

# How does migration relate to health and wellbeing in Later life in China

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# Background

- Dramatic social, economic and political changes:
  - Second Sino-Japanese War;
  - Cultural Revolution; and
  - Economic reform in 1978.
- The urban population has increased from 17.9% of total population in 1978 to 51.3% in 2011.
- Among the urban population about half are migrant workers (rural to urban migrants) (252 million people in 2011).

# Existing literature

- Most studies of migration in China have focused on temporary rural-to-urban migration after the market reform, it has neglected wider forms of migration and more historic forms of migration.
- Also the literature has generally looked at relatively young migrants, and ignored the long run effects of migration.
- And largely neglected the impact of migration on health and well-being.

# Linking Migration and Health

- In this study we investigate the drivers of differences in health outcomes according to migration status in China.
- We adopt a life-course perspective in our framework.
- Our analytical framework is grouped according to three themes:
  - pre-migration experience,
  - selection processes; and
  - post-migration experience.
- And we focus on pathways connecting these themes to health and wellbeing in later life.

# Pre-migration experience

- Critical/sensitive periods (fetal origins hypothesis)
- Accumulation of advantage/disadvantage
- Pathways model
- Consider trajectories
- Pre-existing rural/urban inequalities in China

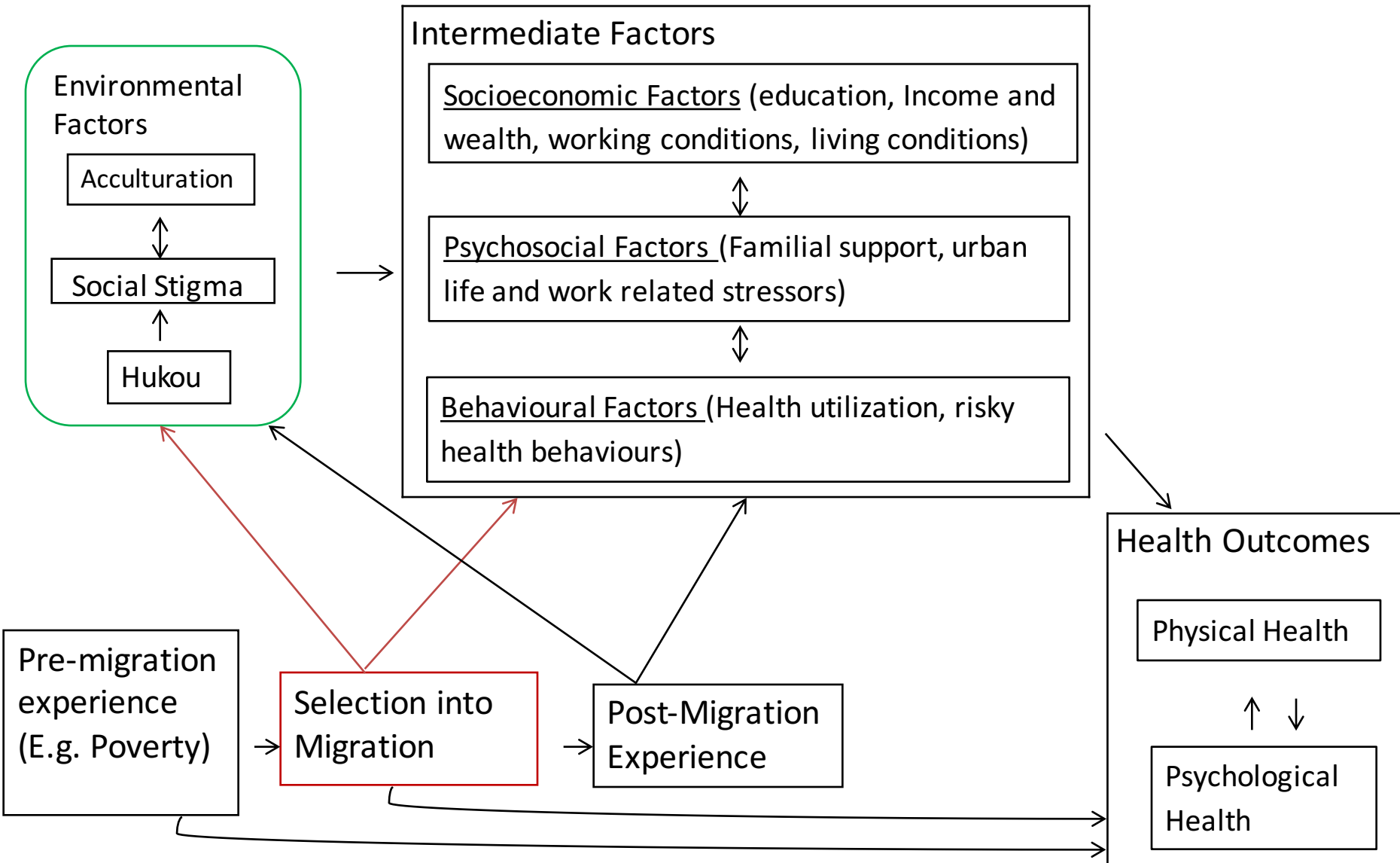
# Selection Processes

- The healthy migrant hypothesis, i.e. those who are healthier initially are more likely to move.
- Favorable selection also in educational level, earnings and some personal characteristics, such as willingness to take risk.
- The unhealthy return-migration hypothesis, i.e. unhealthy immigrants tend to return home.

# Post-migration experience

- Environmental factors:
  - Acculturation
  - Social Stigma
  - Hukou status, loosely similar to an internal passport system
- Intermediate factors (or pathways):
  - Socioeconomic factors: education, income and wealth.
  - Psychosocial factors: familial support.
  - Behavioral factors: risky health behaviors.

# Theoretical Framework





# Research questions

- In this study, we apply this theoretical framework to ask:
  - What are the long run health impacts of different types of migration in China?
  - Do these health impacts differ by different types of migration in China?
  - How much of the relationship can be attributed to the selection processes?
  - What are the likely causal mechanisms?

