



# Remittances from Migrant Children and Quality of Life of Older Adults in Rural China

Merril Silverstein, Ph.D.  
Cantor Professor of Aging Studies  
Syracuse University

“China's economic boom has drawn rural Chinese to cities in search of higher incomes. The rural migrant worker population has expanded significantly, increasing from roughly 30 million in 1989 to more than 140 million in 2008.”

China National Bureau of Statistics

Rural migrants now account for 40% of the urban labor force in factory, service, and construction work.

# Beijing National Stadium



- About 300,000 migrant workers helped build the Olympics venues, many making 4-5X their rural earnings.
- “The human fuel behind China's white-hot economy.” (Associated Press).

# Internal Migration in China is Age-Graded



- Those between 20 and 40 years of age account for more than 75% of rural migrants: the “missing middle generation”.
- Relatively little attention to older adults and children “left behind” in rural villages.
- Dominant narrative is that these left behind elders are at-risk.

# Purpose of Analysis

- To examine how remittances from migrants influence the well-being of older adults in rural Chinese villages.
- Do remittances help explain mental health changes in grandparents caring for the grandchildren of migrants?
- Do remittances allow older adults to use health care services more frequently?

# Anhui Province, China



- Fifth largest province in China (60 million)
- 80% rural
- Historically high migration rates to Hefei, Nanjing, and Shanghai
- GDP is 28<sup>th</sup> out of 34 provinces
- Per capita income = \$854



# Longitudinal Study of Older Adults in Anhui Province, China

- Random sample of 1,798 older adults (60+) in rural villages in Chaohu region who were surveyed in 2001, 2003, 2006, 2009 & 2012.



# A Chaohu Village Young & Old





# Economic Benefits in Rural Village



# Provincial Policy: *Report from Anhui Province*

- In skipped-generation families:

*Grandparents have low quality of life since they are also responsible for agriculture work, have low education levels that make it difficult for them to tutor younger grandchildren, are very poor, and live a “boring” life.*

