

Exploring the Urban/Rural Differences in Functional Health & Mortality among Older Adults in Beijing

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**This research is supported by a grant from the National Institute on Aging,
Grant Number R01 AG20063-01.**

Background

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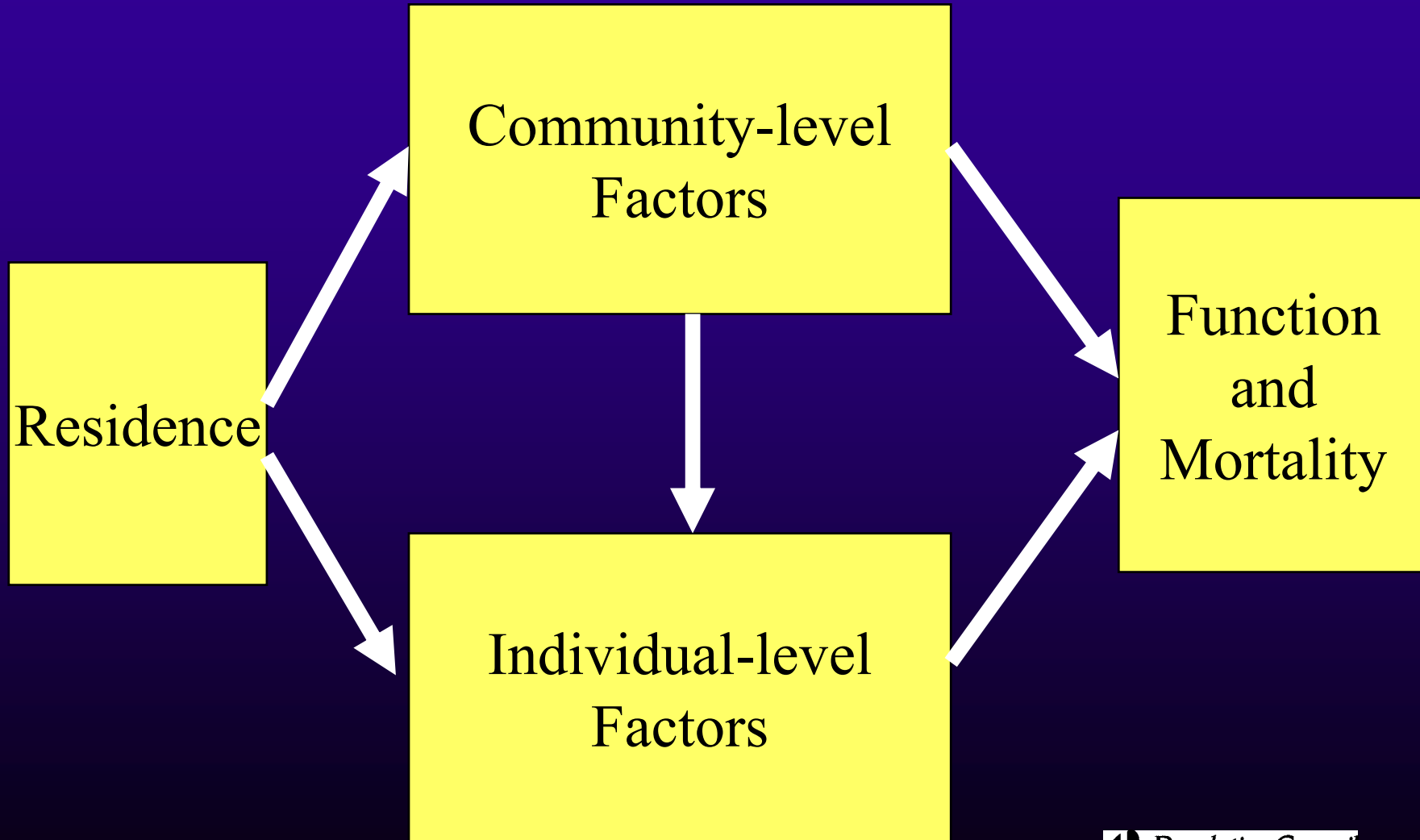
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- * **In China, urbanites are known to have higher SES and better access to health services.**
- * **But, urbanites may also have increased chronic health risks related to lifestyles and environmental factors.**

