Bias in Health Data

Organized by Christiane Gross and Rasmus Hoffmann

Autumn Conference of the Section Sociology of Medicine and Health of the German Sociological Association

03/04 October 2013 European University Institute, Florence, Italy



Bias in Health Data

The conference "Bias in Health Data" was located in the wonderful city of Florence and covered several recent findings in the field of public health and methodology. Presentations focused on diverse challenges in measuring health outcomes and predictors such as the gender bias in measuring depression, applying differential item functioning (DIF) to identify measurement bias by group membership, estimating the correlation of education and health over time by referring to relative and absolute educational level, and survey methodological effects occurring when changing the mode of data collection. Studies dealing with self-rated health (SRH) as the most prominent health outcome refered to the intra-individual consistency in answering two different versions of SRH, the biases of SRH by a social event such as the 2011 earthquake in Japan, and differences in self-rated diseases versus diseases measured by blood tests. Consequences of biases for the results in health research have been shown by reconsidering the healthy migrant effect or the causal relationship of socioeconomic background and health. Further approaches criticized the postulated objectivity in facial analysis and resulting aesthetic reconstruction and presented biases that occur by varying acceptance of using new technologies. The open session contained several talks about explaining health decisions, which has a great impact on (bias in) register data.

Programme Thursday, 03 October 2013

Session 1: Theoretical overview:

• Picking up the Pieces – Applying the Disease Filter to Health Data. *Christiane Gross (University of Konstanz), Thomas Schübel (FAU Nuremberg)*

Session 2: Diverse measurement problems:

- Cumulative advantage and health: The absolute and relative role of education. Liliya Leopold, Thomas Leopold (EUI)
- A concurrent mixed mode design to reduce non– response and social desirability bias in health surveys. Gerhard Krug (IAB Nuremberg), Johann Carstensen (FAU Nuremberg), Peter Kriwy (TU Chemnitz)
- Gender and mode bias in the measurement of depression Evidence from the German lidA– study. *Karolin Hiesinger, Anita Tisch, Silke Tophoven (IAB Nuremberg)*
- Detecting bias in health– related survey instruments using differential item functioning analysis. *Holger Muehlan (University of Greifswald)*

Session 3: Self-rated health:

- Do Social Contexts Influence Self– rated Health in Adults? An Analysis of using Repeated Cross– Sectional Survey. Jimpei Misawa (Rikkyo University), Kazunori Kikuchi (TMIG Tokyo), Rika Otsuka (NCGG, Obu)
- When we know more than our respondents do... Evaluating health of SHARE respondents based on selfreports and dried blood spot samples. Luzia Weiss (MPI Social Law and Social Policy, MEA Munich)

Session 4: Consequences of biases for results

- Measurement biases and their effect on causal interpretations in health inequality research. Hannes Kröger, Eduwin Pakpahan, Rasmus Hoffmann (EUI)
- Health related life chances of migrants: The healthy migrant effect and beyond. Johann Carstensen, Anja Gottburgsen, Monika Jungbauer— Gans (FAU Nuremberg)

Programme Friday, 04 October 2013

Session 5: Normative aspects

- Measuring facial 'wrongness': Interpretation bias in clinical diagnosis. Tony McHugh
- Gaining trust in technology: Biases in qualitative research. *Elias Sahrai, Uwe H. Bittlingmayer, Eva Bitzer (PH Freiburg)*

Session 6: Open session: decision making

- Decision

 — Making Processes in Disability Assessment Procedures. A Qualitative Research Study.
 Susanne Bartel, Heike Ohlbrecht (HU Berlin)
- Decision

 making in the context of neonatal intensive care units: An empirical study on clinical practices. Sarah Maria Büsing, Katja Schaeffer (University of Oldenburg)
- Healthcare— Seeking by Older People in Germany The social and institutional context of decision—making in the case of sickness (HEALSEE). Claus Wendt, Monika Mischke, Nadine Reibling (University of Siegen)

Session 7: Open session: applied research

- Health risks in employment histories in Germany's hotel and restaurant industry the long way towards sustainable employability. Kerstin Guhlemann, Olaf Katenkamp, Arno Georg (TU Dortmund)
- Public Health and the crisis: How are health outcomes in the Mediterranean countries determined by socio—environmental living conditions and stress? Sabine Israel (University of Oldenburg)
- discussion and conclusion

