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Circumstances in Development and Social Class Differences in Adulthood Depression

Evidence from the National Child Development Study

Context

- Increasing
- Inequality of mental health morbidity by Social Class
- Variation evident by
  - Age
  - Sex
  - Geography
- Impact on primary care facilities

Some Risk Factors…

- Low Birth Weight
- Bottle-fed in infancy
- Lower IQ
- Lack of social or parental support
- Poor quality housing in childhood
- Low income or financial insecurity
- Poor physical health
- Low educational achievement

Research Question

Which risk factors for depression during development influence the social class gradient of depressive tendency in adulthood?

- ⌘ *Are class differences in risk factors a sufficient explanation?*
- ⌘ *What are the most influential determinants of poor mental health?*

# National Child Development Study (NCDS, 1958 cohort)

- All those living in Great Britain born between 3rd-9th March 1958 (N=18,000)
- Data collected at birth, 7, 11, 16, 23, 33 & 42 years of age
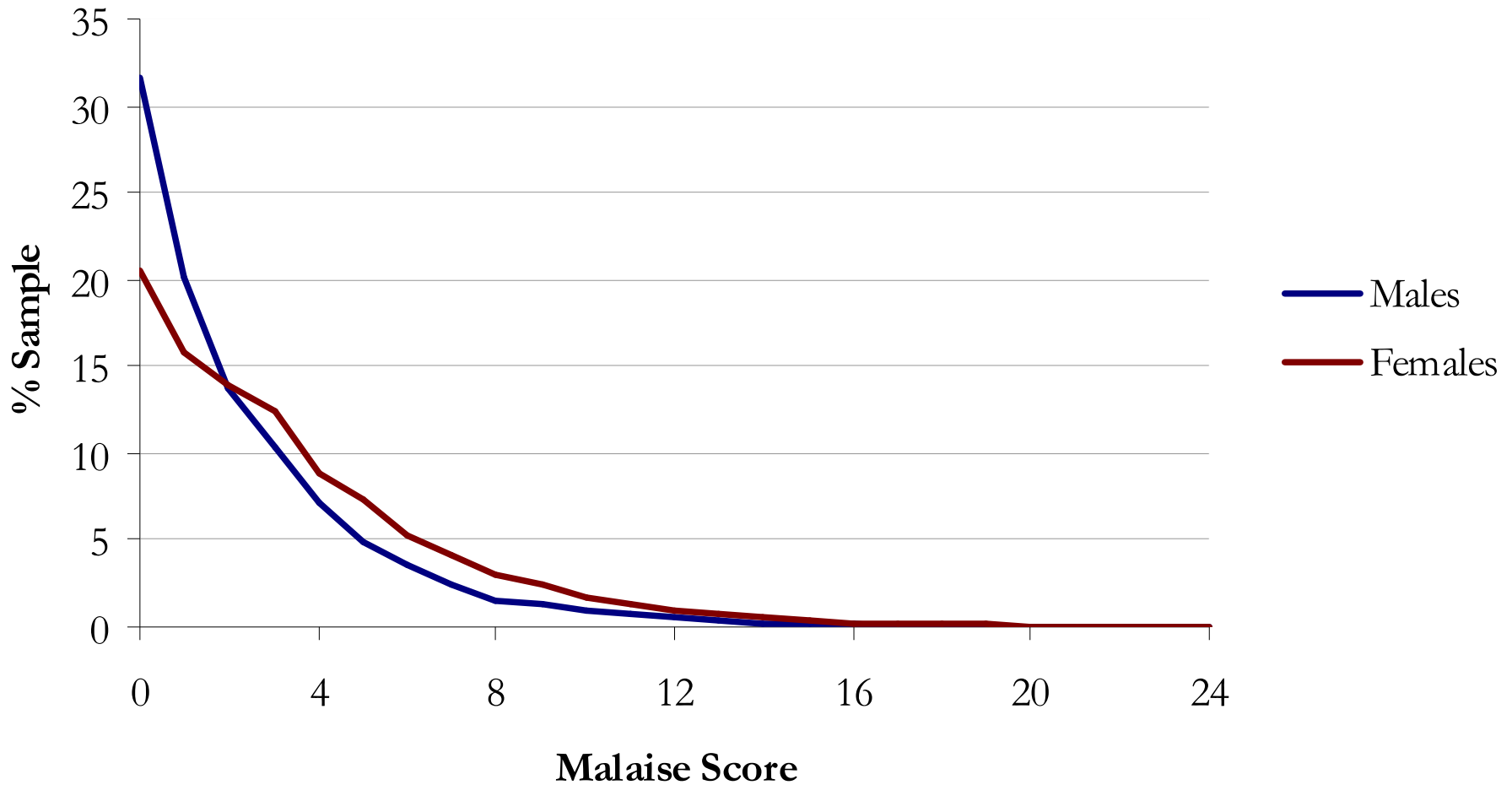- Rich data on multiple aspects of life at each 'sweep'

Malaise Inventory

- Population measurement of 'depressive tendency'

- Simple sum of a 24 question inventory of dichotomous questions ('Yes'=1 'No=0')