Linking Residence and Health



Mediating Factors

Social support:

1) Marital status; 2) Involvement in family decisions; 3) Has a confidant

Socioeconomic status:

1) Education; 2) Income adequacy; 3) Occupation

Health behaviors:

1) Smoking; 2) Drinking; 3) Diet

Health care access:

1) Has insurance

Chronic disease conditions:

1) Has 1+ life threatening disease; 2) Has 1+ debilitating disease

Study Objectives

To examine:

- (1) Urban/rural differences in ALE in old age in Beijing**
- (2) Role of each mediating factor separately**
- (3) The importance of all five mediating factors together**

Beijing Multidimensional Longitudinal Study on Aging

HuaiRou



Xuan
Wu

DaXing

**Conducted by Dr. Zhe Tang at
the Capital University of
Medical Sciences**

**Representative sample age 55 &
over in three districts**

**1992 baseline and 1997 follow-up
surveys**

N=2,859

Active Life Expectancy

• **Expected years of life without needing assistance doing the following:**

- walking 300 meters**
- getting on and off a bed**
- eating**
- dressing**
- bathing**
- walking up stairs**

Methods: Step 1

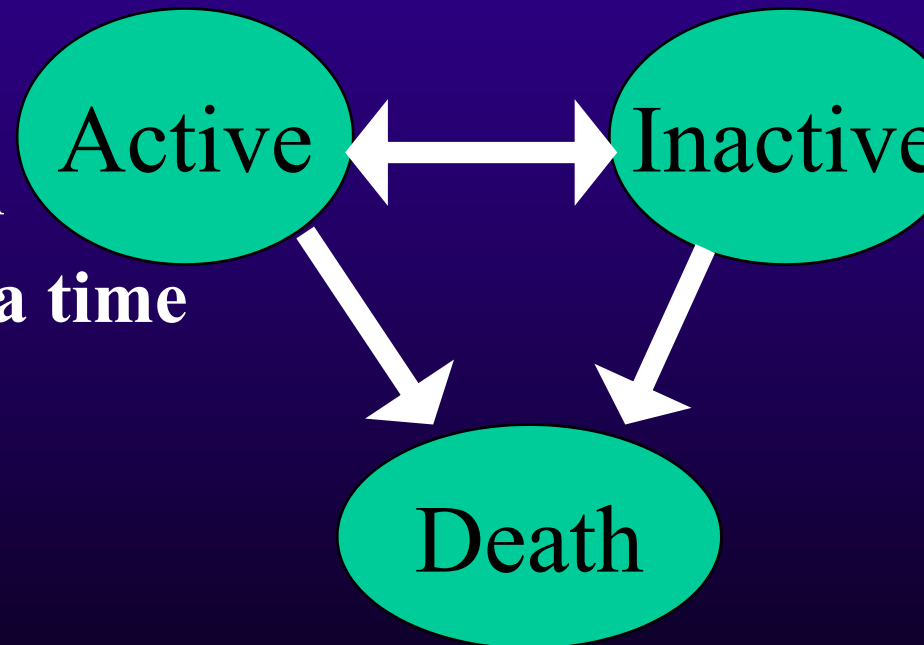
• Estimate transition rates across states using hazard rate models

• Models:

Base age, sex & urban/rural

Intermediate 1 mediator at a time

Full all 5 mediators at once



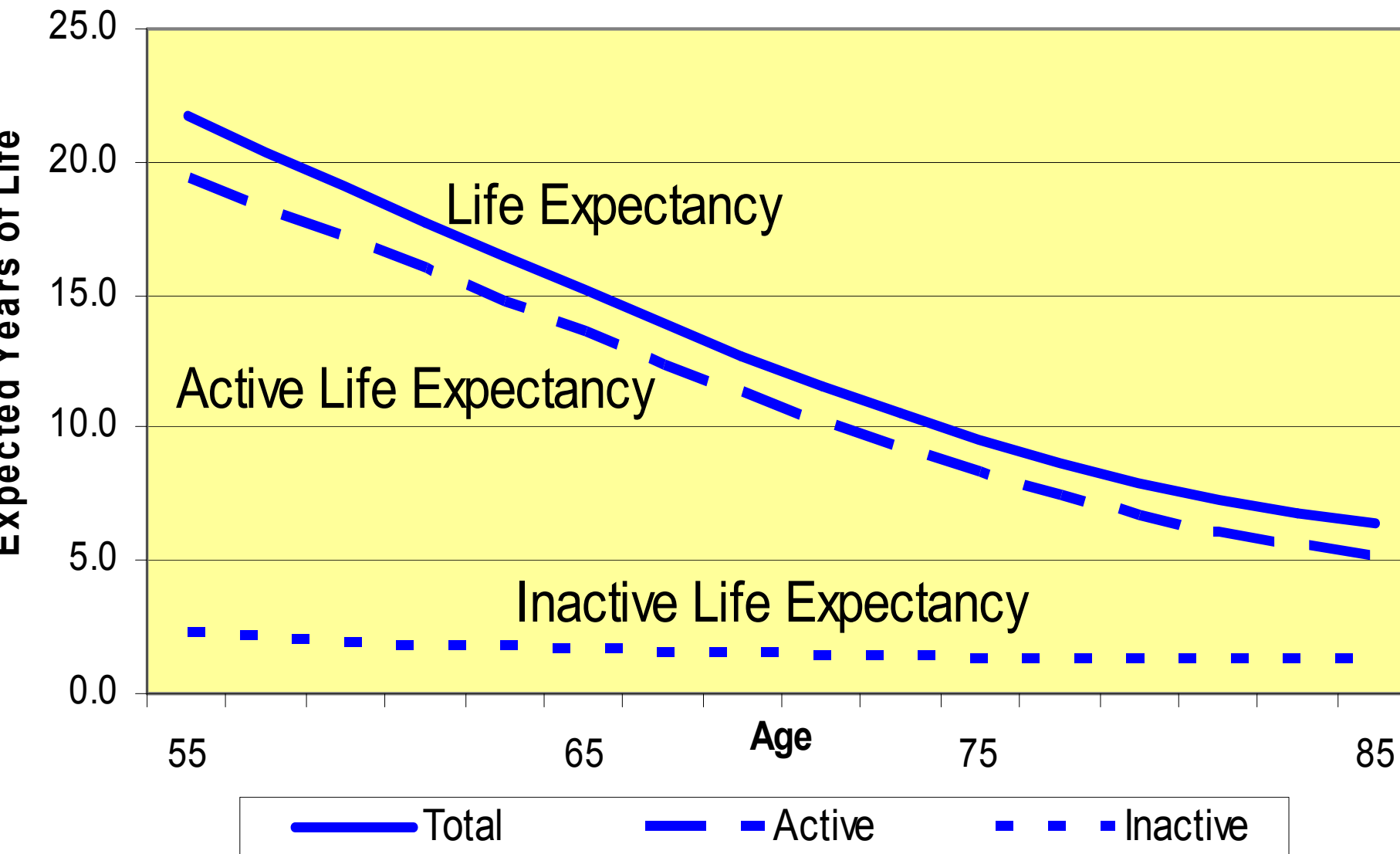
Methods: Step 2

- **Construct multistate life tables**
- **Use SAS macro developed by Mark Hayward**
- **Compare active life expectancies for urban and rural elderly**