# Circular Flow of Resources Between Parents and Migrant Children

Migration  
of Adult  
Child



Start-up Costs



Grandchild  
Care



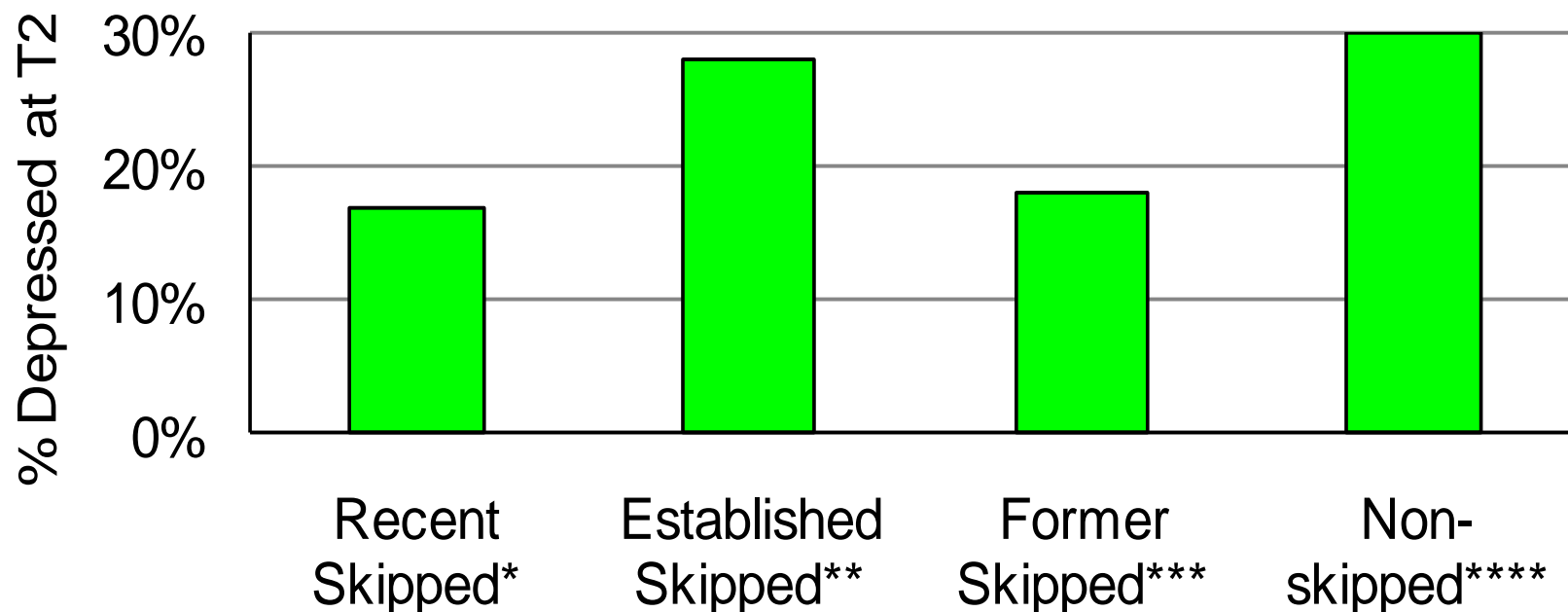
Improved  
Well-being



Economic  
Return from  
Migrant



Rural Chinese Grandparents Who Recently Entered Skipped Generation Households are *Least* Likely to be Depressed (Source: *Older People in Anhui Province*)



\*Entered skipped household between T1 and T2

\*\*In skipped household at T1 and T2

\*\*\*In skipped household at T1 and not at T2

\*\*\*\*Not in skipped household at T1 and T2

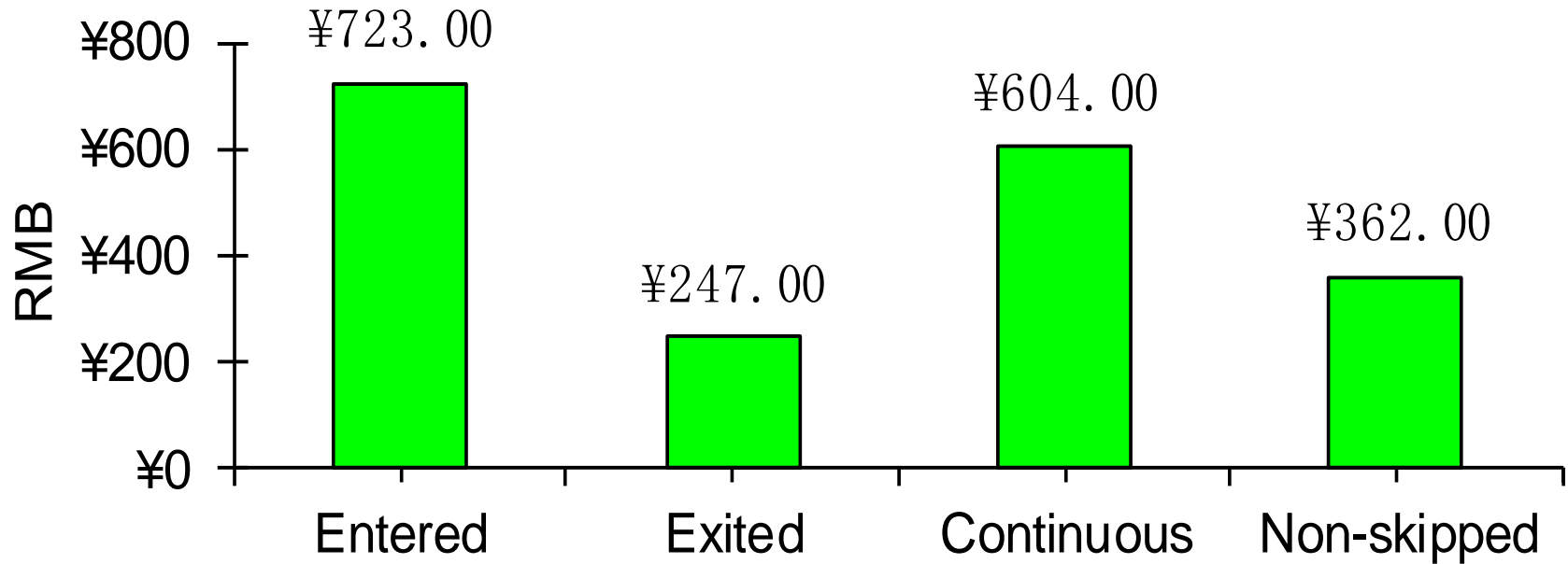
# Remittances and Depression

- Do remittances help explain why grandparents in skipped-generation households (caring for grandchildren) are less depressed than non-caring grandparents?
- Does money buy happiness (or reduce depressive symptoms)?

