Selection and Induction of Supervisors for Fieldwork: Experiences from Young Lives in Peru

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1. Introduction

Young Lives is an international longitudinal panel study that is following approximately 12,000 children in four countries as they grow up in poverty. The study is being undertaken in Ethiopia, India, Peru and Vietnam and a central component is the household survey administered to the parents and children participating in the study every three to four years over the 15-year span of the project. In order to accomplish this task, each country’s lead researcher recruits and trains groups of fieldworkers, individuals who will be responsible for locating the families, maintaining their interest and willingness to participate over the length of the study and collecting the large amount of information that is the basis of the research. The Young Lives children in Peru are spread across the country and the survey teams have to be able to function as independent units, which poses challenges for the management and administration of the survey; having teams that are capable of facing these challenges, and are well prepared for them, is critical to data quality and the success of the study. This Technical Note gives an overview of the recruitment and training processes we followed to try to ensure that teams were cohesive, mutually supportive, and well prepared for the work in Peru. We describe the process with the intention of sharing our experience and stimulating discussion, innovation and research in this area.

2. Young Lives fieldwork

Young Lives fieldwork teams consist of the fieldworkers who will collect the data and one or more field supervisors. A team has been defined as ‘a small number of people with complementary skills who are committed to a common purpose, performance goals, and approach for which they are mutually accountable’ (Katzenbach and Smith 1993). They ‘represent the critical unit that “gets things done” in today’s world’ (Marks 2006) and the success of many endeavours depends on how a team functions, not least in the context of community household surveys such as Young Lives.

Much has been written about teams and the characteristics that make them effective. For instance the review by Kozlowski and Ilgen (2006) gives a very complete analysis, Zaccaro (2007) discusses the trait-based perspective of leadership, and a useful review of the literature by Mickan and Rogers (2000) summarises the characteristics of effective teamwork as having a clear purpose, distinct roles for team members, and positive individual contributions such as trust and commitment, and good organisational processes such as coordination among the team and cohesion. There is general agreement among experts that an important aspect of team effectiveness is team leadership.

In the context of Young Lives, although the team leaders are usually called ‘supervisors’, the role of these individuals goes beyond the traditional concept of supervision as providing technical and administrative management, planning and quality control, and includes other aspects of leadership such as maintaining the cohesion of the group, sorting out conflicts, and preserving good relationships among its members.

There is an extensive literature on the role and training of supervisors and team leaders in organisations. For instance the reviews by Gilbreath (2004) and Tannenbaum and Yukl (1992) provide exhaustive historical overviews, and many texts and websites comment, describe, advise and provide guidelines about team leadership and team leaders in medical
teams, sports teams and the armed forces. In a survey conducted in difficult terrain away from home, where the survey teams may be isolated and sometimes in danger, the lessons from team leadership in the military context are not irrelevant. Nevertheless we could find very little mention of team dynamics, team leadership or preparation of supervisors or team leaders in the context of surveys designed to be implemented in developing countries. Even the very complete SMART manual (SMART 2006) only has a brief section on how to build an effective team but it does not give advice on the selection or training of team leaders or supervisors, and the otherwise excellent WHO reference manual on immunisation coverage cluster surveys has no mention of team leadership or training (WHO 2005).

In 2002 the Young Lives study (known as Niños del Milenio in Peru) enrolled more than 2,000 children aged 6 to 18 months and 750 children aged 7.5 to 8.5 years in 20 randomly selected clusters, areas representing the geographical, agricultural and economic diversity of the country. For more details of the sampling process, see Escobal and Flores (2008), Outes-Leon and Dercon (2008) and Barnett et al. (2012).

The clusters vary from densely populated shanty towns with high rates of crime to sparsely populated villages scattered across steep mountain terrain. The aim is to follow all the enrolled children by conducting interviews with the family and child every three to four years and gathering information from the community to provide context. Complementary qualitative in-depth studies are carried out with some children. The Peruvian population has a high index of migration and after four years the families were living in 400 different communities. The interviews are detailed and time consuming, exploring many aspects of the child and family’s life. Participation and continuation in the project is voluntary and the consent process is designed to ensure that respondents are aware of their rights.