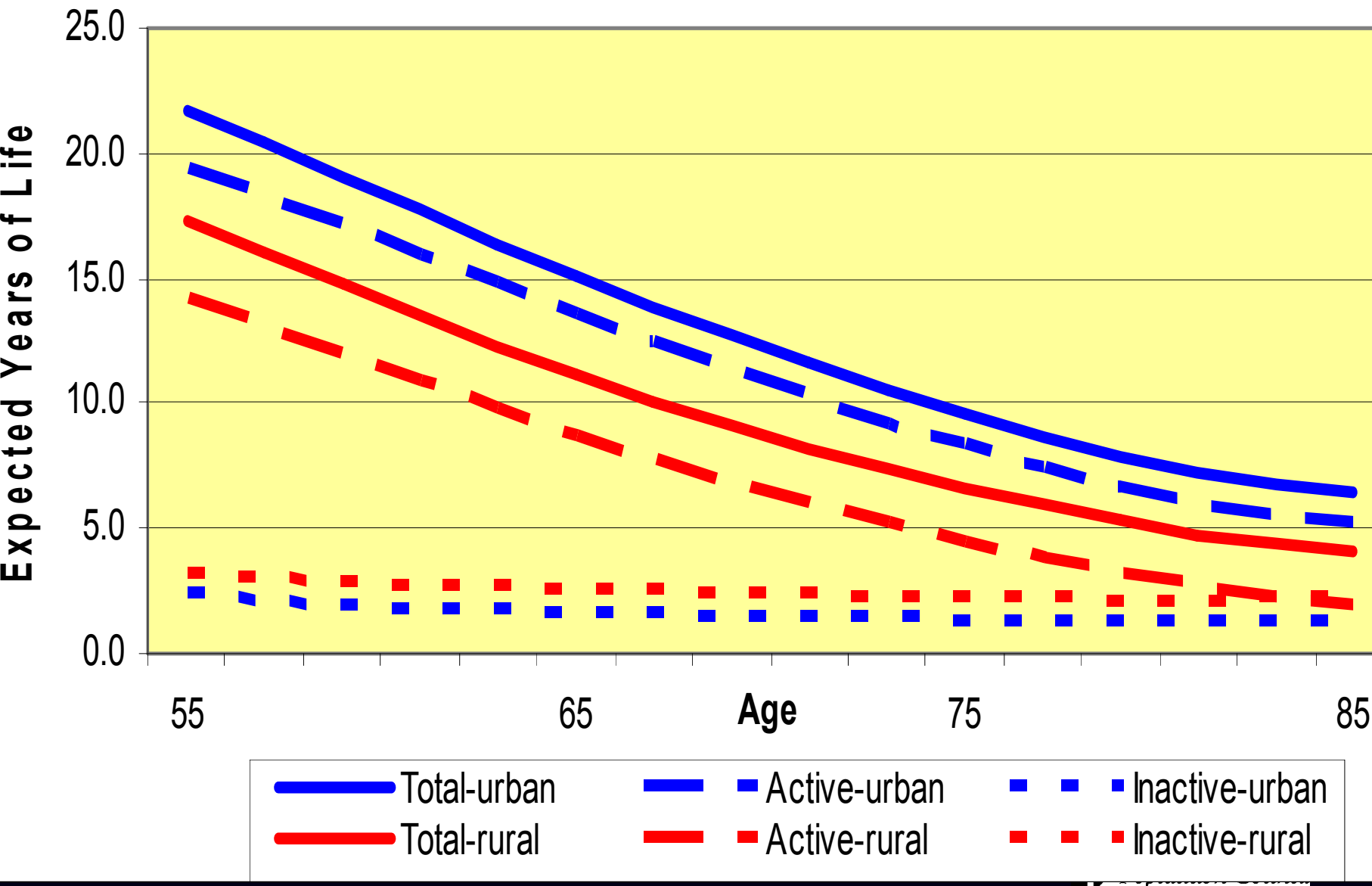
Hazard Rate Models

	Active to Inactive	Active to Death	Inactive to Active	Inactive to Death
Urban/rural	*	*		
Social support		*		*
Health behaviors		*		
SES		*		
Access to care		*		
Chronic conditions		*		*
Age	*	*	*	*
Sex	*	*	*	*

