



Data and Measurement of Tasks

Daniela Rohrbach-Schmidt (Chair)

BIBB/IAB Workshop 'T.A.S.K.S.', May 17-18, 2010,
Nuremberg



Discussion

- Data: unit of analysis and data collection mode: measures the worker- the occupation and the firm-level; questions and response options, scales
- Quality criteria: content / criterion / construct validity, reliability of job content measures (STAMP: explicit scaling, anchored rating scale response format)
- Operationalization of task-schemes (e.g. the ALM-scheme) / degree of repetitiveness / routinization ? Classification of job tasks into distinct generic domains?
- Opportunities to capture skill / task demand change / trends between and within occupations
- Cross-national comparability of measures / applicability of data (skill / task distribution within jobs – over time, validity of routine/non-routine measures across countries; functional equivalence of measures)
- Future challenges / prospects



Selected Data

- **Worker- level (employee assessment)**
 - GER: BIBB/IAB-BIBB/BAuA 1979, 1985/86, 1991/92, 1998/99. 2006, 2011/12; NEPS 2010/11 (*panel*)
 - SWE: LNU 1968, 1974, 1981, 1991, 2000, 2010
 - US. STAMP 2004-2006
 - UK: UK Skills Survey 1997, 2001, 2006;
 - Cross-national: EU: ESS: 2004, 2011; OECD: PIACC: 2011
- **Firm-level (employer assessment)**
 - IRL: NEP (linked employer-employee)
 - UK: NESS 2003, 2004, 2005, 2007, 2009; WIRS/EMPSPS/WERS 1984, 1990, 1992, 1998, 2004;
 - GER: QP (BIBB Qualification Panel) 2011-2013;
 - Cross-national: EESS?
- **Occupation-level (expert ratings, aggregated employee assess.)**
 - US: O*Net (DOT) 1960-
 - Cross-national (EU): ESCO 2011



Items, Questions and response options, scales

- **Generic skills / tasks**
 - Domains (cognitive ('data'), interactive/social ('people'), learning, physical ('things'), computer skills) → classification of job tasks into domains
 - Frequency / importance scales
 - No. of items
- **Repetitiveness / routinization**
- **Substitutability / complementarities to computer use**
- **Task discretion** (autonomy, authority, supervision)
- **Skill requirements** (qualification required to get - do the job; workplace instruction req.) and **skill utilization**
- **Skill changes** (changes in skills, organization, technology, staff, task discretion, aspiration for training / acquisition of skills, time frame?)