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Social Class and Educational Inequality in South Korea

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## Korean Education in a Comparative Perspective

$\square$ Korean Context

- The rate of high school students who go to the university is highest in the world. $85.6 \%$ in 2006.
- Fierce Competition for University Entrance Exam
- Extensive Development of Shadow Education (Private After-School Education)


## Educational Institutions

$\square$ General High Schools

- White collar workers and the middle class

$$
71.5 \%
$$

$\square$ Vocational High Schools

- Supply of skilled workers for manufacturing industry $28.5 \%$
$\square$ High Proportion of the Private Education
- High School 47.1\%
- University 78.7\%


## Rate of Entrance into Higher Education


-OElementary - Middle - - High

The Expenditure for Higher Education in 2012


## Social Class and Educational Inequality

$\square$ Educational Competition

- The lower class parents try to make their offspring move upwardly.
- The upper class parents try to make their offspring not move downwardly.
- Education became a site of silent class war in the contemporary Korean society.
$\square$ The Poor State Welfare and Gradual Erosion of Family System $\rightarrow$ Intensification of the Educational
Competition for Jobs


## Persistent Educational Inequality

$\square$ Class Reproduction (Bowles and Gintis 1976 and 2002; Breen and Goldthorpe 2002; Bourdieu 1983)
$\square$ Intergenerational inheritance of inequality (Katz and Autor 1999, Bowles, Gintis and Groves eds. 2005)
$\square$ "Family background (money and culture) is still important in getting ahead."

## Association between Class and Education

$\square$ Class Matters?

- If educational inequality persists, is it based on social class?
$\square$ If there is, to what extent class matters?
- Controlling the effects of other factors, is there a net class effect?
$\square$ How does class matter?


## Data and Methods

## $\square$ Data

- Korea Education \& Employment Panel (KEEP) (1-3 waves)(2004-2006)
General High School: 2000 cases
Vocational High School: 2000 cases
$\square$ Methods
- Log-linear Model
- X2(Nested Model Tests) and BIC

Type of Children's High School by Father's Class

$\square$ General HS
$\square$ Vocational HS

Father's Class

## Transition after High School by High School Types



## Choices of High School Graduates by Father's Class


$\square$ Stop
$\square 2$ yr Col. $\square 4 \mathrm{yr}$ Uni.

## Log-Linear Model

$\square \log F(i j k l)=\mu+\mu e(i)+\mu c(j)+\mu h(k)+\mu u(l)$ $+\mu e c(i j)+\mu e h(i k)+\mu e u(i l)+\mu c h(j k)$ $+\mu c u(j l)+\mu h u(k l)+\mu e c h(i j k)+\mu e c u(i j m)$
$+\mu e h u(i k l)+\mu c h u(j k l)+\mu e c h u(i j k l)$
$\square$ Where $\sum \mu e(i)=\sum \mu c(j)=\sum \mu h(k)=\sum \mu u(l)$
$=\sum \mu e c(i j)=\mu e h(i k)=\sum \mu e u(i l)=\sum \mu c h(j k)$
$=\sum \mu c u(j l)=\sum \mu h u(k l)=\sum \mu e c h(i j k)$
$=\sum \mu e c u(i j m)=\sum \mu e h u(i k l)=\sum \mu c h u(j k l)$
$=\sum \mu e c h u(i j k l)=0$.

## A Model for Analysis

Parental Generation

Filial Generation

Parent's Education (E)


Parents' Class Position (C)

## Odds and Odds Ratio

$\square$ General HS. versus Vocational HS.

| Odds | Total | Male | Female |
| :---: | :---: | :---: | :---: |
| CAP | $=1.6455$ | 1.6598 | 1.6235 |
| PB | = . 929 | . 9506 | . 9048 |
| M | = 3.789 | 3.6522 | 3.0000 |
| WC | $=.8256$ | . 8497 | . 8164 |
| Odds Ratio | Total | Male | Female |
| CAP : M | $=.434$ | . 4545 | . 5412 |
| PB: M | $=.245$ | . 2603 | . 3010 |
| WC: M | = . 217 | . 2327 | . 2721 |