- Measured in NCDS at 23, 33 & 42

- Inventories with less than 21 responses not used, those with 22-24 responses treated for missing values
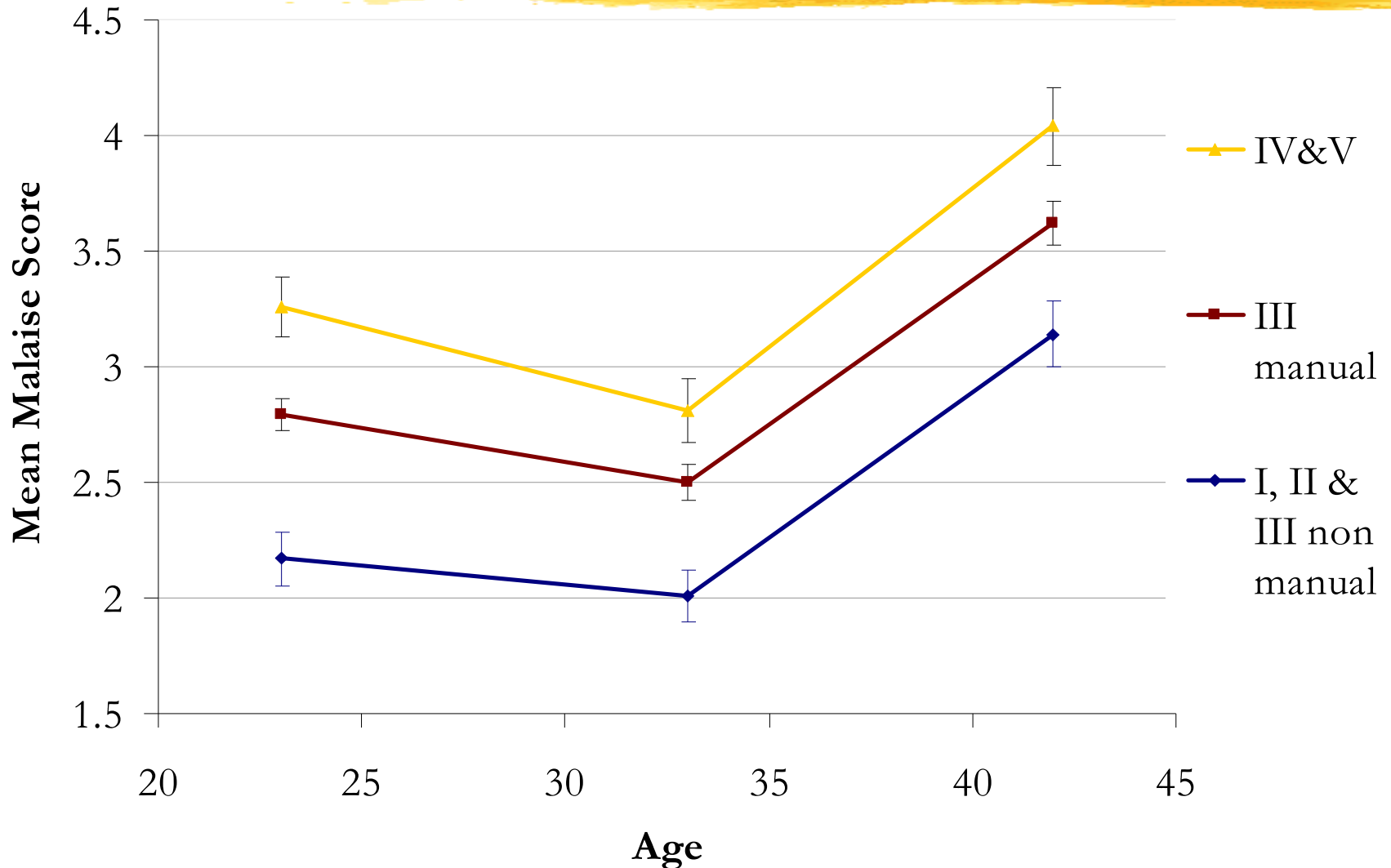
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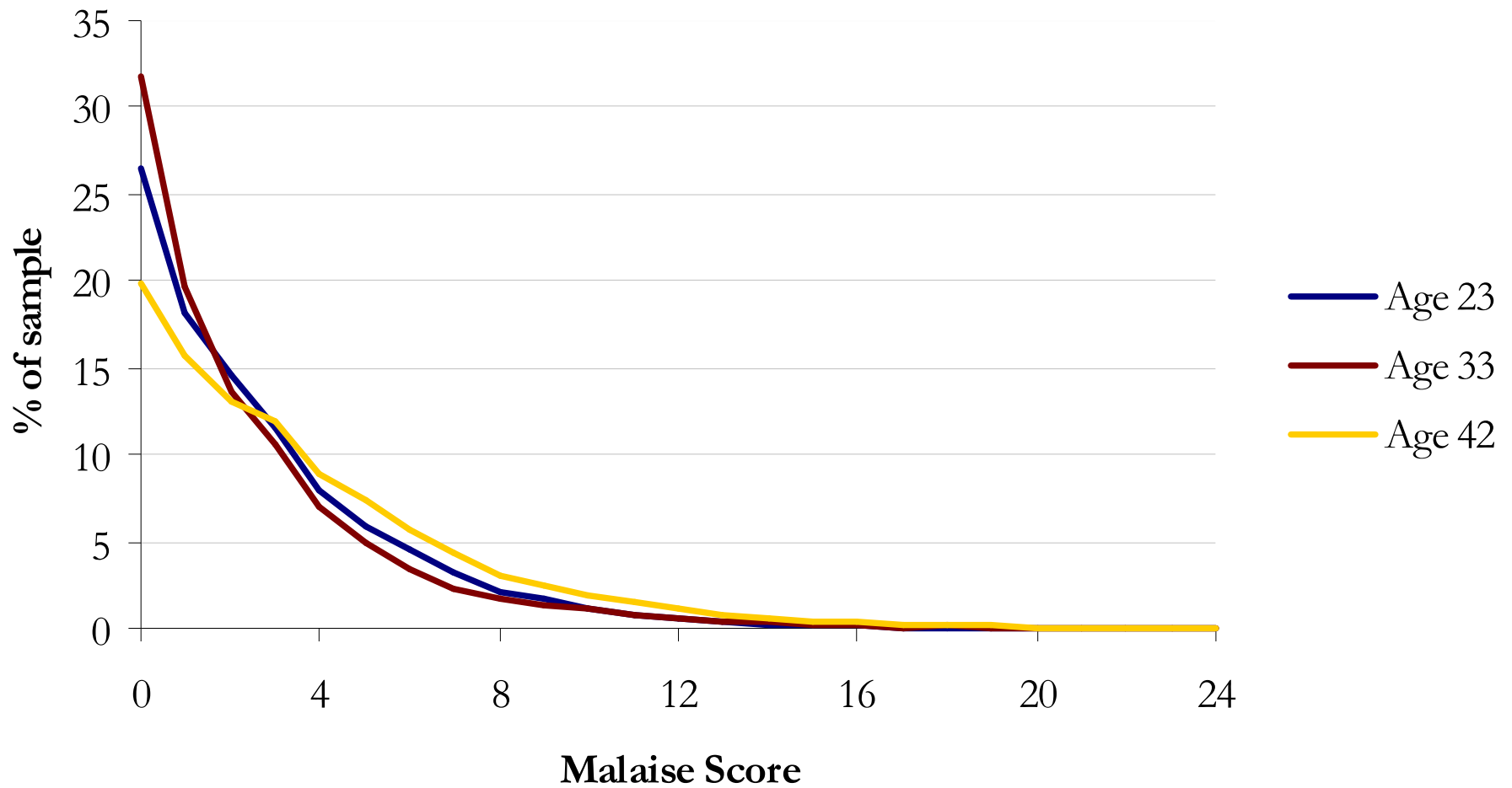
Sex Differences