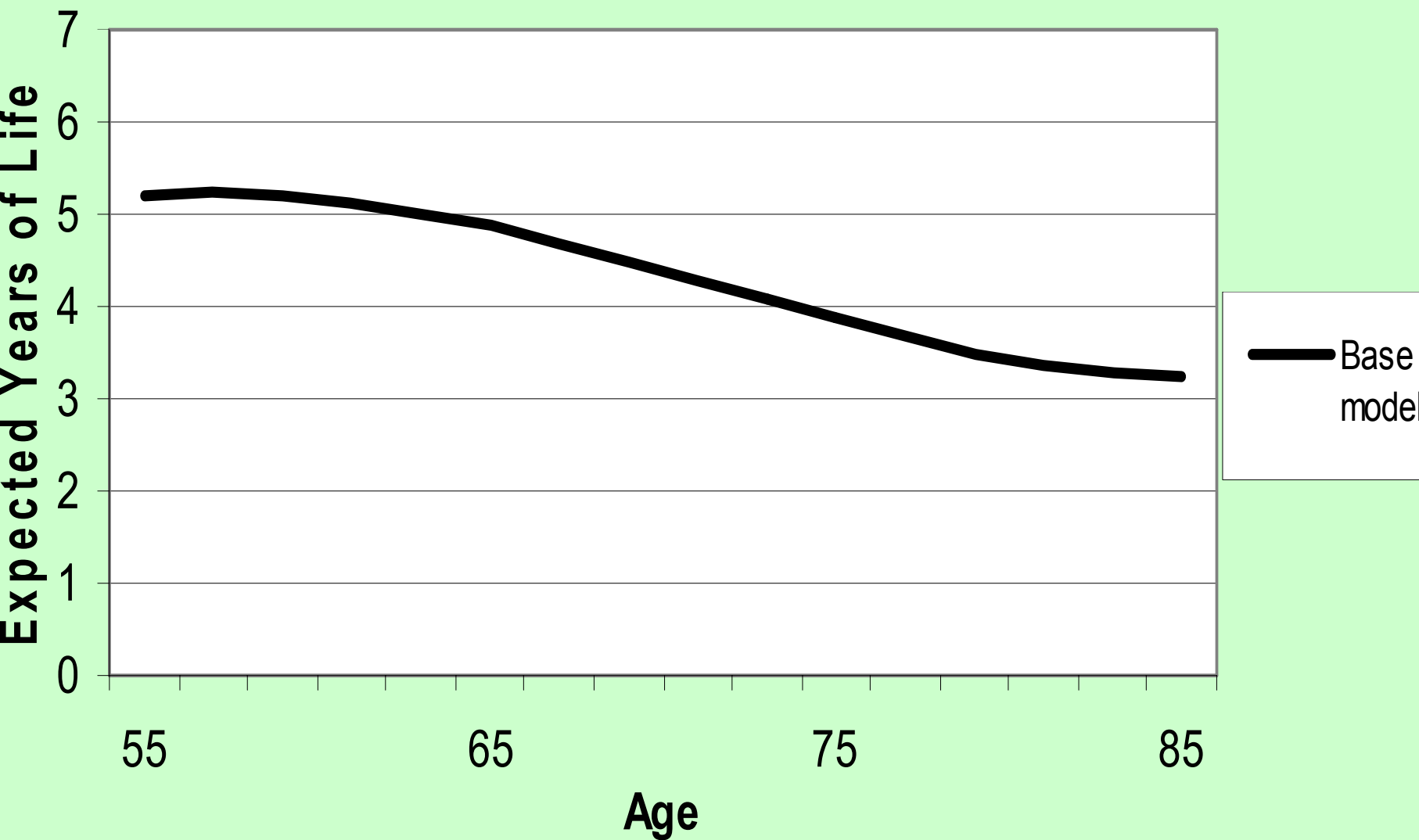
Active Life Expectancy (ALE): Urban



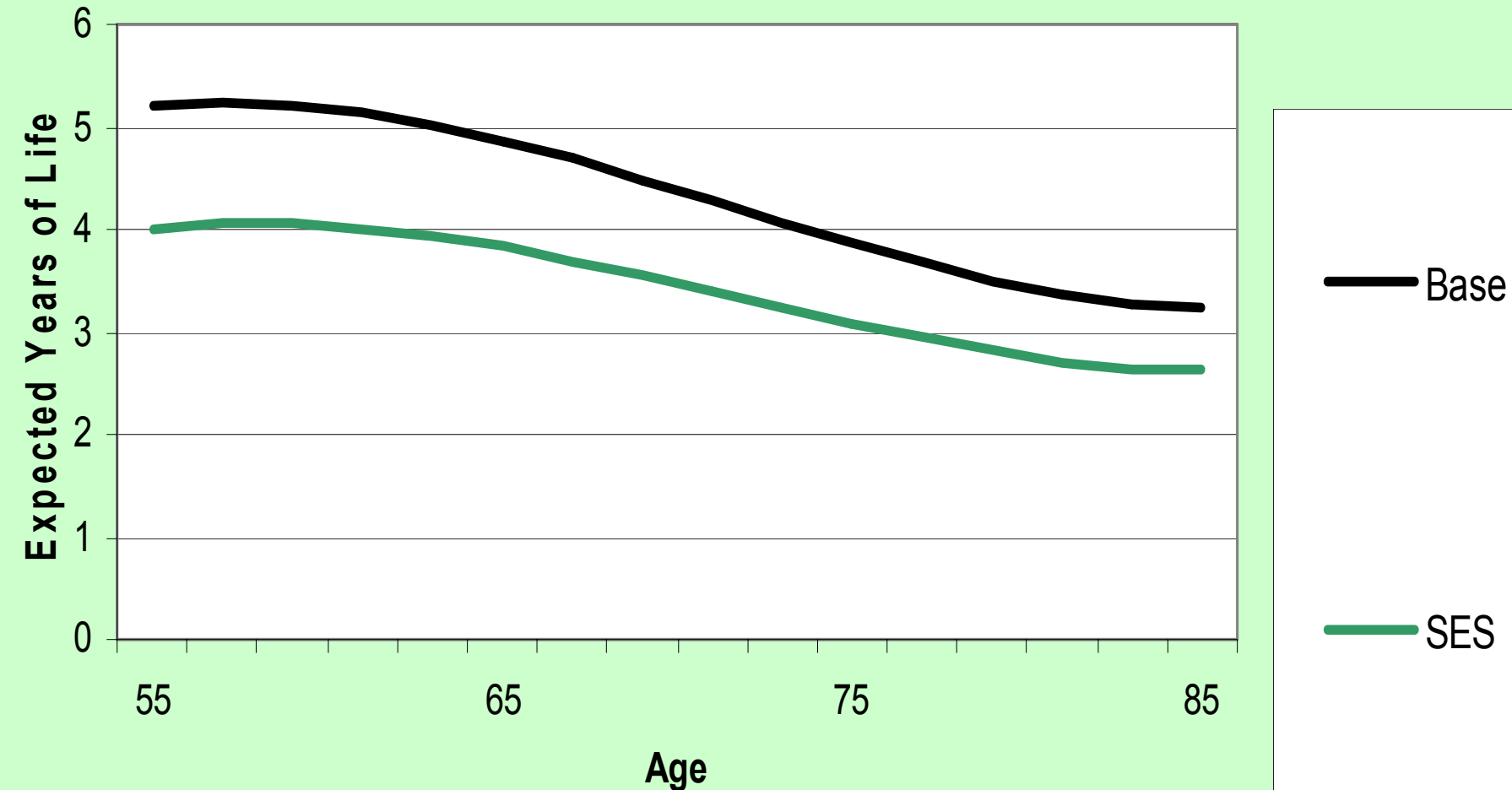
ALE: Urban & Rural



