

Background

- The world is aging, but people age with different health outcomes.
- Education = the most significant impact on physical and mental functioning of the elderly among various socioeconomic factors
- "A family is an economic unit bound by emotional ties... It is in the household that the larger social and economic order impinges on individuals, exposing them to varying degrees of hardship, frustration and struggle"* (Mirowsky and Goldsteen, 1990)
- Families are important in shaping the members' life experiences and health outcomes.

WHOSE EDUCATION MATTERS?

Gap in the literature

- Existing literature do not focus on the educational levels of the family members altogether.
- Important to look at the relationship in Korean context where educational expansion has been rapid and substantial

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Research Question: What is the effect of family members' education on the health outcomes of the elderly?

Methods

- Quantitative analysis using the Korean Longitudinal Study of Ageing (KLoSA) dataset and Stata software program
- Survey subjects = Middle/old-aged population (45 or older) nationwide, excluding Jeju island
- 1st wave (2006) total sample = 10,254
- Dependent variable: an ordinal variable on the objective and subjective health status
- Explanatory variables: respondent's education, father's education, mother's education, spouse's education, first child's education.



Education and Health Status Distribution of the Sample

Education Level	(1) Father Education (% total n)	(2) Mother Education (% total n)	(3) Respondent Education (% total n)	(4) Spouse Education (% total n)	(5) First child education (% total n)	Number of Diagnosis of Any *Disease	Percent (%)
No formal education (illiterate)	20.75	39.6	6.9	10.5	0.3	0	57.8
No formal education (literate)	40.7	37.4	11.0	20.9	0.6	1	26.5
Elementary school	26.6	18.8	27.5	26.0	6.4	2	11.2
Middle school	6.2	2.6	17.1	13.7	8.3	3	3.4
High school	3.7	1.4	26.4	21.4	33.9	4	1.0
Professional/vocational school/ college	0.6	0.1	1.5	1.8	6.4	5	0.2
University	1.5	0.1	8.7	5.5	41.3	6	0.02
Master degree	0.03	0	0.7	0.3	2.2	Total n	4,443
PhD	0.02	0	0.2	0	0.6	*High blood pressure, diabetes, lung disease, heart disease, cerebrovascular disease, emotional problems, arthritis, prostatic disease, glaucoma	
Total N	10,034	10,072	10,246	2,455	9,951		

Results

Result 1. Changes in the odds ratio of (3) respondent's education led by a unit increase in (1)(2)(4)(5) other family members' education

Odds Ratio	(1)	(2)	(4)	(5)
(3)	1.73 (P<0.01)	1.81 (P<0.01)	1.60 (P<0.01)	1.40 (P<0.01)

Mother's education has the strongest effect on the respondent's education.
 [One unit increase in mother's education leads to an increase in odds ratio by 80%, controlling for other family members' education – father's, spouse's, and first child's education.]

Result 2. The odds ratio of being diagnosed of any disease for different education levels

Odds Ratio	^Respondent's education	^Father's education	^Mother's education	^Spouse's education	^First child's education
Any disease	0.7799 (P<0.01)	1.0008	0.97289	0.8957 (P<0.01)	1.1254 (P<0.1)
A unit increase in the education of *	Decrease in the odds ratio of being diagnosed of disease by 22%	Not significant	Not significant	Decrease in the odds ratio of being diagnosed of any disease by 10.43%	Increase in the odds ratio of being diagnosed of disease by 12.5%

Conclusion: Respondent's health is influenced by their education, spouse's education, and first child's education. Although not statistically significant, mother's education has an indirect influence on the health of the respondent, because it has the strongest influence on respondent's education.