German Time Use Survey 2012/13

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The third national Time Use Survey of the Federal Statistical Office since 2001/2002 and 1991/1992 is held in 2012/2013. This survey describes the time use structures of population groups and household types – in particular for topics related to policy on families, gender aspects and education. Also, the data collected have made it possible to construct a satellite system of household production in parallel to the National Accounts. The Time Use Survey 2012/2013 will provide information in particular about the time spent on employment, household activities, child care, education and cultural activities, voluntary work, social engagement, the time use of children and shared time in housework and child care. According to the recommendations of the Stiglitz-Sen-Fitoussi report additional questions of the subjective feelings of time use, like lack of time and wishes to spend time were included in the survey. The data are collected using household and individual questionnaires and a time use diary. Each person of over 10 years of age fills in a diary for three days, i.e. two weekdays and one Saturday or Sunday. The sample consists of 5,000 households including 12,000 individuals. The total sample size is evenly distributed over 12 months. The field work started in August 2012 and will be finished at the end of July 2013. The design of the new survey is comparable with the design of 1991/92. At the same time, the methodological requirements set by Eurostat for European Time Use Surveys (HETUS) are included in order to facilitate comparison with other states. The time use survey is much desired by many users of the data at home and abroad, such as the German ministries, academia and researchers as well as other organizations and associations who require up-to-date results.

Key words: sample size of 5,000 households and 12,000 individuals, household and individual questionnaires, three days diary, harmonised European time use activity coding list

1. Introduction

The German Time Use Survey 2012/2013 (German TUS) is the third one of its kind in Germany. In the process about 12,000 participants from the age of ten keep diaries, describing for three days each of their activities which take longer than ten minutes. Furthermore these participants have to answer questions about employment, voluntary work, use of care facilities, out-of-school activities of children and culture activities as well as questions about subjective feelings. The goal of the survey is to generate data including information about families’ workload and division of labour, child care as well as social engagement of all generations, different life situations of women and men as well as the time use of children and young persons. The time use data also provide information that takes the recommendations of the Stiglitz Commission (2009) into account, which suggest including into national accounts unpaid work of households as a basis of informative economic indicators. Measuring subjective well-being is a main topic of the Stiglitz Commission as well. Interrogating subjective evaluations of personal activities is one possibility to estimate the well-being of different population groups.

Shortly after the German reunification the first German time use survey was conducted in 1991/1992 including 7,200 households from different population groups. The goal was to help answering questions, particularly from topics of women and family policy, and to provide data for the satellite system of household production.

In 2001/2002 the Federal Statistical Office conducted the second time use survey[1], taking into account that this survey had to be comparable with the previous survey and with time use surveys of other countries. Before the field work started, in particular for financial reasons, survey instruments had been developed which replaced the direct questioning by interviewers as used in the first survey. As a consequence a method including two questionnaires – household questionnaire and personal questionnaire – and a diary was designed.

The concept of the current German TUS is based on the surveys of 2001/2002 and 1991/1992 and takes into account the international requirements in line with the HETUS guidelines (Harmonised European Time Use Surveys, Eurostat 2008). During a time period of 12 months (August 2012 – July 2013) about 5,000 households and about 12,000 persons will be questioned on a voluntary basis. Each person in the household, aged 10 years and older, is requested to fill in the individual questionnaire and the diary for three days. The activities will be recorded in an activity list.

The time use survey 2012/2013 in combination with the two preceding surveys shall contribute to picture trends of the time use of German households over a period of 20 years.

This paper presents the methods used for the current German Time Use Survey, describes the survey design and furthermore gives an insight into how the requirements of the *Stiglitz-Sen-Fitoussi Commission* (Stiglitz et al. 2009) are implemented in the content of the survey.

2. Method of the German Time Use Survey 2012/2013

2.1. Sampling design

The sampling of the German TUS 2012/2013 is based on quota sampling. The allocation of the quotas is based on data taken from the German microcensus for which citizens are legally obliged to give information. For quotation the characteristics of Land (federal state), household type (one-person households, couples without children, single parents, couples with children and not more than one parent employed, couples with children and both parents employed) and social status of the

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[1] For further information about the two previous time use surveys in Germany see Merz and Ehling (1999) or Ehling et al. (2001)

household member with the highest income (self-employed, public officials, salaried employees, wage earners, pensioners, other persons not engaged in economic activity) were used. Households that already participated in other household surveys were recruited according to the given quotas. In this process about a third of the households are taken from an access panel. This panel includes all households who, after the last microcensus, voluntarily agreed to participate in surveys of official statistics. In addition to the allocation to quota cells, given through the three characteristics, the sample was allocated into rural and urban areas using a classification of four municipality size classes. However, the results of this classification are not quotas but target values which should be reached as closely as possible in the sample.

The total sample size is evenly distributed over the whole 12-month period to avoid seasonal effects and also over all 365 days to cover all activities.

For estimation in the German TUS, a calibration method (Generalised Regression Method) will be applied. The same weight will be used for all individuals in the household. The calibration weights increase the accuracy of estimates, giving consistent estimates according to the variables that are included in the calibration method. The demographic variables, e. g. sex, age groups, level of education and employment status (working full-time or part-time, non-working), will be used as calibration variables.