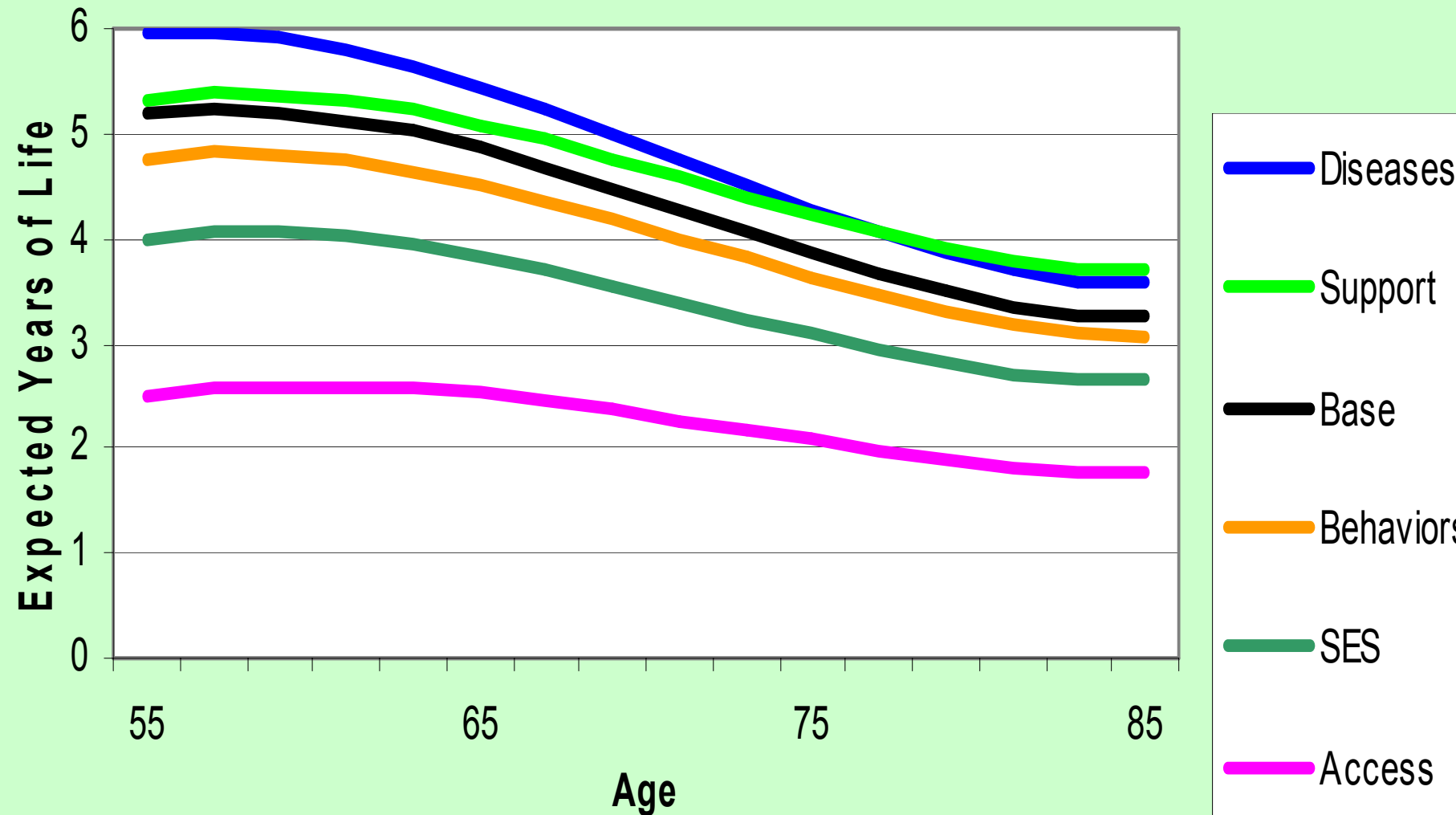
Urban Advantage in ALE: Base Model



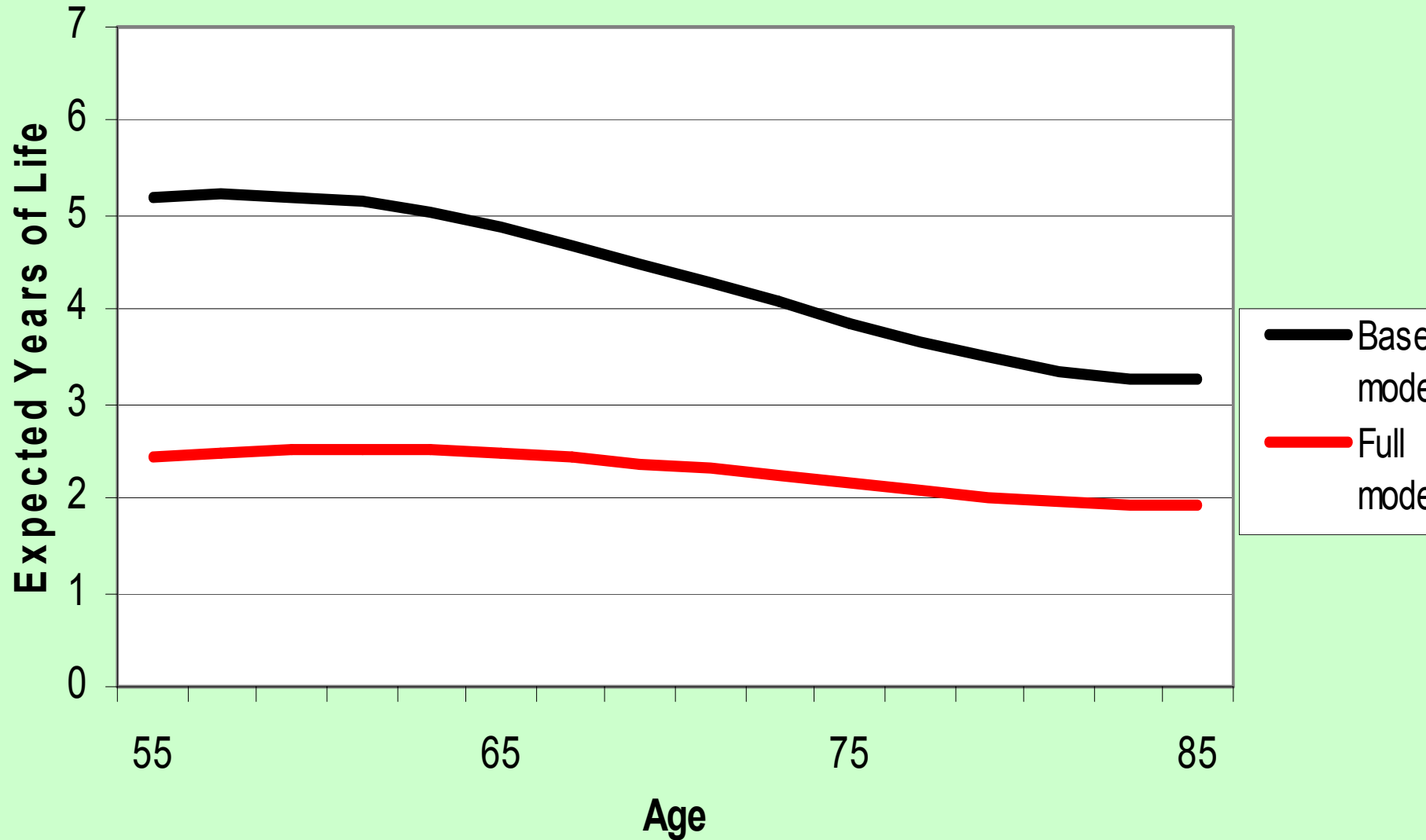
Urban Advantage in ALE: Mediating Effect of SES



Urban Advantage in ALE: All Mediating Effects



Urban Advantage in ALE: Comparing Base and Full Models



Summary & Conclusions

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Individual-level factors together account for half the urban advantage in ALE