In order to undertake the work we created three teams of survey workers and supervisors for each area. In this context the supervisors need not only all the skills required to implement the fieldwork and maintain data quality but in addition skills including leadership, teamwork, maturity, organisation, communication and courage. The Young Lives study presents particular challenges to staff, including difficult and sometimes dangerous terrain, isolation, interaction with different communities sometimes with high crime rates and sometimes suspicious of outsiders, different languages, desperate poverty, ethical issues, plus the need for team coordination and management and other challenging tasks, all on a restricted budget.

Round 1 of data collection took place between August and December 2002. Teams were formed of one supervisor, a data-entry clerk, and six interviewers who conducted a census, enrolled families and conducted the interviews. The survey was successfully conducted a total of 2,800 interviews completed.

However we underestimated the difficulties faced by the supervisors, who had multiple tasks and found it difficult to cope with the different and varied roles that were required of them and as well as maintaining the integrity of the team. We were forced to make changes during the course of the study and despite the overall successful completion of Round 1, it was felt that we needed a new approach for Round 2. As a result of this, we decided to put special emphasis on the selection and training of the supervisors. We decided to design and implement a process that would bring together a variety of successful experiences from other projects in order to select the right people for the job and lay the foundations for the training. We found little published literature to help us with this specific task and based our programme on our combined experience in psychological assessment and preparing personnel for other surveys in our research institutions.
3. Design of the selection and training process: methodological considerations

The selection of personnel is complex in any context. One of the more traditional approaches is based on psychometric tests but this implies a view of the work and the person as static and unchanging. Newer perspectives, such as the emphasis on negotiation, consider the applicants to be active participants in the selection process. (Derous and De Witte 2001). The approach of the Instituto de Investigación Nutricional (IIN, the Institute of Nutrition Research) coincides with this, and the feelings, ideas, reactions and concerns of the applicants are taken into consideration. According to Derous and De Witte, this implies an ethical standpoint that has a positive impact on the selection process and training.

Young Lives needed people who were out of the ordinary for its fieldwork. As in Round 1, we valued people with experience in fieldwork, especially experience in conducting interviews and forming relationships with families, and we considered this more important than professional status or educational attainment. There was no set professional profile, and people with different backgrounds, for instance nurses, social workers, anthropologists, social communicators and non-professionals with experience, were all possible candidates although we did make a decision to try and include some personnel with a background in the social sciences, especially for the qualitative interviews. For Round 2, in order to reduce the need to work through translators, we decided to increase the number of Quechua speakers in the teams that worked in rural areas where some caregivers are not fluent in Spanish. This meant an active search for Quechua speakers.

According to Dielman et al. (2006), who studied health workers, a workforce that is motivated as well as qualified is crucial to increase productivity and improve quality in the services they supply. Our previous experience in managing research projects in the community was in keeping with this view, although Young Lives survey workers were not required to administer health services but to interact with families. We needed them to set up relationships based on respect, empathy, sensitivity and integrity and to inspire confidence and trust, and facilitate communication so that families would willingly and without expecting a direct benefit share detailed personal information about themselves and the child, including information on health, income, spending, family dynamics, state of mind and personal history.

No material benefits, only small thank you gifts such as photos of the child and certificates of participation, have been given to families, and the fieldworkers are required to confront all kinds of reaction, from the welcoming to the abusive. They have to be persistent without being rude, self-confident without being superior, resourceful without being dishonest and in addition have a large measure of common sense and street credibility. In short we were looking for unusual people who already had, or would be capable of developing, these characteristics. It requires skill, patience and experience to obtain accurate information, maintain the goodwill of the family and build up a relationship.
In addition fieldwork of this type requires that fieldworkers endure long hours, gruelling treks, danger and doubt; witness harrowing circumstances; and maintain a high standard of scientific rigour. There are disappointments interlaced with successes, which is emotionally draining and physically exhausting. The people who lead these groups need all the same qualities plus a robust personality, and leadership qualities. They need the ability to inspire and support the others. In short, some very special people are required.