# Transitions in Skipped Generation Households of Grandparents with a Grandchild <16 (N=1,146)

	<b>T1-T2 Transitions</b>	<b>%</b>
<b>Skipped Generation</b>	1,036	32.9
Entered	291	9.2
Exited	368	11.7
Continuous	377	12.0
<b>Non-skipped Generation</b>	2,111	67.1
<b>Total</b>	3,147	100.0

## T2 - T1 Change in Amount of Remittances Grandparents Received by Change in Skipped Generation Status



# Depressive Symptoms

- *Positive affect* (feeling happy, enjoying life, feeling pleasure).
- *Negative affect* (feeling lonely, feeling upset).
- *Marginalization* (feeling useless, having nothing to do).
- *Somatic* (having a poor appetite, having trouble sleeping).
- Three categories: rarely/never, sometimes, all the time
- Range 0-18, mean = 5.87
- Reliability = .78



# Equations Predicting T2 Depression by Skipped Household Transitions

## 1. T1 depression <sup>+++</sup>

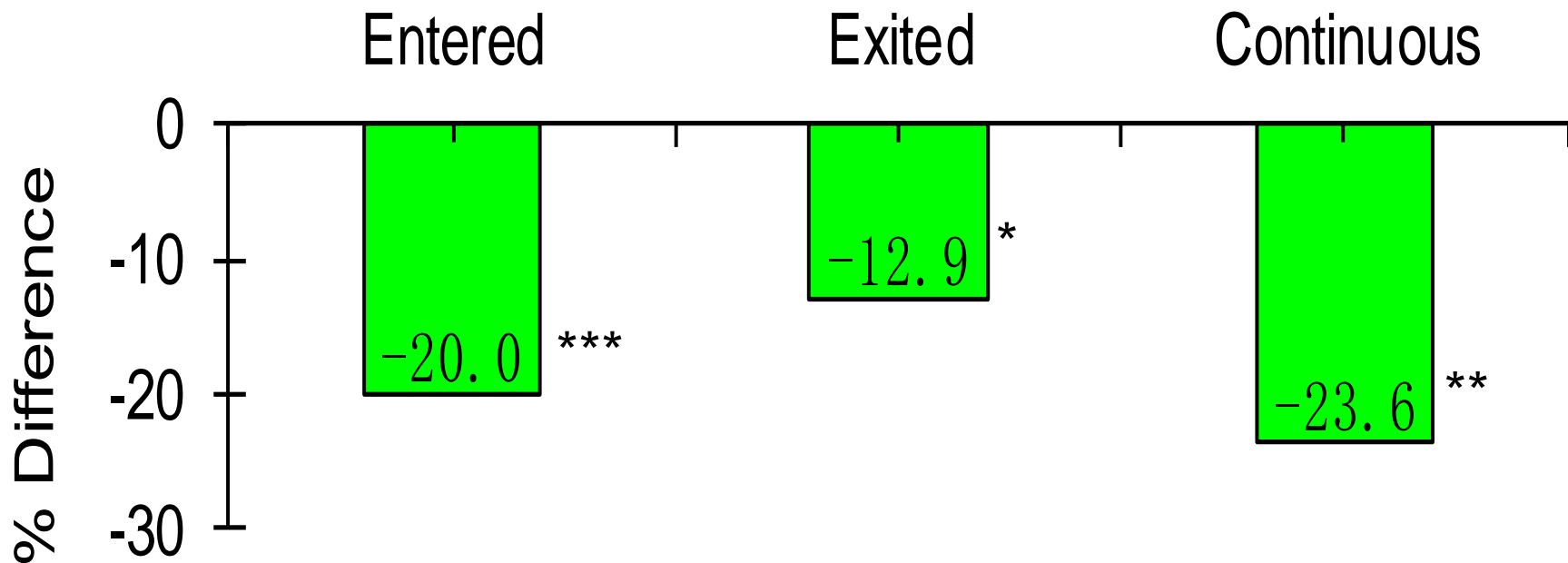
## 2. T1 resources

- Marital status
- Education <sup>-</sup>
- Personal income <sup>--</sup>
- Functional Limitations <sup>+++</sup>
- Age <sup>+++</sup>
- Female <sup>++</sup>
- Number of grandchildren
- Age of youngest grandchild

