PUBLIC EXPENDITURE TRACKING SURVEYS

Questionnaire Design for Data Management

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Chapter 1

Questionnaire Design for Data Management

1.1 Objective

To help design a questionnaire that will facilitate the data capturing and computerization of the PETS data.
1.2 Why is It Important?

- When the questionnaire design is done correctly you have:
  - Neatly filled questionnaires.
  - Consistency in response codes.
  - Easy-to-read questionnaire for data entry agents.
  - Consistency in the overall analysis.
1.3 Questionnaire Design and Data Management

- Data processing is always the 'bottleneck' in all surveys.
- Typical PETS fieldwork takes about 2-3 months.
- Primary data entry about 3-4 months.
- Data cleaning about 6 months more, yet 'unclean' data.
- Bad questionnaire design, the main course.
1.4 Elements of Clean Data

- Consistent and logical.
  - Frequency of units of analysis and all other variables consistent.
  - Range of continuous variables realistic.
  - Consistency in coding.
  - All missing values justified and documented.
1.5 Challenges of Designing PETS Questionnaires

- PETS not 'standardized', number of local adaptations.
- PETS is a diagnostic tool.
  - Investigative in nature.
  - Flow of financial or non-financial resources through disparate government functional systems.
  - No two systems (government) alike.
- It is important to pre-test and adapt the survey instruments for every local setting.
1.6 Consequent to This

- Questionnaire logical design different for each country.
- The data structure unique.
- However, ensure internal consistency to maximize comparability between surveys within country.
- Questionnaire design to reflect the structure of the country (see presentation by Carolyn Winter)
1.7 Benefits of Good Questionnaire Design

- Good questionnaire design facilitates the data entry design (database design).
- Also facilitates data entry and cleaning.
- Always involve a Data Management Specialist from the beginning.

Remember *GIGO*
1.8 Divide the Questionnaire into Section

- Makes it easier to collect information.
- Easier to manage the files.
- Leads to a well designed database (entry screen).
1.9 Relate Questionnaire to Hypothesis

• Ensure that the questions asked answer your hypothesis.

• Have sections on the questionnaire that are tapping on the information related to your hypothesis, e.g.
  – Do schools in well-off neighbourhood more likely to prevent leakages?

• It is important for PETS to establish information about resources provided 'in kind'.
  – Put items that can help cost these resources.
1.10 Pre-code all Variable Values

• Avoid at all cost non-numeric values.

• Use phrases like "Other", "Don't know", "Don't remember", "Refuse to answer".

• The questionnaire workshop and pilot will help identify problem variables.
1.11 Clearly Number the items

- The variables should be clearly numbered.
- Show clearly the sections and variable numbers.
- Facilitates the naming convention for database designer.
- Integrate logical skips and test them during pilot.
1.12 Clearly Number Each Questionnaire

- Each questionnaire should be given a unique ID number.
- This facilitates tracking and queries during data management.
- Questionnaires maybe archived and sorted using the unique ID number.
### 1.13 Questionnaire

<table>
<thead>
<tr>
<th>No</th>
<th>Questions</th>
<th>CODES</th>
<th>Skip to</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Head teacher last year?</td>
<td>1 Yes</td>
<td>q3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 No</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Position last year</td>
<td>1 Gov. official</td>
<td>q7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 Private</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 Other</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>How many teachers are in this school?</td>
<td>Number</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>How many males</td>
<td>Number</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>How many are females</td>
<td>Number</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>What is your salary</td>
<td>Enter &quot;-1&quot; for</td>
<td>q10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>refuse to answer</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Number of tests performed last year</td>
<td>1 AIDS</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 Malaria</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 Cancer</td>
<td></td>
</tr>
</tbody>
</table>
1.14 Local Adaptations

Among the many items that can help ensure quality, the following check list can be used to improve the instrument:

- Qualitative research before the survey to learn about the characteristics of the sub-populations and how best to approach them.
- Comprehensive adaptation and pre-testing of the questionnaires that are suited to the local context.
- Verification that the language in the questionnaires is clear to the people being interviewed, and that the questions are answerable.
- Take time to do translation and back-translation, to make sure that the complex concepts are interpretable in a commonly understood manner.
- Use of self-administered questionnaires when surveying literate population.
1.15 Conclusion

- Involve a Data Management Specialist early and throughout the process.
- Responses should be clear in all circumstances.
- Responses anticipated should be pre-coded.
- Communicate with data management specialist.