Selection of the right people is an essential step and needs to encompass diverse activities that will probe and reveal people’s strengths and weaknesses; this kind of selection can in itself be part of the training. Even people with excellent qualities need to be prepared for this kind of leadership.

Following this idea, we decided to design the selection and training process with the candidate as a principal actor within it. We wanted the programme to take into account both intellect and emotions. In order to achieve this, we designed an integrated process that would involve selection and training at the same time. This would also allow us more time to get to know the people and incorporate psychological tests together with group dynamics.

4. Description of the selection and training process

The Young Lives team in charge of fieldwork analysed its collective experience of community fieldwork and the specific experience of Round 1 and subsequent follow-up activities of the Young Lives study in Peru. We outlined the profile of the person to be employed, determining that their essential characteristics should be the ability to work in a team, good communication skills with adults, children and adolescents, initiative, common sense, a sense of responsibility, and honesty, and most importantly that they should enjoy the challenges of this type of work. We decided to first select and train the supervisors for the project and this is the subject of this paper.

We divided the process into stages: (1) advertising and pre-selection; (2) receipt of completed CV template and handwritten answers to key questions; and (3) selection and training course. The process took nearly three weeks (see Appendix 1) but we believe the extra time paid dividends in the cohesion and function of the teams.

4.1 Advertising and pre-selection

The employment situation in Peru means that putting job advertisements in newspapers leads to an overwhelming response from a large variety of people of varying abilities who are not necessarily suitable. We therefore decided to direct publicity to universities with social science departments and those with prior experience in the IIN. We included five principal universities in Lima (Pontificia Universidad Católica del Perú, Universidad Nacional Mayor de San Marcos, Universidad Feminina de Sagrado Corazon, Universidad de San Martín de Porres, and the Universidad del Pacífico). We asked the administrators of the faculties to post our advertisement. We created an e-mail address for prospective applicants to reply to. This enabled us to identify applicants and send them a CV template.
4.2 CV template and key questions

The CV template ensured that we obtained the candidates' personal information in a standardised format and that we received the information that we considered relevant and reduced the redundant information that can make reviewing CVs difficult. We included three key questions about their perception of what supervision means, their opinion on roles with ‘power’, and the importance of characteristics such as honesty and self confidence. We also asked about language (Quechua) skills. We asked them to return the form by e-mail but to send the replies to the questions written by hand and faxed, posted or delivered by hand to the IIN. This latter was to allow us to check handwriting legibility and reduce the risk of plagiarism.

Following a review of the forms by the Study Coordinator and the Principal Investigator, the successful applicants were invited to an interview. During the interview candidates if candidates had said they spoke Quechua, they were asked to speak in the language in answer to some questions. Twelve people passed the interview and were invited to participate in a three-day selection and training course. This course was devised and led by the Study Coordinator, investigator and a psychologist with experience in personnel selection.

4.3 Selection and training course

This course was intended to combine training with the selection process in the belief that the training process would reveal aptitudes pertinent to selection. It had the following objectives:

- identification of specific qualities, such as communication skills, teamwork and honesty
- creation of awareness of the possible difficulties that might be encountered in the fieldwork
- motivation
- development of self-assessment of personal strengths and weaknesses in relation to teamwork and leadership qualities
- training in the enrolment and consent processes
- training conducting structured interviews
- training in the completion of forms including the principles of ‘good clinical practice’.

Taking these objectives into consideration our goals were to

- enhance leadership skills
- select six supervisors
- evaluate those who were not selected for their potential in other roles in the project.

4.4 Programme and activities

The following activities were included in the three days (see Appendix 2: Outline of training programme):

1. Introduction. Explanation of the course and general information about Young Lives.
2. Written test. This included questions to test candidates’ knowledge about health, gauge their common sense and reactions to possible fieldwork scenarios, and assess their numeracy and potential to be trained in anthropometry through age calculations based on date of birth and current date.
3. **Exercise in good clinical practice (GCP).** An explanation was given about how corrections should be made (a single line through the original with the new value written by the side with initials and date). Information consisting of names and numbers was read out, then the same information was read out again, with a couple of numbers read differently the second time, the latter being the correct values. Papers were collected in to see whether candidates had written down the information correctly, recognised the changes in numbers, and made the corrections in the specified way. General feedback was given on the exercise.