## (continued)

$\square$ University or College versus High School Only Odds

|  |  | Total | Male | Female |
| :--- | :--- | :--- | :--- | :--- |
| - CAP | $=1.167$ | 1.3455 | .9911 |  |
| - | PB | $=.8975$ | .9506 | .8410 |
| - | M | $=1.7174$ | 1.5476 | 2.000 |
| - | W | $=.7500$ | 1.0275 | .6546 |

Odds Ratio

| CAP: M | $=.6797$ |
| :--- | :--- |
| PB: M | $=.5226$ |
| $\mathrm{~W}: \mathrm{M}$ | $=.4376$ |


| .8694 | .4955 |
| :--- | :--- |
| .6142 | .4204 |
| .6639 | .3273 |

## (continued)

$\square$ University versus High School Only

Odds
$\begin{array}{lll}- & \mathrm{CAP} & =2.4061 \\ - & \mathrm{PB} & =1.7214 \\ - & \mathrm{M} & =2.8047 \\ - & \mathrm{W} & =1.4258\end{array}$
Odds Ratio
CAP: $\mathrm{M}=.8579$
$\begin{array}{ll}\text { PB: M } & =.6138 \\ \mathrm{~W}: \mathrm{M} & =.5084\end{array}$

Male
2.8462
2.1552
2.3636
1.6863
1.2042
.9118
7134

Female
2.0182
1.3767
3.7037
1.1720
. 5449
. 3717
.3164

## (continued)

$\square$ College versus High School Only

| Odds |  | Total |
| :--- | :--- | :--- |
| - | CAP | $=1.0748$ |
| - | PB | $=.9160$ |
| - | M | $=.6341$ |
| - | W | $=.9000$ |

Male
1.1154

Female
1.0364
1.2672
. 5273
1.0131
2.1153
2.4032
1.2166
.7477
$\mathrm{W}: \mathrm{M}=1.4193$
.6370
.8519
.7898
Odd Ratio

| CAP: M | $=1.6950$ | 2.1153 | 1.2166 |
| :---: | :---: | :---: | ---: |
| PB: M | $=1.4446$ | 2.4032 | .7477 |
| W: M | $=1.4193$ | 1.9213 | .9271 |

## Log-linear Models and Test Statistics

| Model | $\mathrm{G}^{2}$ | df | BIC |
| :---: | :---: | :---: | :---: |
| (1) (E, C, H, U) | 1549.79 | 63 | 1203.99 |
| (2) (EC, H, U) | 929.04 | 57 | 616.97 |
| (3) (EC, CH, U) | 755.48 | 54 | 442.61 |
| (4) (EC, EH, U) | 602.23 | 55 | 300.34 |
| (5) (EC, CH, EH, U) | 570.47 | 52 | 285.05 |
| (6) (EC, CH, EH, HU) | 162.25 | 50 | -112.20 |
| (7) (EC, CH, EH, HU, EU) | 134.76 | 46 | -106.75 |
| (8) (EC, CH, EH, HU, CU) | 147.44 | 44 | -94.07 |
| (9) (EC, CH, EH, HU, EU, CU) | 125.06 | 40 | -94.05 |
| (10) (EC, CH, EH, HU, EU, CU, EHU) | 54.64 | 36 | -140.96 |
| (11) (EC, CH, EH, HU, EU, CU, ECH) | 121.17 | 34 | -65.46 |
| (12) (EC, CH, EH, HU, EU, CU, CHU) | 76.78 | 34 | -109.84 |
| (13) (EC, CH, EH, HU, EU, CU, ECU) | 100.19 | 28 | -53.50 |
| (14) (EC, CH, EH, HU, EU, CU, EHU, CHU) | 29.47 | 30 | -135.20 |

## A Model for Analysis

## Parental Generation

Parent's Education (E)

Parents' Class Position (C)