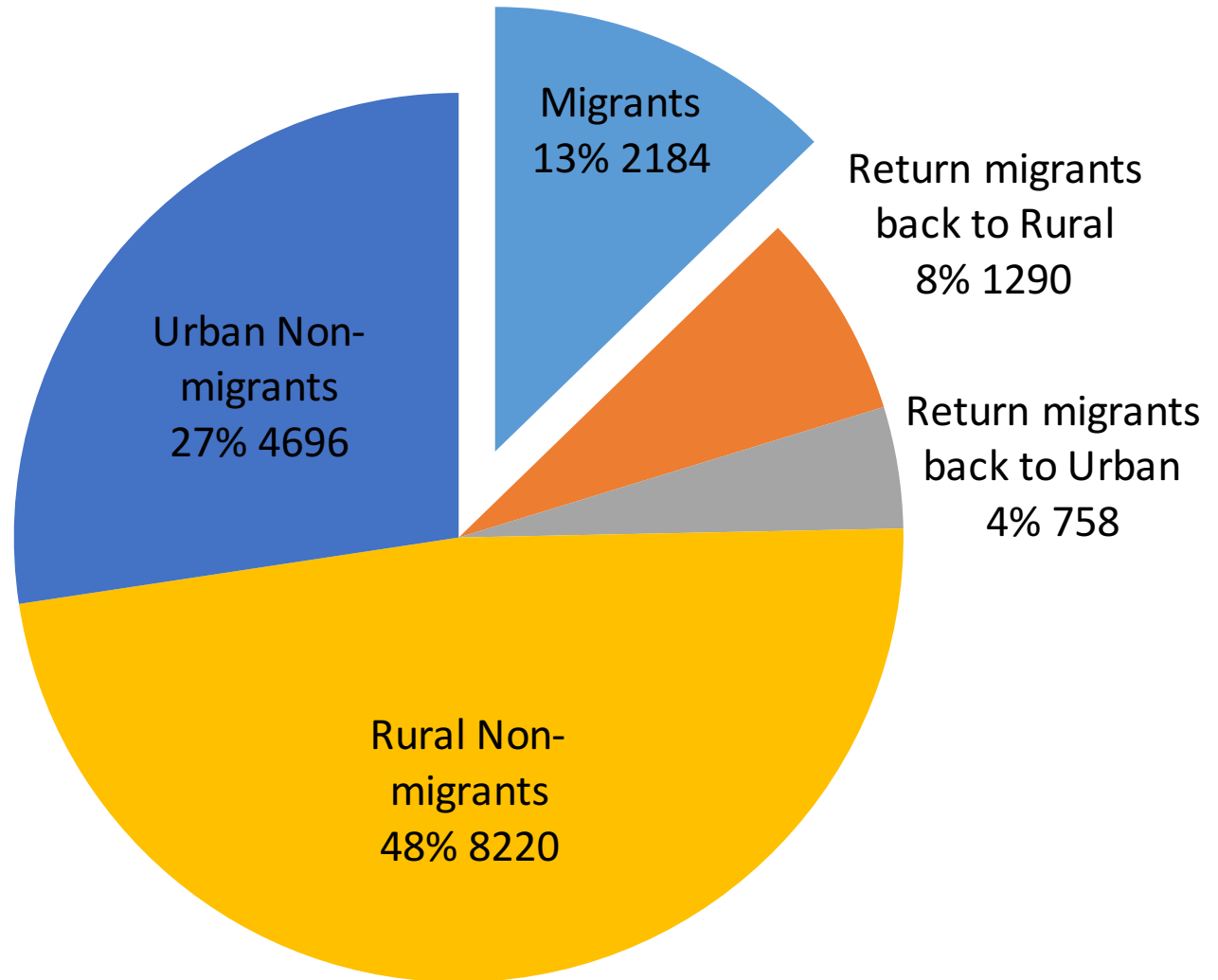
# Data and Methodology

- The China Health and Retirement Longitudinal Study (CHARLS).
- A nationally representative longitudinal dataset of people aged over 45 in the Chinese population.
- Detailed interdisciplinary data source on health and socioeconomic circumstances of elder individuals and some information on migration history.
- We use 2011-12 National Baseline, 17,000 individuals and 450 communities.
- Designed based on the Health Retirement Study(HRS) and the English Longitudinal Study of Ageing(ELSA).

# Defining migrants

- Data on migrants is typically partial and often poor.
- Varying definitions of migrants.
- In this study, migrants are defined as people whose current resident places are different from their birthplace and not in the surrounding town or city.
- The appropriate comparison group, never movers still at the point of origin.

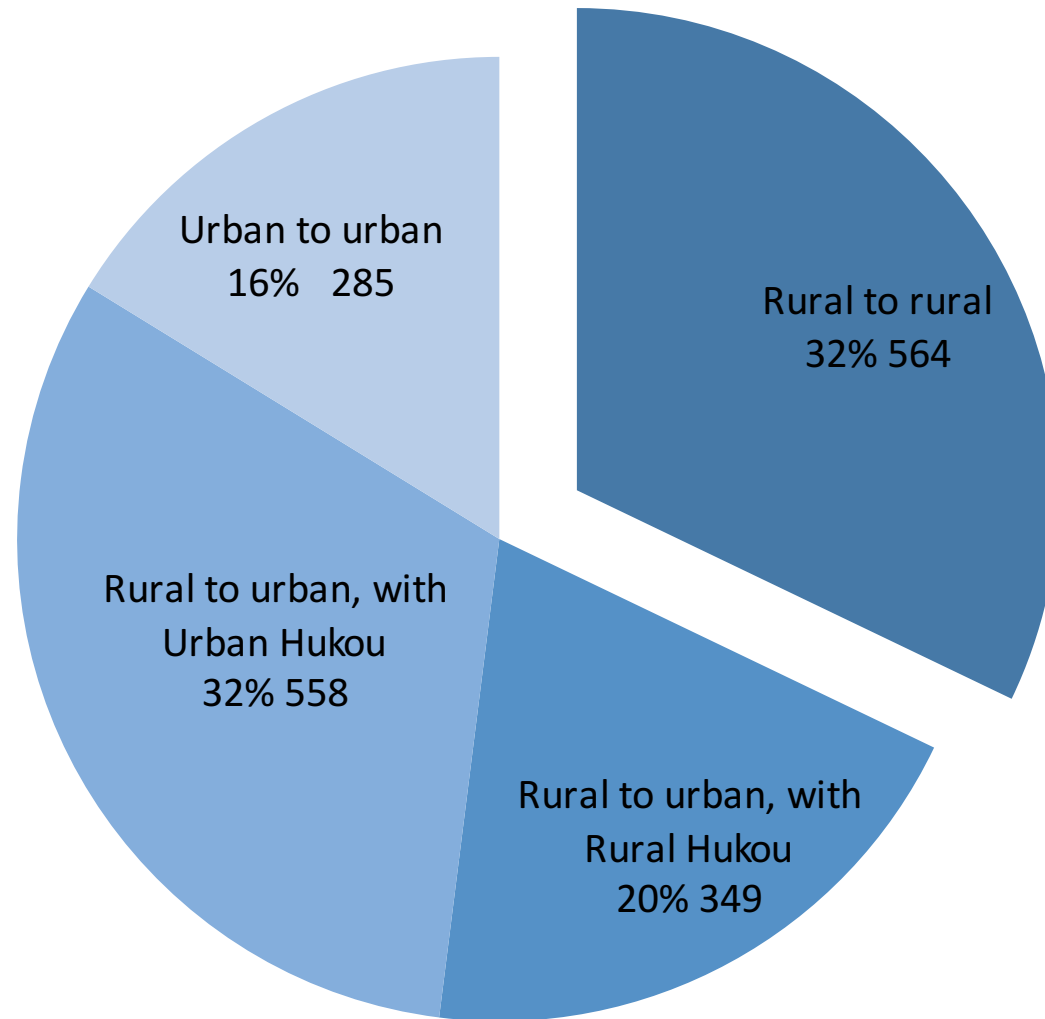
# Chart 1a Classification of Migrants in the CHARLS



# Identification Strategy

- To address the healthy migrant effect and the return migrants bias:
  - In the treatment variable, we exclude return migrants from the never movers;
  - Exclude early life migrants (migration age  $<16$ );
  - And control for some pre-migration early-life factors.