4. **Role playing.** We divided the group into pairs and asked each pair to act out a return visit to the family, imagining that they were going back to do the Round 2 interview. In order to make this more interesting and challenge the candidates, we gave them some scenarios, for instance families refusing to participate because the child had died, the family had broken up or the family had expected a reward for their participation. We allowed a certain amount of improvisation on the part of the candidate playing the caregiver. These role-playing vignettes lasted two to three minutes each.

5. We filmed the session and at the end we played back the films to the group, stimulating a discussion about the positive and negative aspects of each improvised scene. We also retained the videos so that the selection panel could see them and replay as necessary for the final selection process.

6. **Training sessions using participative methods.** These methods allowed the participants to take an active role in the learning and training process. They could use their intellectual capacity and personal experience of problem solving to reach conclusions that could then be confronted, questioned and developed through discussion with their companions (Belo Horizonte 1991). These activities included the following sessions:

   a. Creating a collage called ‘Characteristics of the Peruvian child’. This consisted of a graphic presentation done in groups of three to four people. The participants had to discuss a series of ideas based on what they knew about the real life of Peruvian children and come to a consensus on what their picture of a Peruvian child would look like and what aspects or ideas they wanted to emphasise.

   b. A dynamic group activity called ‘The paper tower’. For this competition two groups of about six people each were formed. Each group was asked to make the highest possible tower using only newspaper and sticky tape. The group whose tower was the first to reach the roof would win. This activity allowed us to see how the groups organised themselves, what roles each member of the group played, who (if anyone) emerged as natural leaders, whether conflicts arose between members of the group and how this was handled, whether the leaders tended to an authoritarian or democratic stance, what roles other members of the group played and how other members of the group reacted to the attitudes and style of the person who had assumed the role of leader.

   c. A group activity called ‘Bread and butter sandwich’. This is done in pairs. Each member of the pair has to plan the steps that the other person has to do to make a bread and butter sandwich. Once the steps are written down, the planner is only allowed to read out only the instructions exactly as they are written, and the other person follows the instructions. This usually leads to the results not being exactly as the planner had intended and they have to confront their own impotence in the face of misunderstanding. This leads to discussion about planning, communication and frustration when things do not work out as planned.
d. A psychology game called ‘Crossing the sea to the island’. This activity consisted of dividing the group into two teams of six people. Each team then had to imagine that they were in a shipwreck and the survivors are a child, an old man, two strong men, two women and a sick person. They reach a desert island but it is contaminated with radiation and they have to get off in a hurry but there only remains a very small boat that holds two people. The team has to decide who should go first. Each person acts a role and has to argue their case for being saved first, since those that are left will probably die. Afterwards there was a discussion on the different roles, the planning and the way the team rose to the occasion under pressure.

e. ‘Creating the profile of the ideal supervisor.’ This is an activity done with the whole group, in which individuals suggest ideas of characteristics of the ideal supervisor and write them on cards that are then pinned on a board so that a diagram illustrating the ideal supervisor is gradually built up. The creation of the framework and the final product allow for discussion of the various characteristics and their relative importance as well as observation of the contribution of each member of the group.

7 Interview practice. Candidates practised first with each other, and then with volunteer caregivers from Lima shanty towns and rural areas. This involved administering parts of the Young Lives survey and filling in the questionnaire sheets. It enabled interviewing technique, communication skills and facility with the questionnaire to be observed.

8. Psychological tests. These were designed to evaluate certain cognitive skills and aspects of the individual’s personality. Two tests were used: the Raven’s progressive matrix test and the drawing of someone in the rain.