A second weight will be used for the diaries in order to include non-response adjustment for missing diaries or days. The diary weight depends on the number of days an individual keeps a diary. By using calibration techniques, the diary weight will include seasonal correction where response rates and postponing have changed weekly or daily sample sizes.

2.2. Survey design

All participating households receive a household questionnaire at least two weeks before the beginning of their specific questioning period and each household member from the age of ten gets a personal questionnaire as well as a diary.

The household questionnaire includes 24 questions referring to household composition, housing situation, household net income, received assistance and the use of day care facilities for children under the age of ten.

The personal questionnaire has to be filled in by each household member from the age of ten. They answer about 40 questions referring to their labour force participation, their level of education or training, their use of school and out-of-school learning opportunities, their cultural activities and their voluntary engagement as well as questions about their subjective time perception.

Again the diary, which covers a total of 72 hours, is the core tool of the survey 2012/2013. Each person from the age of ten describes in his/her own words all performed activities, applying ten-minute cycles. The division into ten-minute intervals is consistent with the guidelines for Harmonised European Time Use Surveys (HETUS Guidelines 2008). Instructions and examples referring to the correct description of the activities are given in the diary. Besides the main activity there can be entered a secondary activity and the participants have to choose which secondary activity is their first one. Furthermore they have to describe with whom the time was spent during the activity and which means of transport was used for journeys that took longer than 10 minutes,.

The activities described in the diaries will be structured in an activity coding list covering 200 different activities. The coding list is based on the Eurostat recommendation (HETUS Guidelines 2008) and the list of the previous survey in order to make surveys more consistent and comparable, i.e. internationally on the cross-sectional level and nationally on the longitudinal level. The activity list keeps the main structure of the classification and generally the same categories. The changes introduced in the new activity coding list take into account rare frequencies (combined

with other codes) and new policy needs, for example, the division of the school subjects.
At the end of each day the participants are asked for additional information on their diaries, for example, when they filled out their diary exactly, whether the described days were usual or rather unusual days or if they did a longer travel during the diary day, and there are questions about the subjective time perception, too.
Short versions of the household and the personal questionnaires as well as the diary were tested in a qualitative pretest including 16 cognitive interviews.

3. Content issues of the German Time Use Survey 2012/2013 referring to the Stiglitz Report

One of the demands of the *Stiglitz-Sen-Fitoussi Commission* in 2009 was to record data that provide information about the society's quality of life and wealth and thereby to complete traditional national accounts. Also, in its guidelines that will be published soon, the UNECE (United Nations Economic Commission for Europe) Task Force on Time Use Surveys suggests that methods should be applied in time use surveys that can help answering that kind of questions.
The current time use survey in Germany tries to meet part of these demands. Hence there are questions in the personal questionnaire as well as in the diary about the subjective feelings of the participants and their assessment of whether they have enough time at their disposal for different activities.

3.1. Subjective questions in the personal questionnaire

In the personal questionnaire the participants are asked to describe their personal sensation about the time they spend on 13 different areas of life (e. g. household care, employment, personal interests or friends). More specifically they are asked whether or not the time they spent on these specific areas during the past four weeks was enough. They give their answer on a five-point scale from "totally enough" to "not at all enough". As the pretest shows, spending "not enough" time on an activity (e. g. household care) can either be attributed to time restrictions or to a lack of motivation. One has to keep this fact in mind when interpreting the survey results.
The second subjective question is about the topics of time stress and time wishes referring to oneself, family or friends. Here the participants can agree or disagree with statements regarding the topic on a five-point scale from "agree completely" to "disagree completely". Furthermore, at the end of the personal questionnaire, the respondents are asked about their time wishes. They can use their own words to answer the question "For which activity do you want to have more time?". By allowing a free description of the answer one gets all sorts of activities and the participants are not affected by a choice of possible answers. The answers are classified in the same way as is done with the diary activities.

3.2. Subjective questions in the diary

Besides the above questions about travels and characteristics of the day, additional personal questions about time perception are to be answered at the end of each day. The respondents are asked to describe the activity that gave them the greatest pleasure and as well the one that gave them the least.
Furthermore they are asked for which activity they would have liked more time during the past day. They describe the activities in their own words and code them on the basis of the coding list. The participants are only allowed to describe activities of the specific diary day.
The number of activities the participants can describe is not specified exactly. However, a maximum number of three different activities is assumed when processing the data.

The question about time wishes is picked up both in the personal questionnaire and the diary. However two different concepts are pursued for subsequent analysis: The personal questionnaire gives a general view about the time use, the diary is linked to specific diary days. For instance different time perceptions on weekdays vs. weekend days can be analysed.
The survey will show what problems may occur with the questions about subjective time perception, what new findings can be reached from the analysis and if they can be a useful addition according to the requirements of the Stiglitz Report.

4. Conclusions

The presentation will focus on the methodology of the time use survey 2012/2013. The German TUS' concept is based on the two surveys of 2001/2002 and 1991/1992 and takes the European requirements according to the HETUS Guidelines into account. During a period of twelve months (August 2012 – July 2013) about 5,000 households and about 12,000 persons will be asked on a voluntary basis. A household questionnaire and, for each person from the age of ten living in the household, a personal questionnaire will be completed and a diary kept. First results are expected at the end of 2014.

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