# Chart 1b Classification of Migrants in the CHARLS

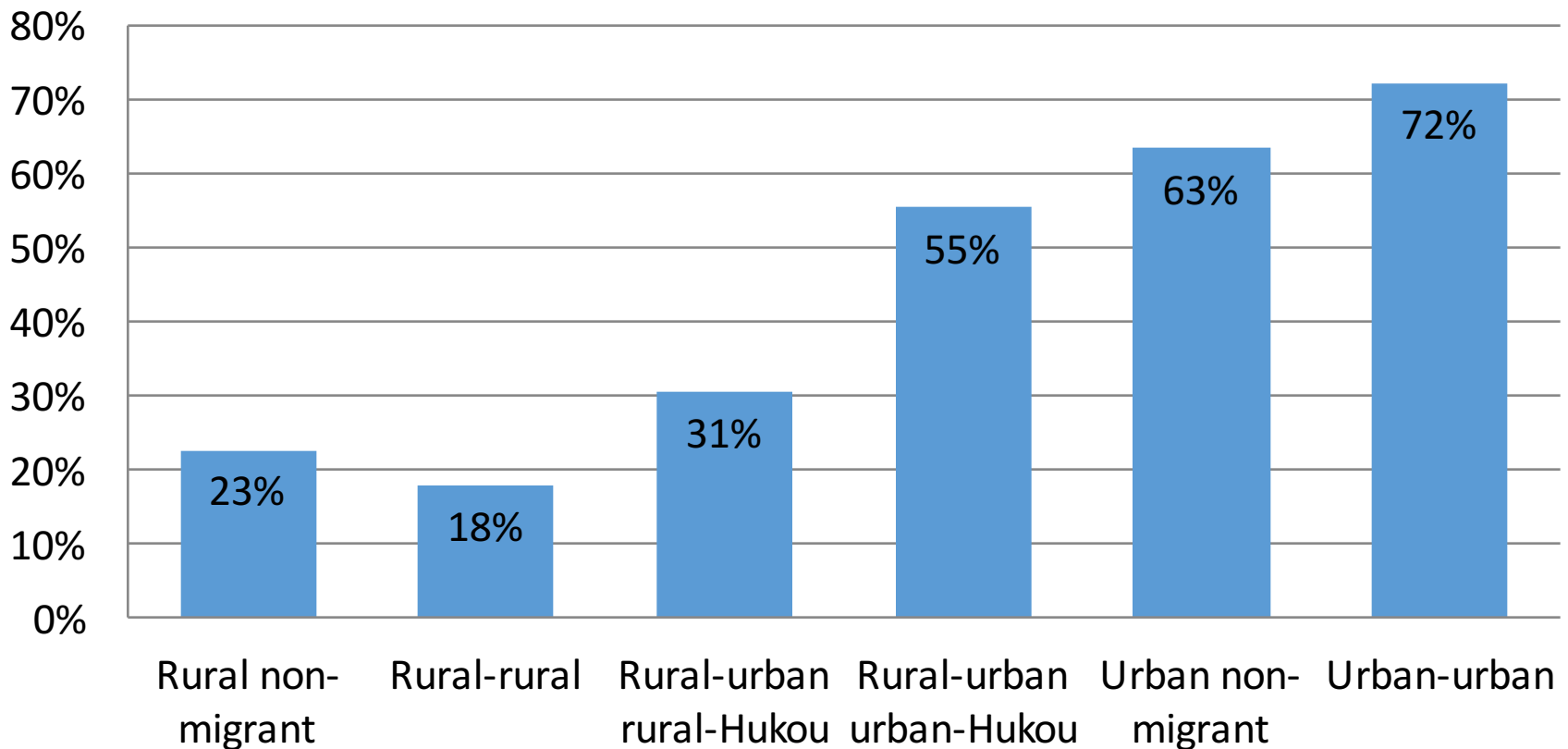


# Empirical model

- Demographic factors (age, gender).
- Early life (youth health (and leg length), education, first job, marital status).
- Socioeconomic factors (current job status, expenditure on food, other expenditure, household durable wealth, house ownership).
- Also control for:
  - Environmental factors (length of migration, social activity)
  - Psychosocial factors (familial support);
  - Health behaviours (smoking and alcohol).
- Two health outcomes, self-assessed general health (five categories) and depressive symptomatology (CES-D10, 0-30)
- Models were run using OLS, but results are consistent with those from multinomial logistic models.

