

Affective Self-Regulation in Day-to-Day Life: Applying Mobile Technology as a Research Instrument

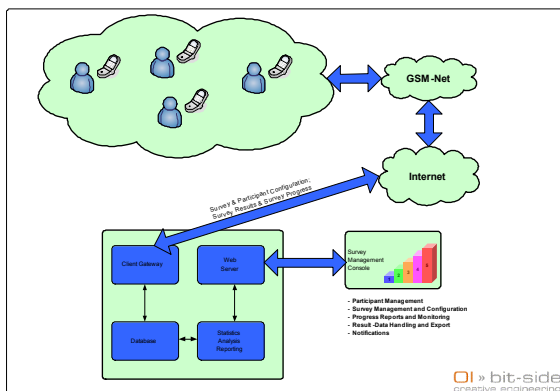
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Two Central Purposes

- 1. Development** of a technology that makes micro-longitudinal components feasible in heterogenous samples (e. g. large-scale household panels)
Requirements:
 - **Manageability** in large and widely distributed samples (i.e., mobility, management facilities for data collection and storage)
 - **Flexibility** (i.e., easy study setup, accommodation of various item and task formats, implementation of complex assessment schedules)
 - **Ecological validity**
- 2. First application** of technology in a study on the development of day-to-day affective self-regulation

Ad (1): Technology Development: Experience Sampling with Mobile Phones

- **Java-client** on mobile phones
 - Control of assessment schedule
 - Display of items and tasks
 - Input of responses
 - Immediate data upload to server
- **Server**
 - Data storage
 - Web interface
 - Study setup and modification
 - Display of individualized assessment schedules
 - Visualization of response compliance



Planned Extensions

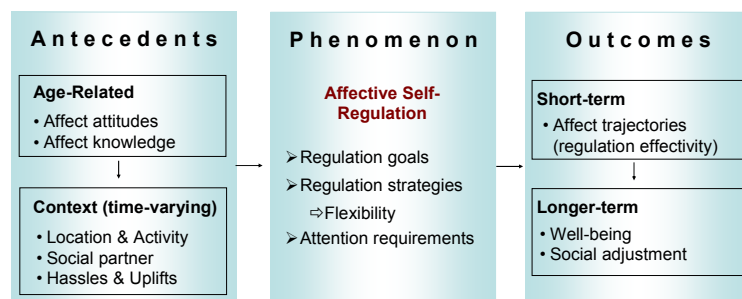
- 1. Psychophysiological monitoring in daily life (Co-PI: Viktor Müller)**
 - Combination with ambulatory monitoring via Varioport (Becker Medtec)
 - Planned foci: Physical activity, cardiovascular activation
- 2. Interactive Experience Sampling**
 - Implementation of event-contingent assessment schedules in social systems (including low-frequency events, like marriage, divorce, employment, re-employment)

Ad (2): An Application in Progress: Day-to-Day Affective Self-Regulation from Adolescence to Older Adulthood

- **Affective self-regulation:** Ability to influence **which** affective states to have, **when** to have them, and how to **experience** and **express** them (e.g., Gross, 1999)
 - Few studies suggest age-related improvement in affect-regulation competence throughout adulthood (e.g., Gross et al., 1997; Lawton et al., 1993; but see Kunzmann et al., 2005)
 - Evidence on age-related changes in affective self-regulation as it occurs in people's day-to-day lives and natural environments is limited (Carstensen et al., 2000)
- **This study:**

How do **phenomenology**, **effectiveness**, and **attentional requirements** of day-to-day affective self-regulation develop from adolescence to older adulthood?

Working Model



Exemplary Predictions (Selection)

- Affect-regulation effectiveness increases from adolescence to older adulthood. This is not (solely) due to differences in exposure to affect-eliciting events, but (partly) due to differences in affect attitudes, affect knowledge, and affect-regulation flexibility.
- Attentional demands of affect-regulatory attempts are stronger the more intense the to-be-regulated affect is, and increase with age from adolescence to older adulthood (not necessarily linearly).

Method of Pretest

$N = 270$; 14 to 80 years, stratified by age, gender, education
T1 (Questionnaires) γ Experience Sampling γ T2 (Questionnaires)
54 experience samples:

- 3 x 3 days, 6 daily assessments, additional days when missings
- Assessment of momentary context, hassles and uplifts, at regulation goals and strategies, and numerical memory updating