## Filial Generation



## Log-linear Models and Test Statistics (Boys)

Model
(1) (E, C, H, U)
(2) (EC, H, U)
(3) (EC, CH, U)
(4) (EC, EH, U)
(5) (EC, CH, EH, U)
(6) (EC, CH, EH, HU)
(7) (EC, CH, EH, HU, EU)
(8) (EC, CH, EH, HU, CU)
(9) (EC, CH, EH, HU, EU, CU)
(10) (EC, CH, EH, HU, EU, CU, EHU)
(11) (EC, CH, EH, HU, EU, CU, ECH)
(12) (EC, CH, EH, HU, EU, CU, CHU)
(13) (EC, CH, EH, HU, EU, CU, ECU)
(14) (EC, CH, EH, HU, EU, CU, EHU, CHU)
$\mathrm{G}^{2}$ df BIC

| 893.25 | 63 | 430.41 |
| ---: | ---: | :--- |
| 523.20 | 57 | 104.44 |
| 450.58 | 54 | 143.86 |
| 362.19 | 55 | -41.88 |
| 345.60 | 52 | -36.43 |
| 108.61 | 50 | -258.72 |
| 97.22 | 46 | -240.73 |
| 99.34 | 44 | -223.91 |
| 90.71 | 40 | -203.16 |
| 56.75 | 36 | -258.73 |
| 85.81 | 34 | -163.98 |
| 54.77 | 34 | -244.02 |
| 70.29 | 28 | -135.42 |
| 31.94 | 30 | -188.46 |

## Log-linear Models and Test Statistics (Girls)

| Model | $\mathrm{G}^{2}$ | df | BIC |
| :---: | :---: | :---: | :---: |
| (1) (E, C, H, U) | 743.55 | 63 | 293.20 |
| (2) (EC, H, U) | 481.68 | 57 | 74.22 |
| (3) (EC, CH, U) | 411.84 | 54 | 25.83 |
| (4) (EC, EH, U) | 326.17 | 55 | -66.99 |
| (5) (EC, CH, EH, U) | 310.16 | 52 | -61.55 |
| (6) (EC, CH, EH, HU) | 107.35 | 50 | -172.94 |
| (7) (EC, CH, EH, HU, EU) | 88.97 | 46 | -239.85 |
| (8) (EC, CH, EH, HU, CU) | 92.24 | 44 | -222.29 |
| (9) (EC, CH, EH, HU, EU, EHU) | 54.19 | 42 | -246.04 |
| (10) (EC, CH, EH, HU, EU, CU) | 76.23 | 40 | -209.70 |
| (11) (EC, CH, EH, HU, EU, CU, EHU) | 40.24 | 36 | -257.10 |
| (12) (EC, CH, EH, HU, EU, CU, ECH) | 73.01 | 34 | -170.03 |
| (13) (EC, CH, EH, HU, EU, CU, CHU) | 53.88 | 34 | -189.16 |
| (14) (EC, CH, EH, HU, EU, CU, ECU) | 64.05 | 28 | -136.11 |
| (15) (EC, CH, EH, HU, EU, CU, EHU, CHU) | - | - | - |

Note) Model (14) is not testable due to some sampling zero cells.

## Conclusion

$\square$ Family background (class and education) significantly affects children's educational achievement (the middle class thesis).
$\square$ An effect of father's class on children's education can be observed at the early stage of education, the transition from secondary to tertiary education.
$\square$ There is gender difference regarding effects of family background on children's education in the late stage of educational transition from high school to university.

## Conclusion (continued)

$\square \quad$ We might get more comprehensive understanding of educational inequality in Korea after several years as the Korea Education \& Employment Panel (KEEP) survey proceeds. With the rise of unemployment of the university graduates after the financial crisis, class differentials becomes larger in the university education. Wealthy families send their children abroad to learn foreign language for one or two years, especially English, that is crucial for job qualification in Korea.
$\square \quad$ We can not account students who study abroad from the early stage. More than 1 percent of high school students went abroad to study.

Thank you very much.