# Migration status and education

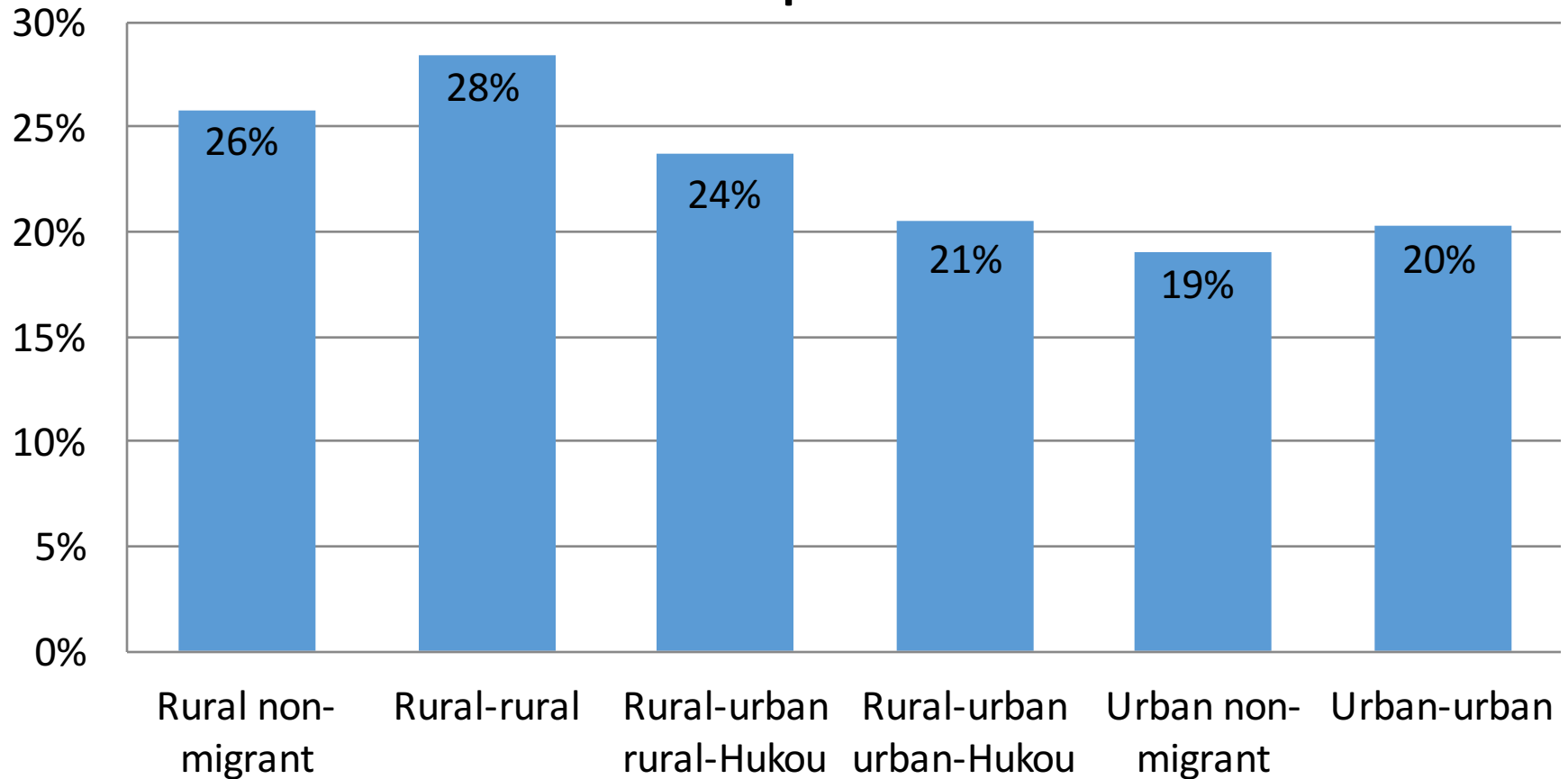
## Secondary and above





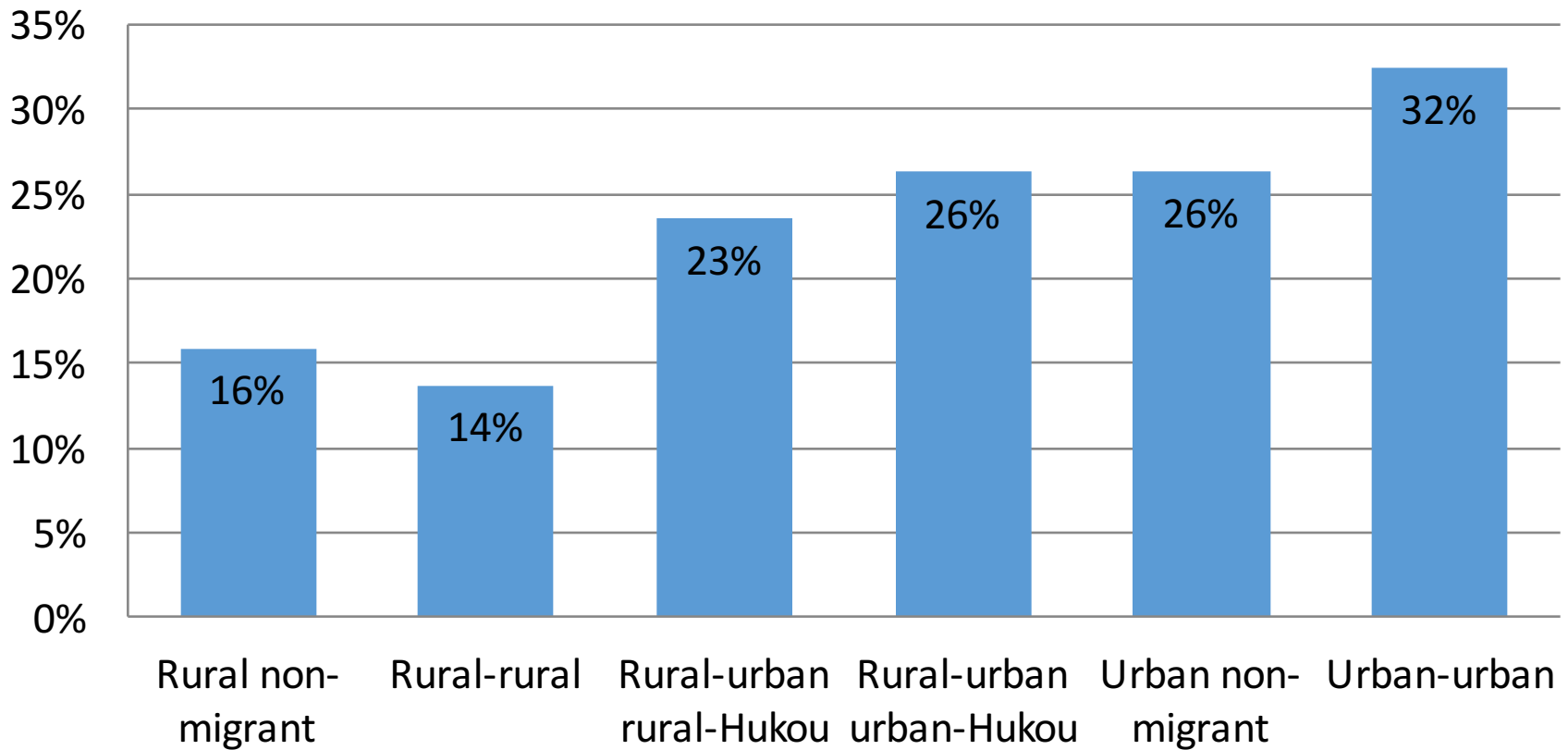
# Migration status and youth health

## Fair and poor health



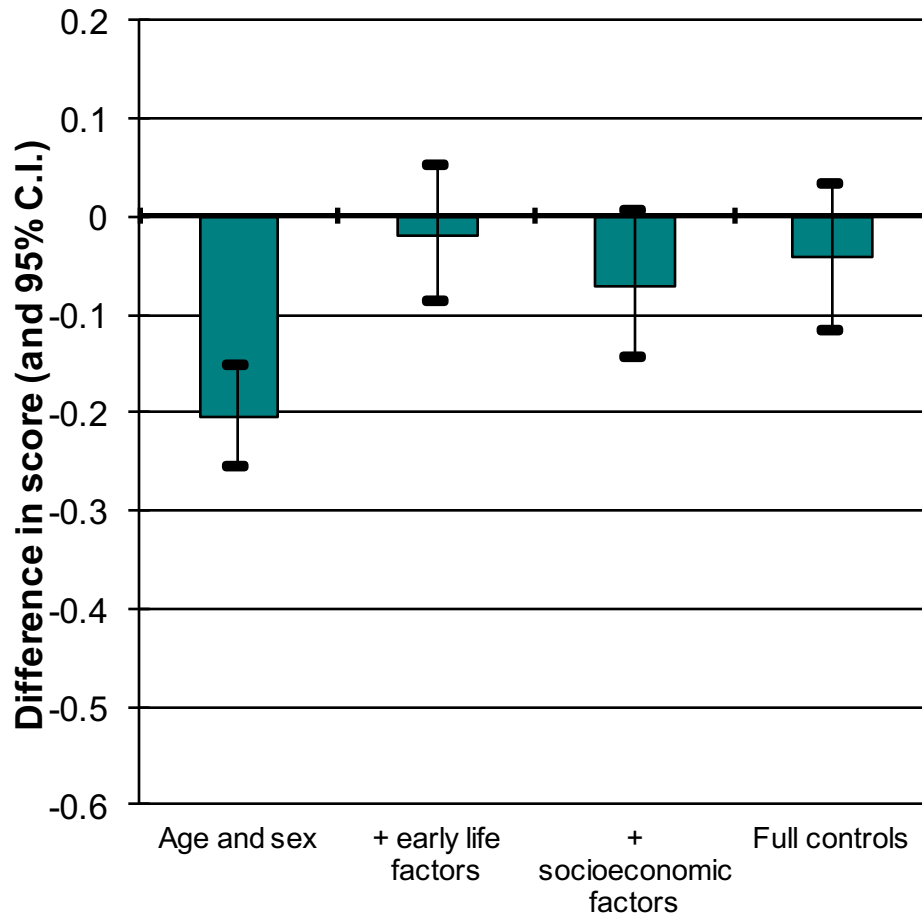
# Migration status and household durable wealth

