closer
The home of longitudinal research

Cross-study research

Opportunities, challenges and examples

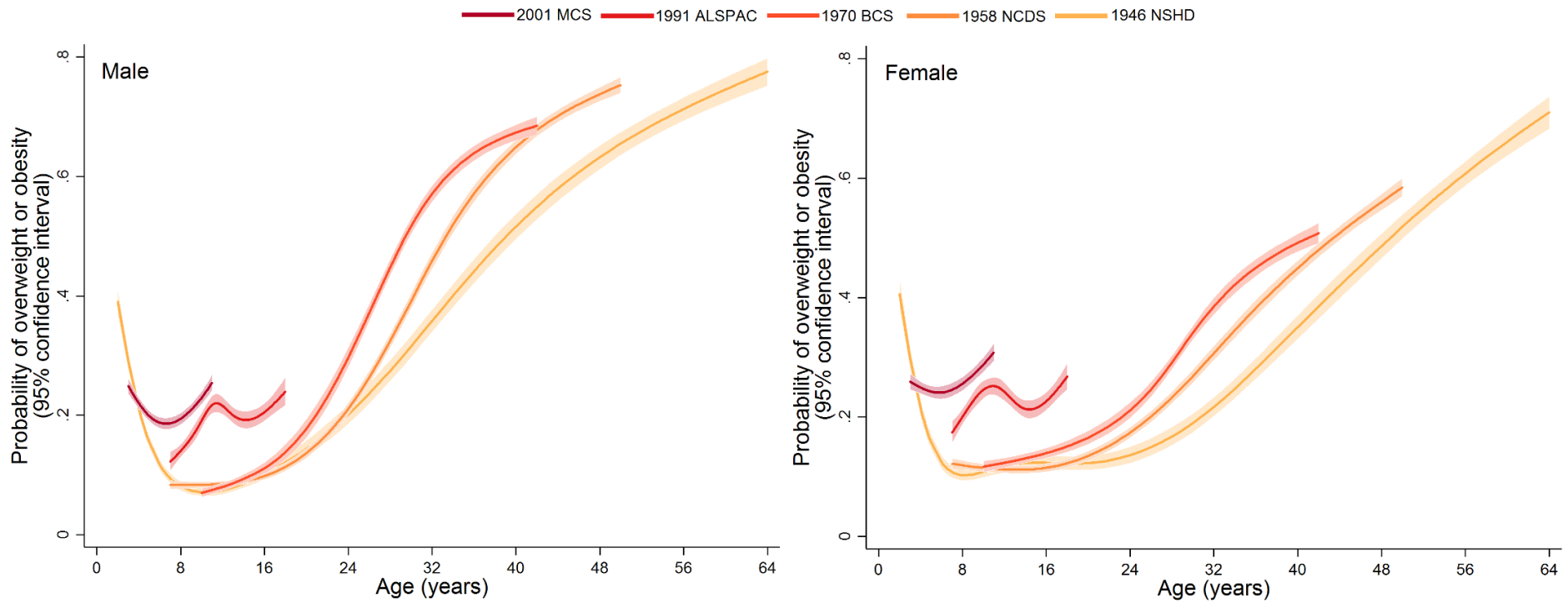
MRC Unit for Lifelong Health and Ageing

E·S·R·C ECONOMIC & SOCIAL RESEARCH COUNCIL

UCL

MRC Medical Research Council

Trajectories of the probability of overweight or obesity (versus normal weight) by cohort



Johnson et al. Plos Med 2015

Outline of the day

- Session 1: CLOSER data harmonisation
- Practical exercise
- Lunch
- Session 2: Cross-study research: examples
- Coffee break
- Session 3: CLOSER resources
- Key themes and where to next

closer
The home of longitudinal research

Cross-study research

Opportunities, challenges and examples

Key themes and where to next

MRC Unit for Lifelong Health and Ageing

E·S·R·C ECONOMIC & SOCIAL RESEARCH COUNCIL

UCL

MRC Medical Research Council

Key themes

- Harmonisation depends on the scientific question (and studies included)
- Harmonisation of concepts versus harmonisation of variables
- Balancing act – comparison versus detail
- Data analysis approach is dependent on the level of harmonisation achieved
- Calibration using external data sources can be helpful
- The use of sensitivity analyses is important
- Harmonisation challenges exist across multiple waves within one study as well as across studies
- Documentation and meta-data for harmonised variables (and within studies) are vital

Common technical challenges

- Whether/how to impute missing values
- Prospective versus recall
- Differences in measurement protocols
- Harmonising samples across studies
- Cultural norms/translation

Future?

- Deposited harmonised datasets
- Role of data platforms/repositories (e.g. CLOSER Discovery)
- Co-ordination of calibration studies
- Prospective harmonisation