## 3. Remittances (log)

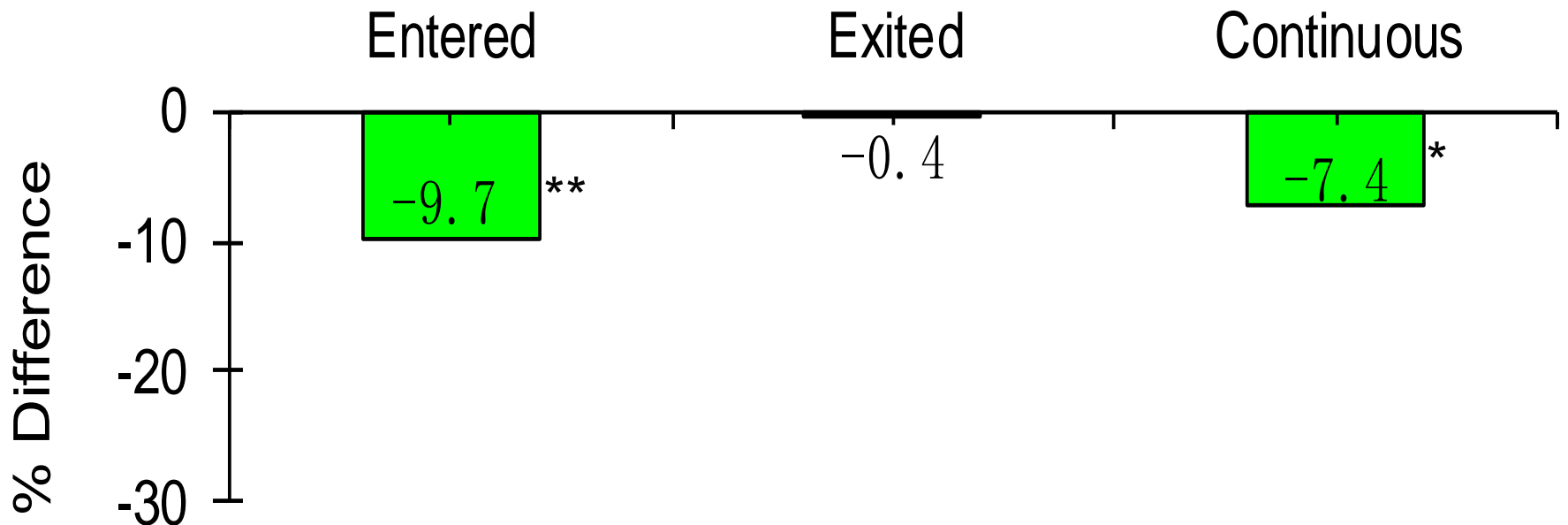
- Total financial support <sup>---</sup>
- T2-T1 change in total financial support <sup>---</sup>

Percent Difference in T2 Depressive Symptoms in Grandparents by Change in Skipped Generation Status:  
Controls for T1 Depressive Symptoms