## Richest quintile

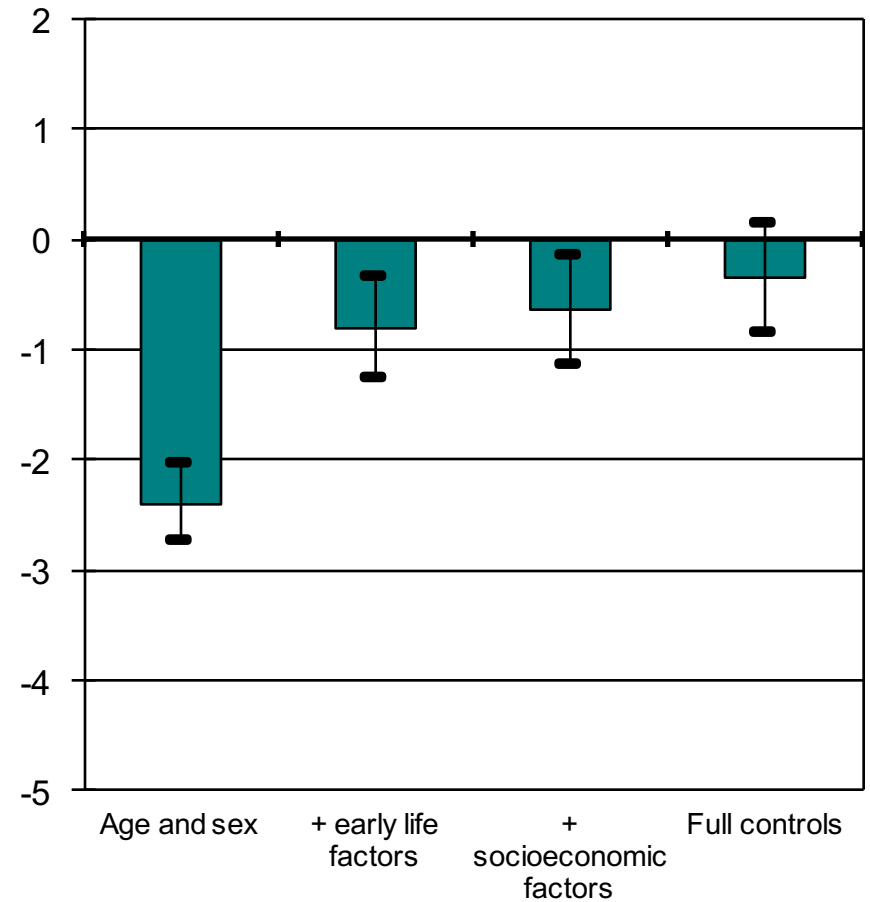


# Urban non-migrants compared with rural non-migrants

## Self reported general health scores

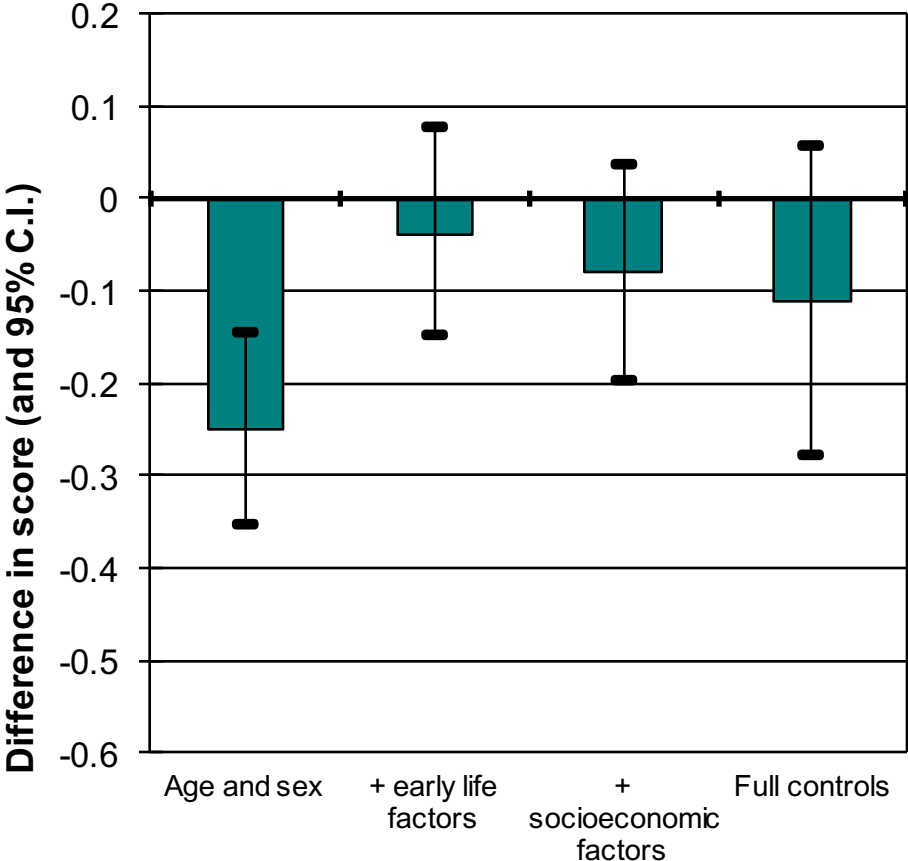


## CESD-10 depression scores

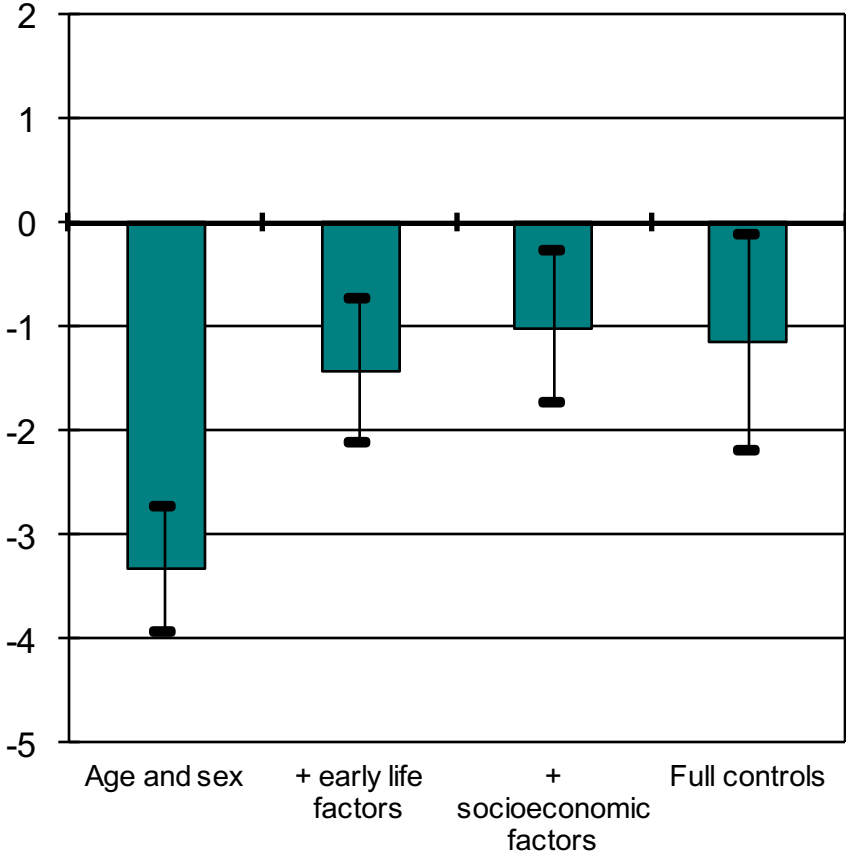


# Rural to urban migrants with urban Hukou compared with rural non-migrants

## Self reported general health scores

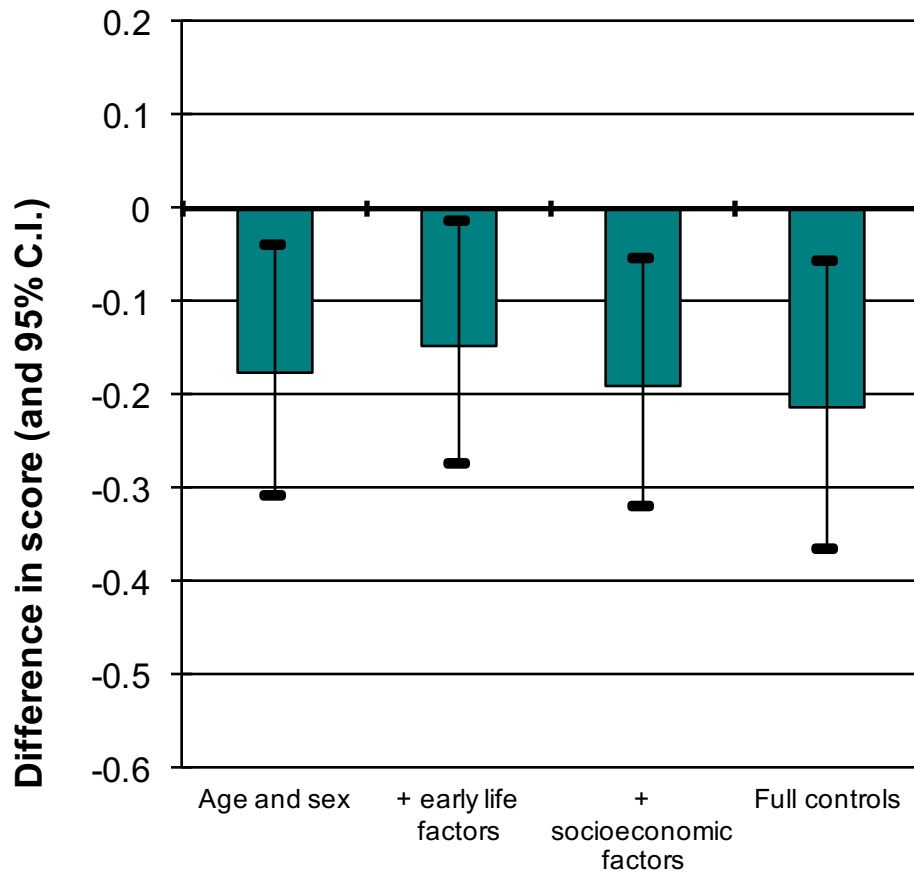


## CESD-10 depression scores

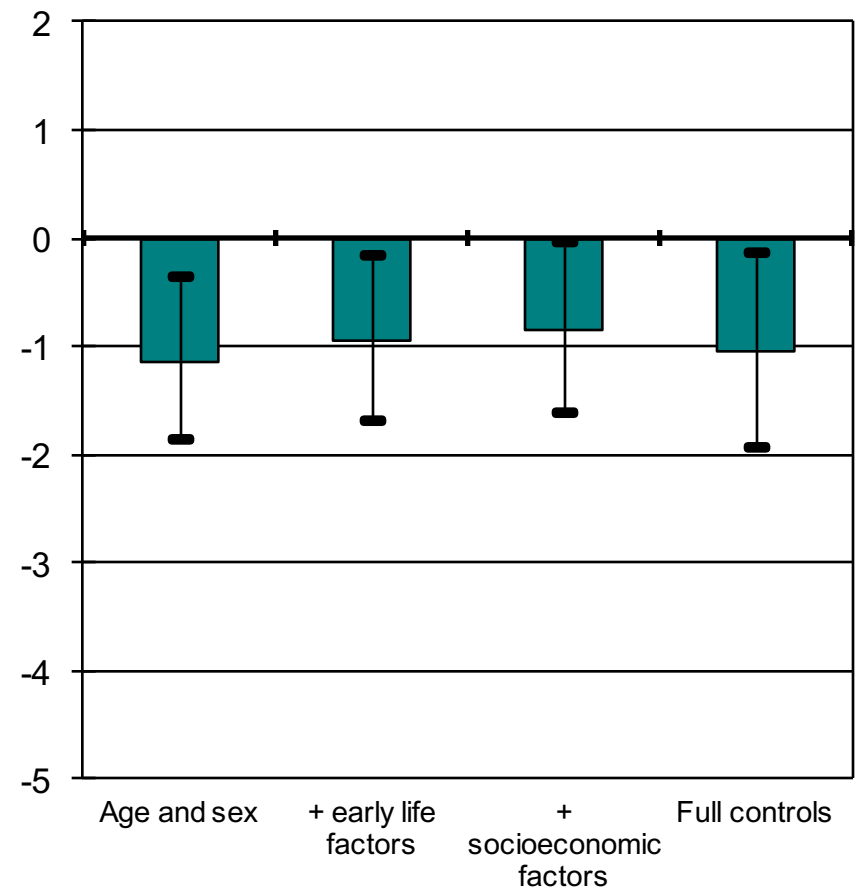


# Rural to urban migrants with rural Hukou compared with rural non-migrants

## Self reported general health scores

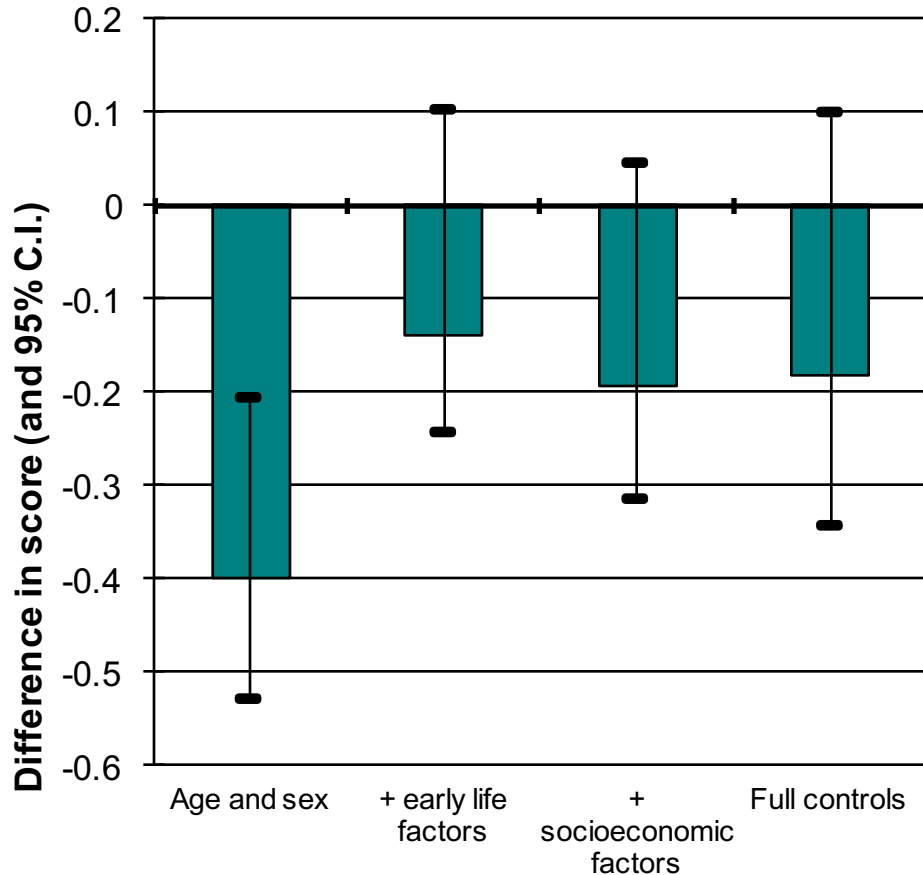


## CESD-10 depression scores

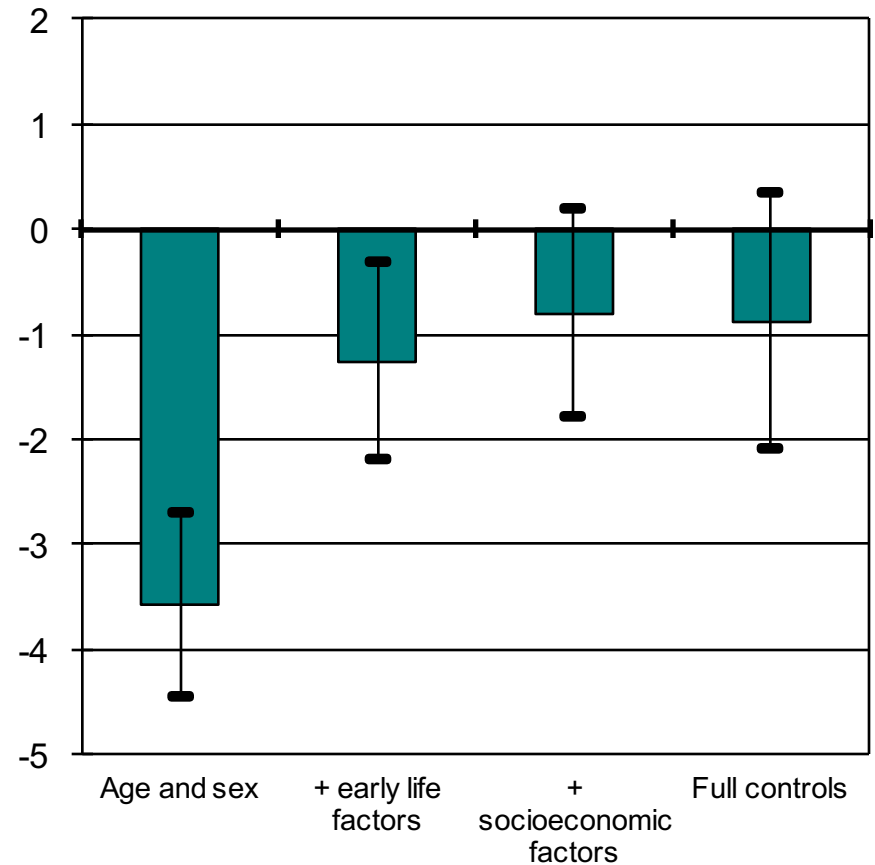


# Urban to urban migrants compared with rural non-migrants

## Self reported general health scores



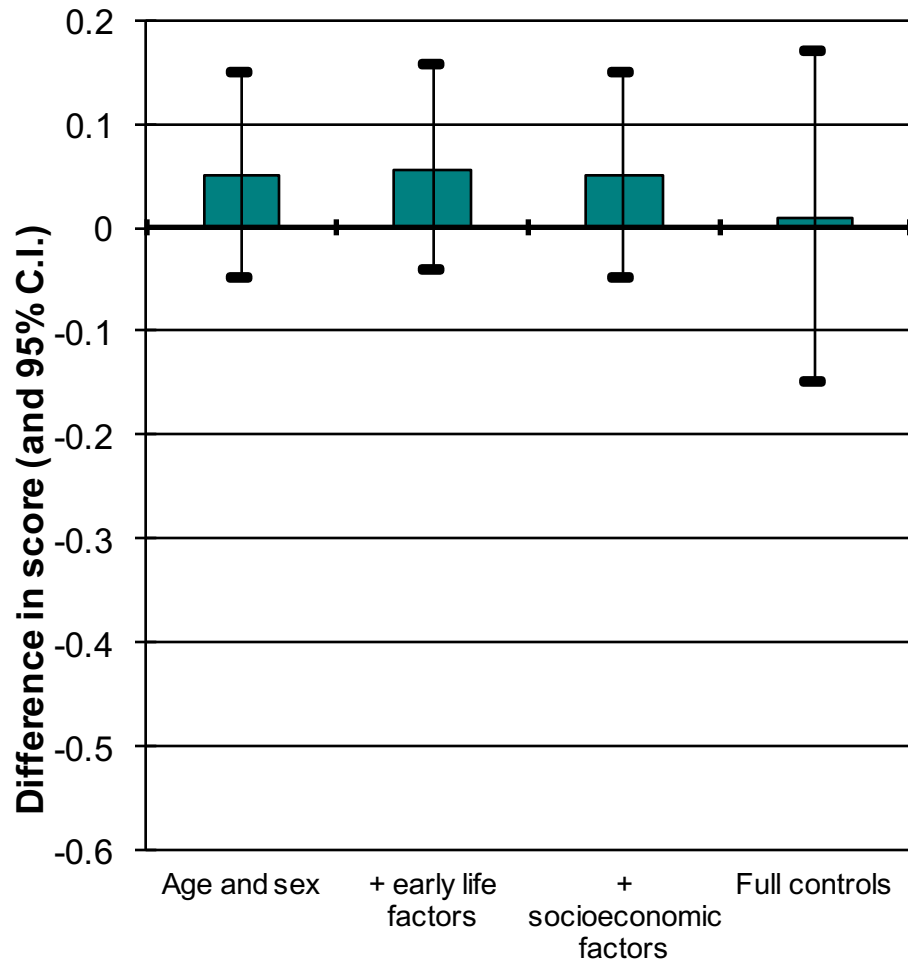
## CESD-10 depression scores



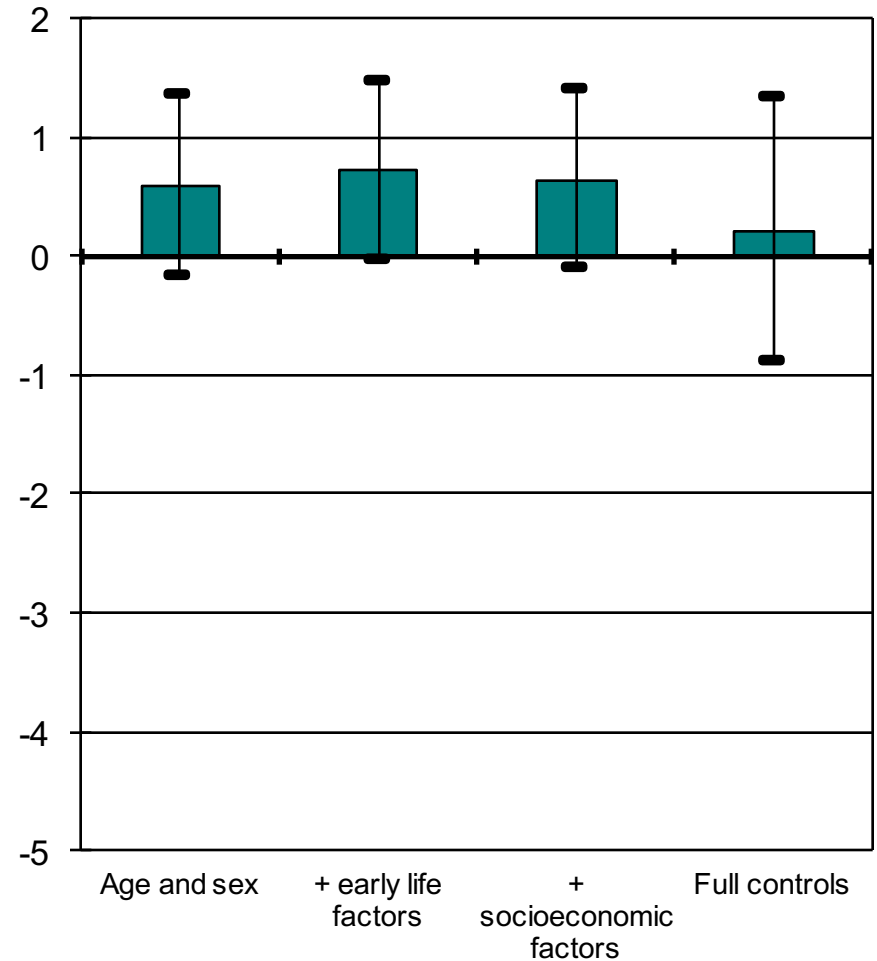