These psychological tests are instruments with many advantages and uses. In the context of selection of personnel, they allow a rapid assessment of a group of people. They enable information to be collected about a variety of aspects of the individual such as intellect, personality, motivation and psychopathic traits. Nevertheless in our context very few tests have been validated or standardised. In spite of this, in many areas of psychology different tests are in current use based on the validity of their performance in other populations. The tests are described below.

a. The Raven’s progressive matrix test (Raven 1995) is a test that estimates a person’s general level of intelligence level of. It has the advantage that the score does not depend on the educational attainment or the previous experience of the person being evaluated. This test was used to make sure that the supervisors would have the necessary cognitive skills to fill in and check the questionnaires in the field.

b. The draw-a-person-in-the-rain test is a projective personality test, which allows the psychologist to evaluate an individual’s personal resources when faced with a stressful environment. Candidates are asked to draw a person in the rain. The resulting picture can help to reveal the person’s aptitude for relationships of an interpersonal, intellectual and physical nature (Querol and Chavez 1997).

At the end of this process, the results of all the tests were collated in a matrix and discussed by the whole selection team, which consisted of the investigators on the project, the Field Coordinator and the psychologist. Six of the 12 candidates were selected to be supervisors. The remaining six went on to become fieldworkers.

The supervision and selection of the supervisors was followed by preparation for the survey, including questionnaire development and documentation, activities in which the supervisors could act as both trainers and trainees. Once the survey instruments were ready, a full pilot
exercise took place in a rural area involving the teams that would go to the field. This allowed us a final practice of the complete questionnaire in order to ensure that all fieldworkers were administering it in a standard way.

5. Discussion

This process allowed us to base our selection of supervisors on diverse tests that measured many different aspects of the personality and competence of the individuals. The selection was objective and obviated suspicion of favouritism or other bias. It also included a lot of training of relevance to the project and ensured that supervisors and a core of the fieldworkers had a good knowledge of the study activities, fieldwork and questionnaire. The process was also motivational, although at times stressful, and was felt to have strengthened team spirit.

We included a large number of activities and tests and the process took three days. The first written test, which checked whether what people had said about their language skills in the interview was true, identified people who had clearly exaggerated or given misleading information. This lack of truthfulness disqualified them.

The activities that were considered most useful in the selection process were role playing and the psychological testing.

The process was successful in that in we identified some excellent supervisors who eventually exercised their leadership skills and formed strong teams that were able to successfully undertake all the challenges of the survey. During the course, two of the three teams worked very well indeed, confronting difficult situations constructively and showing excellent leadership and teamwork. We felt that the process not only helped identify people with the right qualities but also strengthened and consolidated their skills. The objective, rigorous and diverse nature of the selection and training had a positive effect on all the participants, setting a high standard for the project and establishing from the outset high expectations and the seriousness of the task to be performed. The activities created team spirit and camaraderie among the whole group.

We would recommend this methodology but we also identified weaknesses. Despite the seemingly exhaustive process, two of the people selected turned out to have difficulty in leading their team in the field, and although the quality of the survey work was not affected, the team had internal communication problems. Although these problems only became fully obvious after the fieldwork had started and in the busy implementation phase of the project, in discussions held afterwards by the whole team it was felt that certain character traits had in fact become obvious in the training that followed the selection of the supervisors but had not been recognised by the investigators.

We conclude that the psychological tests were helpful but not sufficient to identify personality traits important for leadership. Perhaps because of the intensive nature and completeness of the process and the diversity of the tests, we were overconfident of success, and we turned our attention to piloting and modifying the survey forms, training fieldworkers and practising form-filling with them, and left a lot to the supervisors without paying enough attention to how they were developing as leaders. The lesson to be learned was that, however thorough the selection process, ongoing observation and willingness to reverse decisions remains essential.
A second weakness of the process was that we only had a limited number of people from which to select, and half of the candidates were selected. We were looking for people with rare skills and had we had a larger number to choose from, the selection might have been more successful. The limiting factor was trying to include as many Quechua-speaking candidates as possible. For logistic and cost reasons the selection and training had to take place in Lima and this reduced the number of applicants. In future we will consider looking for ways to include more candidates who are residents of the Quechua-speaking areas of the country.

This selection process was novel and to a certain extent experimental. It built on previous experience in selection and training of personnel for research projects but was the first time that we had done such a comprehensive process. Like the supervisors themselves, we also learned from the process and we would encourage others to modify, improve and report their experiences so that this important aspect of project work receives more attention.

