



## Mobile Phones as Assessment Instruments

### *Experience Sampling Is Feasible in Survey Research*

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#### Experience Sampling

= Repeated sampling at short intervals (few hours) of *momentary* experiences (events, behaviors, feelings, thoughts ...) in the individuals' *natural* environments

#### Benefits

##### Methodological

- **Minimization** of retrospective memory biases and aggregation effects
- **Maximization** of ecological validity

##### Conceptual

- Assessment of **short-term** within-person processes
- Insights into role of daily-life **contexts**

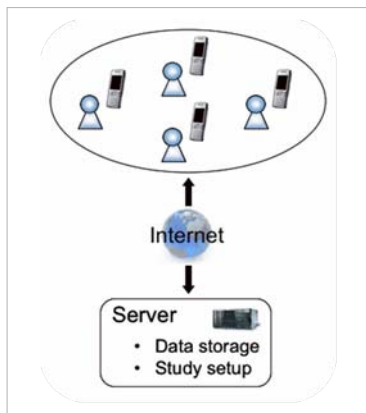
#### Purpose of this Cooperation

- Make Experience Sampling feasible in **survey** research (especially in SOEP)

#### Requirements

- Manageability in large and widely distributed samples
- Flexibility (i.e., easy study setup, accommodation of various item and task formats and assessment schedules)

## The Technology



#### Mobile Phone

- Control of assessment schedule
- Display of items and tasks
- Input of responses
- Data upload to server

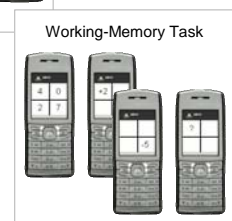
#### Server

- Data storage
- Web Interface
  - Study setup and modification
  - Display of individualized assessment schedules
  - Visualization of response compliance



Survey Questionnaire

**Innovative Feature:**  
Assessment of self-report and cognitive tasks in daily life.



Working-Memory Task

## First Application Successful: Affect Regulation from Youth to Old Age

#### Research Interest

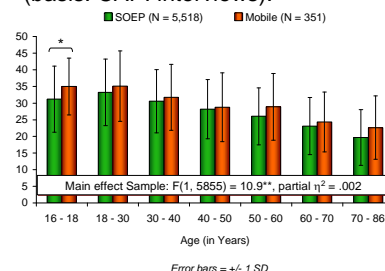
- How does **affective self-regulation**—its strategies, effectiveness, and cognitive requirements—develop from youth to old age?

#### Method

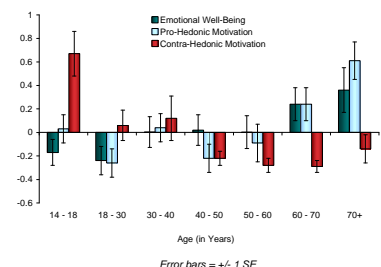
- $N = 378$  (14 to 86 years), pretest sample (Berlin, Munich, Duesseldorf), administered by TNS Infratest Sozialforschung
- Baseline and "exit" interviews (CAPI)
- Interviewer survey (PAPI, self-administered)
- $M = 54$  experience samples per person
- Assessment of momentary context (location, activity, social partner), events, affect, regulation goals and strategies, working-memory capacity

#### Two Exemplary Findings

- Participants **approximately comparable** in fluid-cognitive abilities (perceptual speed) with age peers in SOEP (basis: CAPI interviews).



- Age differences in daily-life emotional well-being **mirror** those in pro- and contra-hedonic motivation.



## (Preliminary) Conclusion and Outlook

- Mobile technology makes Experience Sampling feasible for survey research → Potent supplement to standard survey methods in suitable subsamples of SOEP (and other studies)
- Many possibilities for combinations with further innovative assessment methods, for example, ambulatory bio-monitoring (e.g., cardiovascular and physical activity) or location tracking → First tests under way