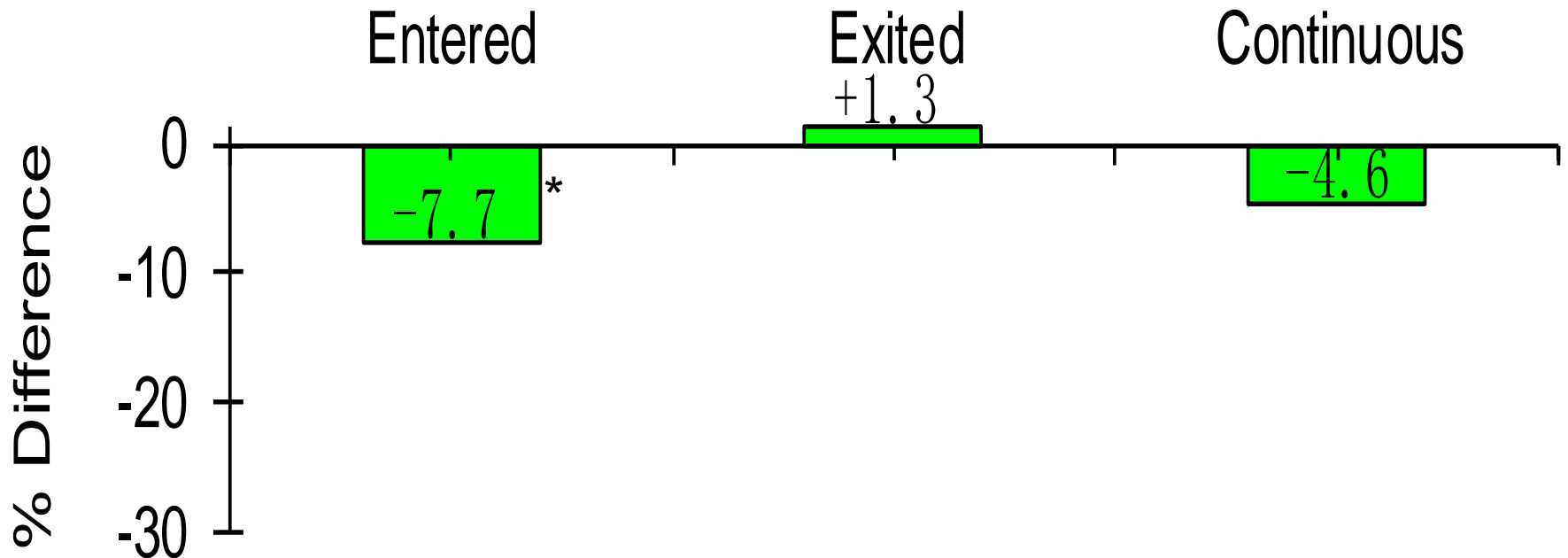
Note: Difference is relative to non-skipped group.

Percent Difference in T2 Depressive Symptoms in Grandparents by Change in Skipped Generation Status:  
Adds T1 Resources



Note: Difference is relative to non-skipped group.

Percent Difference in T2 Depressive Symptoms in Grandparents by Change in Skipped Generation Status:  
Adds T1 Resources + Remittances



Note: Difference is relative to non-skipped group.

# Remittances and Health Care Utilization

- Do remittances allow older parents in poorer health to use more health care services?
- Data from 2009 wave of Anhui Study.
- N=1,143

# Health Insurance in Rural China

- New Cooperative Scheme Medical Insurance (NCSMI)
  - Rural health insurance program, established in 2003 and expanded nationally. The program is underwritten by both the central and provincial governments, but the county-unit governments have the responsibility for setting parameters of the program, such as user fees and premiums and reimbursement rates (*Strauss, et al., 2012*).

# Coverage and Reimbursement for Outpatient Services *(Strauss, et al., 2012)*

- Based on pilot CHARLS study
  - Coverage by NCSMI > 90% in rural China
  - Total average cost for outpatient services in previous month = 413 RMB
  - Share of out-of-pocket cost = 91.5%
  - Outpatient health care is still private pay in rural China

# Health Care Utilization Measure in Anhui Study

- “How many times in the last year have you used outpatient health care services? This can include doctors, nurses, specialists, folk healers, “barefoot doctors”, and community clinic providers.”
- Range = 0-60, median = 2, mean = 3.1, 32.7% = none



# Model Building

- Andersen model of health care utilization: predisposing, enabling, and need
- Poisson regression used due to non-normal DV.
  - Hierarchical inclusion of predisposing, enabling, need variables
- Main enabling and need predictors
  - Net remittances received from migrant children
  - Self-rated health (1=excellent...4=poor)
  - Interaction between the two

# Poisson Regression Predicting Health Service Use

Type	Variable	Model 1	Model 2	Model 3	Model 4
Predisposing	Age (years)	-.01*	-.01*	-.02*	-.02*
	Gender (1=Female)	.25*	.26*	.15*	.15*
	Marital status (1 = not married)	-.14*	-.01	.17*	.17*
	Education (years)	.02	-.01	.07	.07
	Occupation (1= agricultural)	.29*	.35*	.36*	.35*
Enabling	Income (log + 1)		-.08*	.03	.03
	Number of children		.09*	.10*	.10*
	Proximity (1= has child in village)		.21*	.23*	.23*
	Co-residence (1= lives with child)		-.09	-.08	-.09
	Instrumental support (1= receives from child)		.74*	.45*	.46*
	Net monetary transfers (log + 1)		-.03	.02	.03
Need	Self-rated poor health (1=excellent; 4=poor)			.44*	.31*
	Functional health difficulties			.01*	.01*
	Number of chronic diseases			.01	.01
	Depression			.02*	.02*
Interaction	Net monetary transfers × self-rated health				.06*

