie, referential and connotative meaning). These meanings were obtained by one of the authors of this paper (De Silva) in an interview with 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 YL questionnaire to the whole content of the questionnaire as presented on the website (www.younglives.org.uk). Note that question 11.5 was about perceived relative wealth of the household and not social capital and has therefore been excluded.

Table 3 summarises the results of the validation in Vietnam. The first column is the back translation of the Vietnamese used in the main survey questionnaire. Note that there are some differences between the original English wording and the back translation. For example, question 11.1 now refers to 'organisations' 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; 2 stated they did not understand the word 'active'; and 12 interpreted the question as relating to participation in general – whether active or not. Non-active participation would, for example, include attending a meeting but not contributing (ie, playing a passive role).

Overall, across all questions, the ten workers accurately interpreted 77 per cent of the questions (69 responses out of 90) and had a different interpretation 22 per cent 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, at 77 per cent (166 responses out of 216), and 19 per cent of responses indicated a different interpretation of the question. On 8 occasions (out of 216) the question was not understood. Below, we consider the responses to each question in turn.

TABLE 2: INTENDED MEANING OF YL SOCIAL CAPITAL QUESTIONS

Question	Meaning intended by questionnaire designer (Trudy Harpham)
Definition of community	***Meaning:*** *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 their community.*
11.1 In the last 12 months have you been an active member of any of the following types of groups in your community?	***What question is measuring:*** *Actual current connections between 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 (eg, 'family') however they want. Could be overlap between individuals listed here and the groups listed in 11.1 (eg, 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?	***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.*
11.4 In the last 12 months have you talked with a local authority or governmental organisation about problems in this community?	***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. Any form of connection/communication. Does not include voting.*
11.5 In general, can the majority of people in this community be trusted?	***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 you care about. Synonyms: Fellow feeling, reciprocity, fairness, kindness, fidelity, friendliness, co-operation.*
11.6 Do the majority of people in this community generally get along with each other?	***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.* ***Meaning of specific words/phrases:*** *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.*
11.7 Do you feel as if you are really part of this community?	***What question is measuring:*** *Sense of belonging.* ***Meaning of specific words/phrases:*** *Feeling part of community = Left to respondents' own interpretation.*
11.8 Do you think the majority of people in this community would try to take advantage of you if they got the chance?	***What question is measuring:*** *Quality of social relationships in community in terms of whether they are exploitative or reciprocal.*

TABLE 3: FIELDWORKERS' AND CAREGIVERS' INTERPRETATIONS OF THE VIETNAMESE SOCIAL CAPITAL QUESTIONS

	Question as back translated into English from Vietnamese	Fieldworkers' response (N = 10)	Caregivers' response (N = 24)	Recommended future wording
11.1	During the last 12 months, have you been an *active* member in the following organisations?	4√, 6* the concept of member as whether or not someone participates in an organisation	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 organisation?	10√	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 things?
11.2	During the last 12 months, have you received any support/help from any one of the following individuals, including foreigners?	10√	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 things?
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√	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 government	24√	In the last 12 months, have you talked with a local authority or governmental organisation about problems in this community?
11.5	Do you think that a majority of the people in the commune is trustworthy?	7√, 2* as social relationships of trust, safety, friendliness and faithfulness, 1x the term 'commune'	21√ however caregivers do not relate to a 'majority' as they associate with nearest neighbours only, 3x	In general, can the majority of people in this community be trusted?
11.6	Do you think that a majority of the people in the commune have good relationships with one another?	10√ although interviewers find this question hard to distinguish from 11.5	24√	Do the majority of people in this community generally get along with each other?

	Question as back translated into English from Vietnamese	Fieldworkers' response (N = 10)	Caregivers' response (N = 24)	Recommended future wording
11.7	**Do you think that you are really part of the community?**	**10√ but also included the caregiver's fondness for/liking of the community**	**22√ but can be improved to 24 if the term 'community' is replaced by 'village/ commune'**	**Do you think that you are really part of the commune?**
11.8	**Do you think that a majority of the people in the commune would take advantage of you if given the opportunity?**	**10√**	**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 take advantage of you if they got the chance?**

√ = correctly interpreted; x = did not understand; * = interpreted differently
Underline = wording change from original Vietnamese version

The questions on support from organisations 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. 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 separate out 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 concept 'raising issues' was problematic and 'joining together to address a problem or issue' will be clearer for the future.

The translation of the question on citizenship into Vietnamese resulted in an excessive orientation towards '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 rapidly changing, and a 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 11.5) problems were not related to the concept of trust itself, as that was clear to all, but to the concepts of commune and majority. Most caregivers spontaneously commented that they did not know about most people in their commune because they only knew their neighbours. Thus there were difficulties in abstracting

to the commune as a whole.Social harmony (question 11.6) 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 11.7) wandered into concepts like fondness for/liking of the community. Note that here there was also confusion about the geographical reference area with the future recommended wording being 'commune' as opposed to 'community'. Commune is a resilient and highly meaningful geographical construct in Vietnam although the power and role of political structures within the commune are changing.

Finally, we turn to the now classic question (11.8) 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?' (original English version). This is a useful question in that it provides a check that respondents are not on 'autopilot' 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 3 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 sticks more strictly to the original and an example will be given to respondents (eg, do you feel people around here would return any money they borrowed from you?).

Discussion and conclusion

Concepts that many of the UK and Vietnamese researchers thought might cause problems – such as 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 related to changes arising in the translation process from English to Vietnamese. Although independent back translation into English showed, prior to fieldwork, that the original wording had not been maintained in some instances, both UK and Vietnamese researchers were happy to keep the translation as it stood because there was an assumption that the slight change in wording would ease respondents' understanding. However, this has proved not to be the case. Most of the changes suggested in the last column of Table 3 involve reverting back to the original English version of the questionnaire (ie, column 1 of Table 2).

Some problems stemmed from reference to narrow and traditional forms of political leadership at the commune level. While ten years ago in Vietnam citizenship 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 organisations, non-governmental organisations 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 those of fieldworkers'.

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 and money). In poverty-related studies it is important to separate out these different types of support as the poor often have high levels of emotional support but low levels of instrumental support. It can be hypothesised that different types of

support have different forms of relationships with various outcome indicators (eg, 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 per cent of the time. We can conclude that the Short A-SCAT is a valid tool for measuring social capital quickly and cheaply in multi-purpose surveys in Vietnam. However, appropriate pilot testing and back translation is needed 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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Young Lives is an international longitudinal study of childhood poverty, taking place in Ethiopia, India, Peru and Vietnam, and funded by DfID. The project aims to improve our understanding of the causes and consequences of childhood poverty in the developing world by following the lives of a group of 8000 children and their families over a 15 year period. Through the involvement of academic, government and NGO partners in the aforementioned countries, South Africa and the UK, the Young Lives project will highlight ways in which policy can be improved to more effectively tackle child poverty.

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