Class & Age Variation

Changing depressive states

Depressed (D) or Not Depressed (N) at 23 33 42	%	Grouped %	Further %
D D D	1.56	1.56	
D D N	0.73		
D N D	1.40	3.96	
N D D	1.84		17.14
N N D	7.11		
N D N	1.64	11.62	
D N N	2.87		
N N N	82.86	82.86	82.86
Total	100	100	100

Regression Analysis - method

- Multiple linear regression models fitted
- Control variables from infancy, childhood & adulthood
- Regressions initially performed on each separate age survey (23, 33, 42)
- Final regressions combined all survey inventories & adjusted additionally for age

Regression Analysis - controls I

- Sex
- Birth weight
- Breastfeeding
- Ethnicity
- Parity
- Family Size
- Geographical Region
- Housing Tenure (age 7, 11, 16)

Regression Analysis - controls II

- Crowding (age 7, 11, 16)
- Health Abnormality (age 7, 16)
- Maths ability (age 7, 11, 16)
- Reading ability (age 7, 11, 16)
- Financial Hardship in family (age 11, 16)
- Parental divorce (up to ages 7, 11, 16)
- Geographical mobility (birth to 16)
- Parental interest in education (ages 7, 11, 16, both maternal & paternal)

Regression Analysis - results I

- ⌘ Crude Linear Regressions
  - ⌘ Significant increases in mean malaise score with SES (p<0.001)
  - ⌘ Malaise score increased by 0.51, 0.76 and 1.15 points for each respective SES group
  - ⌘ Significantly higher malaise among women (p<0.001)

Regression Analysis - results II

⌘ **Adjusted Linear Regressions**

   ⌘ **Non Significant differences in malaise scores between SES groups (p>0.05)**

   ⌘ **Significantly higher malaise among women persists (p<0.001)**

   ⌘ **Factors with most explanatory power include maths score, financial hardship & parental interest in education**

Conclusions

- Significant gradient with social class
- Episodic in nature
- Large and persistent gender difference
- Gradient can be eliminated by relatively few factors: thus differences can be explained by differentials in risk factors between SES groups
- Factors in infancy, childhood & adolescence all play a role

For electronic versions of full project please email laura.woods@lshtm.ac.uk