

Children's Worlds survey 2013

Overall comments from the sampling review panel

The following general guidelines have been identified by the sampling review panel through reviewing the proposed sampling strategies of each country.

1. Defining the sampling frame

In the funding bid we stated to the Jacobs Foundation that the surveys conducted within each country would be as representative as possible of the whole country, or (in the case of countries with a federal structure) a specified region.

So wherever possible, the sampling strategies should cover the whole country. However, it is clear from the proposals that this would be practically very difficult in some countries. Therefore in this situation the core group for the project have agreed that it will be acceptable for the sampling strategy to only cover one region of the country. This should be a region including both urban and rural areas.

In the case where the sampling strategy only covers a region, all the other guidelines below should still be followed. In particular it is important that all children in schools within the region have the possibility of being included in the survey. It is recommended that any sampling of smaller areas within the region should be done through random selection.

2. Inclusions and exclusions

It has been recognised from the start of the project that it will usually only be possible to include in the sample children who are attending schools, as a schools-based survey is likely to be the only option within the funding available. This means that certain children (e.g. children not attending school at all and children attending specialist educational establishments) will not be included in the sample. This will be stated as a limitation of the project.

However, any further exclusions of children from the sample need to be considered very carefully and should only be put in place if there is no reasonable alternative.

3. Stratification

All of the proposals involve an element of stratified sampling and the sampling panel agree that generally this is helpful in order to maximise the quality of the sample. When using stratification two key principles should be followed:

- a) The strata used should include all schools and children in the sampling frame.
- b) Wherever possible the proportion of the sample selected within each stratum should be equal to the proportion of the total child population (of the country or region) contained in the stratum. It is possible to use different proportions and then apply weighting to balance the final sample. Where this option is chosen there should be clear reasons for this and the variations from the population proportions should be kept to a minimum. The reason is that using large weighting corrections can create problems for analysis.

4. Selection of schools

If possible, information about the number of children in each school year should be obtained and this can then be used to select (within each strata) schools with probabilities proportional to size. If one class group is then selected from each school, this approach will mean that all children have an equal probability of being selected.

Where information on school size is not available at the time that schools are being selected,

other steps can be taken to help to balance the sample - such as sampling two class groups in larger schools. However it will then be essential to record information about the number of children in each school sampled as this will help to calculate weighting figures for the final data set.

Schools should be randomly selected from complete lists of schools within each stratum. When selected schools say they do not wish to participate, replacement schools should be selected randomly from the list. Alternatively, if time is short, a larger pool of schools can be randomly selected from the outset to take account of non-participation.

5. Selection of class groups within schools

Most of the proposals involve selecting one or more class groups within schools. In this case, the class groups should be selected randomly within each school.

If class groups are based on children's ability or other factors the implications of this need to be carefully considered in the sampling strategy.

6. Selection of children

Where class group selection is used, ideally all children in the selected class group should be included in the survey.

Some proposals do not involve using class groups. Instead they involve selecting children from the school roster. This is also a good strategy provided children are selected randomly and the overall probability of selection is equal across the sample. This can be achieved either through selecting schools with probabilities proportional to size and then selecting the same number of children in each school; or through selecting schools with equal probabilities and then selecting the same proportion of children in each school.

7. Numbers of children selected per school

There are disadvantages to large cluster sizes and it was recommended at the Frankfurt meeting that the maximum cluster size within each school should be two class groups (around 50 children). So all proposals should work within this maximum and this means a minimum of around 20 selected schools per year group.

8. Gender balance

The issue of gender balance should be carefully considered within each country. Ideally steps should be put in place to include roughly equal proportions of females and males in the final achieved sample. Where this is not possible, weighting can be applied to the final data set but this should be kept to a minimum, particularly where weighting will also be needed to balance other aspects of the sample.

9. Links between different year groups

Almost all of the proposed strategies involve including the same schools for at least two different age groups. This seems to be a necessary strategy given the costs of travelling to schools to administer the survey. However it should be noted that this will have some implications for undertaking analysis across different age groups as the samples for each age group will not be independent.

10. Parental consent

It will be important to know whether parental consent is needed in each country and to ensure that the correct procedures are followed where parental consent is needed. It will be essential to know what proportion of children can not participate in the survey in each school because parents do not give consent.