The German Socio-Economic Panel (SOEP)

1. The German Socio-Economic Panel Study (SOEP)

The German Socio-Economic Panel Study (SOEP) is the longest-running longitudinal study of private households and residents in the Federal Republic of Germany. It is a theory-based multidisciplinary mix of data on households, individuals and families that is conducted annually. The survey provides micro-data for research in social sciences, economics and behavioral sciences both in Germany and abroad.

The SOEP provides increasing opportunities for long-running household panel studies for at least four reasons:

- As the observation units are households, the study guarantees appropriate coverage of births and deaths from cradle to grave
- There are 34 waves of the survey available
- It has a large sample size: it started in 1984 with 6,000 households and last year approximately 16,000 households were surveyed
- It has information on accumulation of rare events by pooling (e.g. mortality, divorce, etc.)
- It allows intergenerational analysis by linking parents and their children

2. Life course perspective

The life course perspective considers information of household context, parents, partners and children. Through the life course perspective, SOEP questionnaires cover most stages of life:

- Fetal phase (measured aspects include physical and mental condition of the mother)
- Preschool (some of the aspects measured are physical indicators, health, personality, care)
- Primary school (measured aspects include recreation, school performance)
- Secondary school (measured aspects include type of school, values, relationships with parents, goals)
- Adult life (some of the aspects measured are personality traits, values, physical and cognitive potential)
- Retired life
- Memories of widows and widowers

The German Socio-Economic Panel Study collects measures related to the present (questions cover topics such as employment status and life satisfaction), the past (including retrospective questions about events, monthly calendar of income and employment), and the future (questions on expectations).
3. **Survey instruments and sampling**

The SOEP applies standard and biographical survey instruments. Some examples are: household questionnaire, individual questionnaire for every person in household aged 17 or more, and biographical data (e.g. place of birth, nationality, nationality of parents).

Population sampling considers two key recollection features:
- A random points sampling strategy. Firstly, a random sample of points is selected across German households. Secondly, a random sampling of addresses is selected from the first sampling points. Thirdly, a random route is planned starting at the selected addresses.

4. **Measuring life during childhood**

One of the main aspects of the SOEP is its focus on capturing a comprehensive set of measures concerning childhood development. Seven questionnaires have been designed to cover a wide range of topics for all age cohorts from 0 to 14 years. The following table shows the questionnaires.

<table>
<thead>
<tr>
<th>Age-specific questionnaire</th>
<th>Age cohorts</th>
<th>Start</th>
<th>Topics covered</th>
<th>N (SOEP v33, 2003-2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>bioage01 (mothers)</td>
<td>0-1</td>
<td>2003</td>
<td>pregnancy and birth information, health of the child and the mother, temperament of the child, care situation</td>
<td>5,309</td>
</tr>
<tr>
<td>bioage03 (mothers)</td>
<td>2-3</td>
<td>2005</td>
<td>weight and height, child health, temperament, activities with the child, care situation, personality of the child, adaptive behavior of the child</td>
<td>5,807</td>
</tr>
<tr>
<td>bioage06 (mothers)</td>
<td>5-6</td>
<td>2008</td>
<td>weight and height, child health, activities of the child, care situation, personality, socio-emotional behavior</td>
<td>5,468</td>
</tr>
<tr>
<td>bioage08 (both parents)</td>
<td>7-8</td>
<td>2010</td>
<td>care and school situation, parental role, parenting goals and practices</td>
<td>4,835 / 3,328</td>
</tr>
<tr>
<td>bioage10 (mothers)</td>
<td>9-10</td>
<td>2012</td>
<td>child health, activities of the child, care and school situation, grades, homework, personality, socio-emotional behavior, educational aspirations and expectation of the parents</td>
<td>4,109</td>
</tr>
<tr>
<td>bioage12 (children)</td>
<td>11-12</td>
<td>2014</td>
<td>child health, activities of the child, care and school situation, grades, homework, personality, socio-emotional behavior, educational aspirations and expectation of the child, well-being of the child</td>
<td>1,777</td>
</tr>
<tr>
<td>bioage14 (children)</td>
<td>13-14</td>
<td>2016</td>
<td>child health, activities of the child, care and school situation, grades, homework, personality, socio-emotional behavior, educational aspirations and expectation of the child, well-being of the child</td>
<td>531</td>
</tr>
</tbody>
</table>

Table 1. From David Richter’s presentation

5. **Other topics included in the study**

- Well-being. The study has included sections on life satisfaction, affective well-being and sorrows.
- Personality traits. Questions included in the survey cover risk aversion, reciprocity, impulsiveness and patience, trust and fairness, personal networks, self-esteem, loneliness, anomie indicators, life goals.
- Health. The survey has included questions on physical and mental health, height and weight, smoking behavior, alcohol consumption, nutrition, active sports, sleep satisfaction, grip strength.
- Work. Some topics covered include working days per week, work hours per day, work on weekends and evenings, commuting, stand-by duty, managerial responsibilities, effort-reward
imbalance, justice of earnings, fringe benefits, minimum wage, employment.
• Intervention studies have been conducted. An example of this is a meeting with Chancellor Merkel that boosted participant’s interest in politics.

6. Advantages and challenges of panel studies

Some advantages of using panel data are the identification of important life events, the possibility of establishing causal effects, the control of time-constant heterogeneous variables, and the possibility to conduct trend analyses and decomposition of trends.

One of the key challenges of longitudinal surveys is sample attrition: some respondents may become unwilling to participate in the survey or change their address and contact information, effectively leaving the study sample. This can limit the accuracy of the data in terms of representing the population of interest. Another challenge is the introduction of new topics: the survey needs to adapt to change and add new questions. However, some old questions need to be kept and the survey time is limited.