# Poisson Regression Predicting Health Service Use

Type	Variable	Model 1	Model 2	Model 3	Model 4
Predisposing	Age (years)	-.01*	-.01*	-.02*	-.02*
	Gender (1=Female)	.25*	.26*	.15*	.15*
	Marital status (1 = not married)	-.14*	-.01	.17*	.17*
	Education (years)	.02	-.01	.07	.07
	Occupation (1= agricultural)	.29*	.35*	.36*	.35*
Enabling	Income (log + 1)		-.08*	.03	.03
	Number of children		.09*	.10*	.10*
	Proximity (1= has child in village)		.21*	.23*	.23*
	Co-residence (1= lives with child)		-.09	-.08	-.09
	Instrumental support (1= receives from child)		.74*	.45*	.46*
	Net monetary transfers (log + 1)		-.03	.02	.03
Need	Self-rated poor health (1=excellent; 4=poor)			.44*	.31*
	Functional health difficulties			.01*	.01*
	Number of chronic diseases			.01	.01
	Depression			.02*	.02*
Interaction	Net monetary transfers × self-rated health				.06*

# Poisson Regression Predicting Health Service Use

Type	Variable	Model 1	Model 2	Model 3	Model 4
Predisposing	Age (years)	-.01*	-.01*	-.02*	-.02*
	Gender (1=Female)	.25*	.26*	.15*	.15*
	Marital status (1 = not married)	-.14*	-.01	.17*	.17*
	Education (years)	.02	-.01	.07	.07
	Occupation (1= agricultural)	.29*	.35*	.36*	.35*
Enabling	Income (log + 1)		-.08*	.03	.03
	Number of children		.09*	.10*	.10*
	Proximity (1= has child in village)		.21*	.23*	.23*
	Co-residence (1= lives with child)		-.09	-.08	-.09
	Instrumental support (1= receives from child)		.74*	.45*	.46*
	Net monetary transfers (log + 1)		-.03	.02	.03
Need	Self-rated poor health (1=excellent; 4=poor)			.44*	.31*
	Functional health difficulties			.01*	.01*
	Number of chronic diseases			.01	.01
	Depression			.02*	.02*
Interaction	Net monetary transfers × self-rated health				.06*