- Also tested against the urban non-migrants as the base group, health advantages are explained by early life selection factors.

# Rural to rural migrants compared with rural non-migrants

## Self reported general health scores



## CESD-10 depression scores



# Summary of findings

- Urban non-migrants compared with rural non-migrants have a health advantage which is largely driven by early life and socioeconomic factors.
- Migrants from rural to urban areas with an urban Hukou also have a large health advantage compared with rural non-migrants, which is largely driven by early life factors – their health advantage may be consequence of selection into migration.
- These selection effects are also apparent for the health advantage of migrants who move within urban environments.
- Rural to urban migrants with a rural Hukou have a persistent health advantage, that appears to be a migration effect – early life (selection) and socioeconomic effects do not moderate these differences, which remain large in fully adjusted models.
- Those migrating within rural environments show no health advantage in comparison with those in rural areas who do not move.
- Health advantages in later life are greatest for those who move to or within urban areas in China. This is a consequence of who migrates (the selection of elites) and in some cases socioeconomic effects and unmeasured migrant effects.



# Other key findings

- Dominant role of socioeconomic factors in health and wellbeing in later life in China.
- Familial support has very strong positive effect on the health and well-being in later life, especially for mental health.
- Also the important role of the level of social participation/integration in mediating migration effects.

# Conclusion

- Using an interdisciplinary, theoretically informed, approach we analyse the CHARLS data to investigate the long run health impacts of migration in China.
- We show strong associations between migration and health in later life in China.
- The long term health impacts of migration differ by type of migration, with migrants to or within the urban area having the greatest health advantages.
- Our results suggest that migration is selective of those who are healthier in later life.
- A combination of life course effects are likely to operate (critical period, accumulation and pathways). We do not test these directly.
- However socioeconomic effects, operating both early in life (education and first job) and in later life (employment, home ownership, consumption), have important consequences both for health in general and for migrant/non-migrant health differences.

# Further work

- Investigating the unexplained health advantage of rural to urban migrants with rural Hukou, is this due to return migration of those with poorer health?
- And examining the health impacts of urbanisation in China, could this tell us more about what is driving the migration and health relationship?
- Identifying causal relationships, for example migration before and after the market reform in 1978.

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