We publish in the hope that the description of the range of selection and training methodologies will provide others with additional tools for the selection and training that we believe to be the basis of quality in research projects of this type and probably many other jobs.
References


Appendix 1: Timetable of selection process

<table>
<thead>
<tr>
<th>April 2006</th>
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<tbody>
<tr>
<td>M</td>
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<tr>
<td>10</td>
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**Contacted universities**

**Press note**

<table>
<thead>
<tr>
<th>Candidates responded</th>
</tr>
</thead>
</table>

**IIN sent letter and form**

| Candidates replied using form |

**IIN sent CV template and set of questions (test 1)**

| Candidate sent back CV and handwritten replies to questions |

**IIN selected candidates**

| Personal interview and selection of candidates for training |

**Selected candidates informed by phone or email**

**Training At IIN**
## Niños del Milenio (2006)

### Fieldwork supervisors selection and training course

#### Thursday 27 April

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00 – 09:30</td>
<td>Welcome</td>
</tr>
<tr>
<td>09:30 – 10:00</td>
<td>Explanation of the course, Brief description of the Niños del Milenio study</td>
</tr>
<tr>
<td>10:00 – 10:45</td>
<td>Test: General knowledge about health, common sense questions, probes for reactions to events under field conditions</td>
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<tr>
<td>10:45 – 11:00</td>
<td>Break</td>
</tr>
<tr>
<td>11:00 – 11:15</td>
<td>Psychology test: Person in the rain</td>
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<tr>
<td>11:15 – 13:00</td>
<td>Introduction to the survey</td>
</tr>
<tr>
<td>13:00 – 14:00</td>
<td>Lunch</td>
</tr>
<tr>
<td>14:00 – 15:30</td>
<td>Characteristics of the Peruvian child</td>
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<td></td>
<td>Group activity: Mini SWOT (FODA)</td>
</tr>
<tr>
<td></td>
<td>Discussion about the qualities needed for a supervisor</td>
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<td></td>
<td>Individual activity ending in a plenary session</td>
</tr>
<tr>
<td>15:30 – 16:00</td>
<td>Break</td>
</tr>
<tr>
<td>16:00 – 17:00</td>
<td>Psychology game: Crossing the sea to the island</td>
</tr>
<tr>
<td>17:00 – 17:30</td>
<td>Each participant is given a section of the survey to study at home</td>
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#### Friday 28 April

<table>
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<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>09:00 – 10:15</td>
<td>Test of intellectual capacity: Raven’s test</td>
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<td></td>
<td>Group activity: Bread and butter sandwich</td>
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<tr>
<td>10:15 – 10:30</td>
<td>Break</td>
</tr>
<tr>
<td>10:30 – 12:30</td>
<td>Group psychology test: The paper tower</td>
</tr>
<tr>
<td>12:30 – 13:00</td>
<td>Exercise in good clinical practice (GCP)</td>
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<tr>
<td></td>
<td>How to fill in forms correctly</td>
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<tr>
<td>13:00 – 14:00</td>
<td>Lunch</td>
</tr>
<tr>
<td>14:00 – 15:15</td>
<td>Interview practice: Filling in a section of the survey instrument that had been studied at home</td>
</tr>
<tr>
<td>15:15 – 15:30</td>
<td>Break</td>
</tr>
<tr>
<td>15:45 – 16:45</td>
<td>Role playing and improvisation of possible field scenarios</td>
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<tr>
<td></td>
<td>Discussion of video recordings of role plays</td>
</tr>
<tr>
<td>15:45 – 17:00</td>
<td>Exercise in logistics: Capacity to manage logistics problems</td>
</tr>
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#### Saturday 29 April

<table>
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<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00 – 12:30</td>
<td>Socio-drama</td>
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</table>
THE AUTHORS

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About Young Lives

Young Lives is an international study of childhood poverty, following the lives of 12,000 children in four countries (Ethiopia, India, Peru and Vietnam) over 15 years. www.younglives.org.uk

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