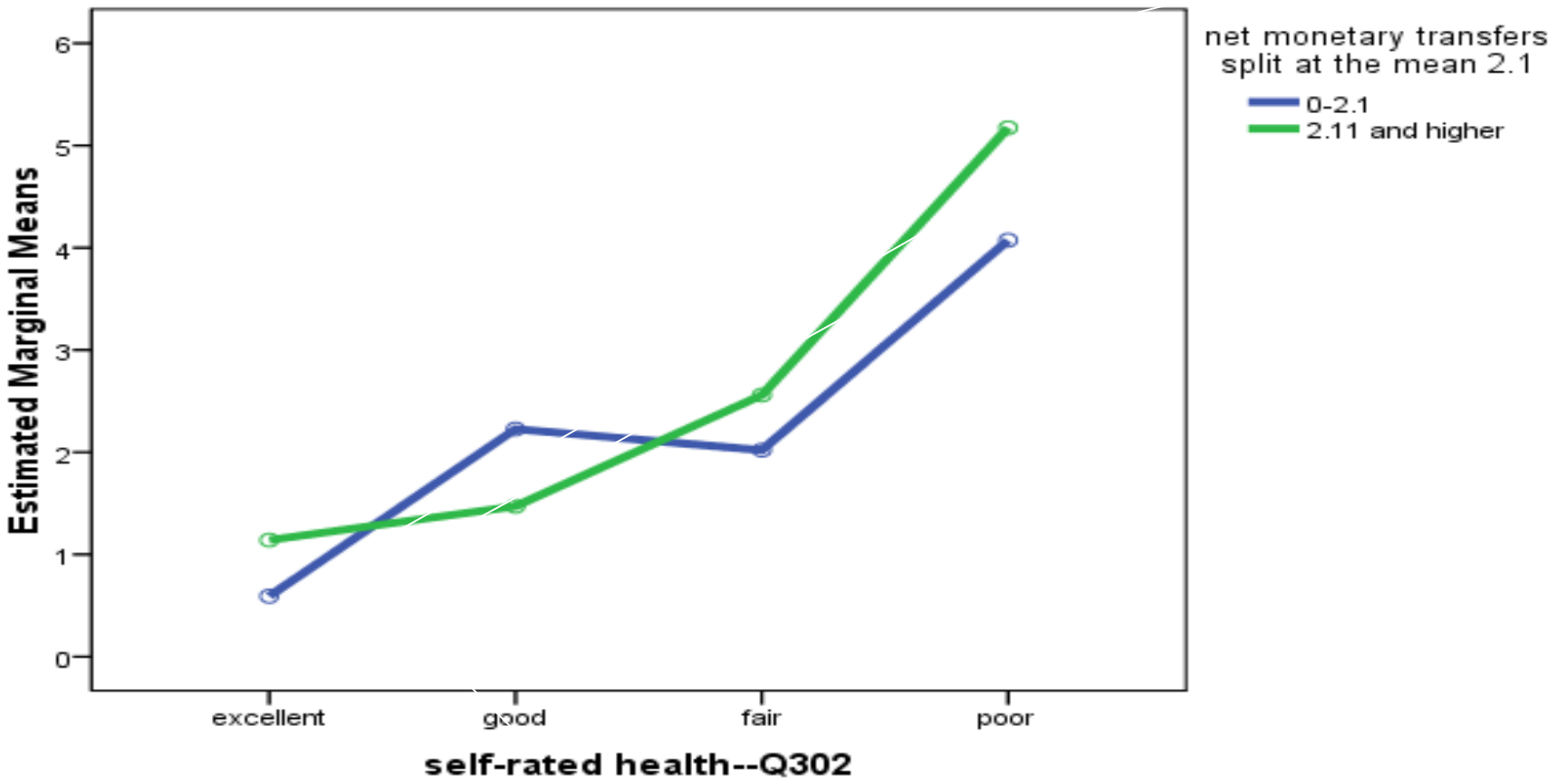
# Poisson Regression Predicting Health Service Use

Type	Variable	Model 1	Model 2	Model 3	Model 4
Predisposing	Age (years)	-.01*	-.01*	-.02*	-.02*
	Gender (1=Female)	.25*	.26*	.15*	.15*
	Marital status (1 = not married)	-.14*	-.01	.17*	.17*
	Education (years)	.02	-.01	.07	.07
	Occupation (1= agricultural)	.29*	.35*	.36*	.35*
Enabling	Income (log + 1)		-.08*	.03	.03
	Number of children		.09*	.10*	.10*
	Proximity (1= has child in village)		.21*	.23*	.23*
	Co-residence (1= lives with child)		-.09	-.08	-.09
	Instrumental support (1= receives from child)		.74*	.45*	.46*
	Net monetary transfers (log + 1)		-.03	.02	.03
Need	Self-rated poor health (1=excellent; 4=poor)			.44*	.31*
	Functional health difficulties			.01*	.01*
	Number of chronic diseases			.01	.01
	Depression			.02*	.02*
Interaction	Net monetary transfers × self-rated health				.06*



