

## Basics: Psychological Research and the SOEP

### Overlapping Interests of Social Sciences with Psychological Research on ...

- ...well-being and life satisfaction
- ...life events (e.g., effects of marriage, divorce, unemployment)
- ...social relations and social support
- ...predictors of longevity/mortality
- ...cognitive resources (Symbol-Digit and Vocabulary tests in SOEP)
- ...job satisfaction & job rotation
- ...personality development (Big5 in SOEP)

→ **More and more psychological variables added to the SOEP**

### Combining Laboratory Experiments and Household Panels

#### Advantages of laboratory studies

- Extensive information on (multidimensional) psychological constructs that need to be measured with multiple items or multiple cognitive tasks
- Process analyses (e.g., daily variability, learning processes) based on several measurement occasions in micro-longitudinal studies

#### Advantages of household panel studies

- Longitudinal information with small drop-out rates
- Representative samples
- Details about the environment (Social, economical, vocational, and educational background information)

#### Getting the best of both worlds by integrating laboratory samples in panel studies

- Combination of complementary data
- Detailed analyses of sample selectivity
- Longitudinal follow-ups and sample maintenance
- Investigating long-term effects of participation in laboratory training studies

## An Example: The COGITO Study

### Background

For the first time in research on cognition, the COGITO Study (F. Schmiedek, M. Lövdén, & U. Lindenberger) provides sufficiently large data cubes (i.e., people x variables x occasions), allowing us to compare systematic relations of different psychological variables not only at the between- but also at the within-person level. Major aims of the study are the investigation of several aspects of intraindividual variability across the adult lifespan: (a) age differences in performance fluctuations at different time scale levels, (b) comparisons of between- and within-person structures of variability in cognitive performances, (c) the effects of a comprehensive list of potential influences on day-to-day fluctuations in cognitive performance, and (d) behavioral and brain plasticity of cognitive functioning due to intensive practice.

Funding: MPI for Human Development and Innovation Fund of the Max Planck Society

### Variables

#### Daily sessions

Cognition: 3 working memory, 3 episodic memory, and 6 perceptual speed tasks

Self report: events, affect, self-regulation, motivation, sleep, subjective health

Visual acuity

#### Pretest and Posttest

Cognition: Comprehensive battery of cognitive ability and potential transfer measures, paper&pencil intelligence tests, MMSE

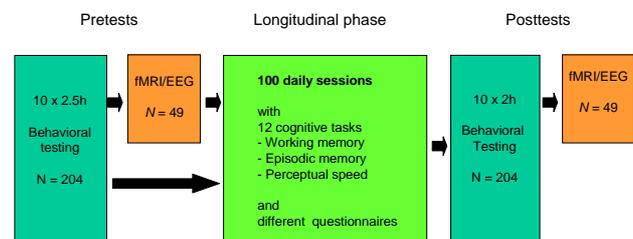
Self report: Personality (e.g., NEO-PI-R, Control beliefs), Well being (e.g., PANAS-X, Life satisfaction, CES-D), Life events (e.g., major/chronic life events, perceived stress), Self-regulation (e.g., emotion regulation, stress coping), Activities (e.g., Sports, Community engagement), ADL/IADL, Social Support, and many more...

### Samples and Design

Based on a "convenience sample," 101 younger (20-31 years) and 103 older (65-80 years) adults participated in 100 daily sessions, in which they worked on a comprehensive cognitive test battery and several self-report measures.

In addition, all participants completed comprehensive pretests and posttests with baseline measures of cognitive abilities and transfer tasks for the practiced abilities. Furthermore, several functional and structural brain measures (fMRI, MRI, DTI, EEG) were collected for sub-samples of younger and older participants at pre- and posttest. A control group, consisting of 44 younger (21-29 years) and 40 older (65-81 years) adults, completed pretests and post-tests without any daily sessions in between.

Currently, a two-year follow-up is underway, which includes the medical examination and DNA sampling of the BASE II Study (**see Poster on BASE II**).



## COGITO goes SOEP

### COGITO Participants are assessed "SOEP-like"

To prepare for the assessment of the COGITO participants according to the SOEP procedure, participants were contacted by MPIB. All participants of the main study and control group were informed about the SOEP and were asked to participate. A workshop for SOEP interviewers was organized with the SOEP Survey Group and Infratest Sozialforschung informing them about the special background of this new sample.

So far, about 70% of the study participants provided their written consent to be interviewed by the SOEP interviewers. Most of the first wave of interviews were conducted during summer 2008. Second wave interviews are currently under preparation.

Up to now sample sizes are  $N = 142$  (90 older, 52 younger adults), for the main study group and  $N = 59$  (39 older, 20 younger adults), for the control group.

Funding Wave 1 and Wave 2: BMBF

### Exemplary Research Questions

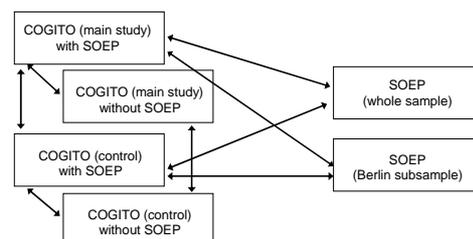
#### Social support and objective and subjective health (Dissertation Julia K. Wolff)

The aim of this dissertation is to investigate the association of social support and health with the data of the COGITO Study. The SOEP data allows to map social networks of the participants. Also, it will be very helpful to know the representativeness of especially the older age group concerning health status to draw conclusions about the generalization of the results.

In addition, the integration of some SOEP measures in a currently conducted COGITO follow-up study will be useful to compare the whole sample, even the participants that were not willing to participate in the SOEP, with the SOEP data.

### Possible Selectivity Analyses

The COGITO Study is a highly demanding study for its participants; therefore the potential for selection effects is large. The integration of COGITO into SOEP assessments provides various opportunities for selectivity analyses:



### Future Perspectives

Making COGITO a permanent SOEP sample (as a "Related Study" or part of an "Innovation Sample") will in the long run provide longitudinal data of a highly trained population. Research questions about the influence of a laboratory training on, for example, reactions to major life events can be addressed.

Tracking the residence of participants through the SOEP panel maintenance will facilitate possible additional COGITO follow-ups.