# Remittances from Migrant Children Allow Elderly Parents in Poorer Health to Receive Services

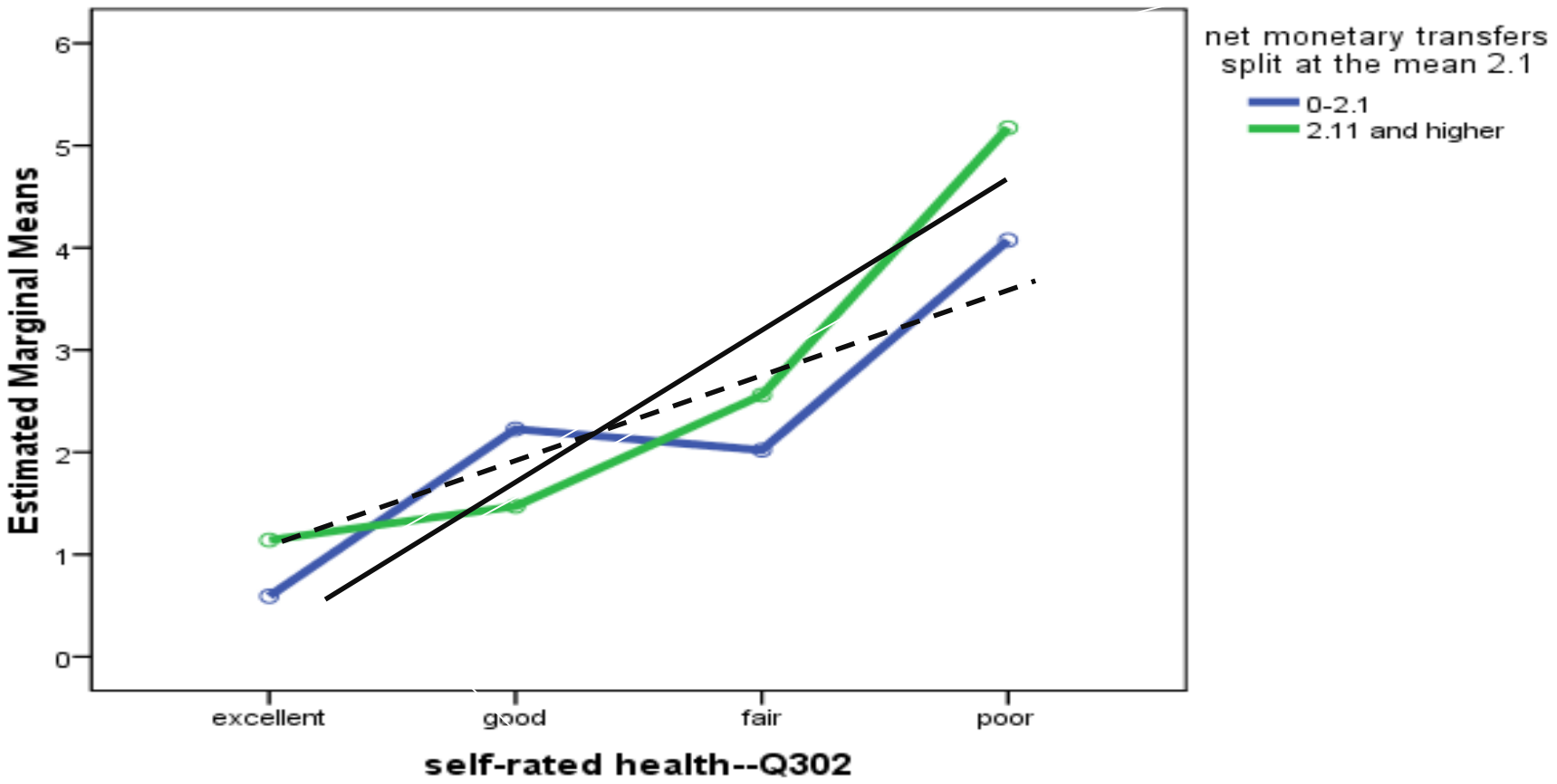
Estimated Marginal Means of outpatient service use--Q310





# Remittances from Migrant Children Allow Elderly Parents in Poorer Health to Receive Services

Estimated Marginal Means of outpatient service use--Q310



# Summary

- Remittances from adult children play an important role for older people in rural China
  - By improving emotional well-being and helping explain why custodial grandparenting is a positive experience
  - By allowing the consumption of more health care services as health needs escalate.
- Having more children and local children is an enabling factor in outpatient service use.



# Discussion

- Migration as an adaptive response to urban-rural economic disparities lifts the well-being of older generations through remittances, countering the dominant narrative that “left behind” elders are disadvantaged by the migration of adult children.
- Smaller family sizes of the future may change role specialization that now allows some children to migrate (and send back money) and some to stay behind (and help instrumentally).

# Acknowledgments

- Shuzhuo Li and his research team at the Institute for Population and Development Studies, Xi'an Jiaotong University.
- Iris Chi and the China Research Group in the School of Social Work at the University of Southern California
- Current and former graduate students and postdocs: Zhen Cong, May Guo, Lu Zhuo, Ling Xu, Lu Song, Wenjuan Yi, Lindsey Baker

