A study on the care work effects on parents' bedtime in South Korea

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Intro(1)

• This paper is about health inequality

depends on gender.

Intro(2)

- There are many factors that influence our health.
 - amounts of time doing sleep, low level stress, appropriate exercise and brain activity, enough nourish, regular life, not smoke and not alcohol, hygiene, body temperature, social networks...

Intro(3)

Today, I focus on amounts of time doing sleep.



amounts of time do sleeping

Intro(5)

• Most researchers have interested in

relations between amounts of time doing sleep and health.

Intro(6)

- A few sociologists reports what factors affects amounts of time doing sleep.
 - Ailshire, J. and Burgard, S. (2012)
 - Burgard, S. (2011)
 - Burgard, S. and Ailshire, J. (2009)
 - Seun-Eun Cha and Ki-Soo Eun (2014)
 - -etc

Previous studies review(1)

- Gender
- Age
- Job and Income
- Race
- Network
- etc

Previous studies review(2)

- Mechanism
 - Most people should get up at certain times for going to office.
 - The factors keep people awake at night.
 - The later people go to bed, the less they do sleep.

Previous studies review(3)

- Why do not researchers have interested in bedtime time slot? I prefer to analyze bed time.
 - Advantage 1 : amounts of time doing sleep depend on bedtime

Previous studies review(4)

- Why do not researchers have interested in bedtime time slot?
 - Advantage 2 : Sleeping time slot is very important factor to health because body secretes melatonin and cortisol well when people sleep at night not daytime.

Previous studies review(5)

- Melatonin strengthen immunity.
- Cortisol get rid of stress.

Previous studies review(6)



citation : https://www.crossfitbloomfield.com/2018/07/09/lifestyleguidelines-energy/melatonin-and-cortisol/





citation : http://cebp.aacrjournals.org/content/23/7/1176.figures-only

Previous studies review(8)



citation : https://link.springer.com/article/10.1007/s00420-014-0954-5

Research Question(1)

- Then, I find what factors affect bedtime.
- analyze whom?

 people who stay up late because of unreasonable cause

– Who?

Research Question(2)

- In South Korea, work-life balance is very hot issues.
- Second shift : Women still take care of most of the household and child care

responsibilities despite their entrance into the labor force.

Research Question(3)

• However, dual earner husbands do

housework more than they did in the past.

Research Question(4)

dual earner husbands' predicted housework time(minute)



Research Question(5)



Research Question(6)

My question is whether dual earner

husbands' doing housework makes their spouse's bedtime advanced or not.

Research design(1)

- Korean Time Use Survey, 2004/2009/2014
- unit of analysis
 - : dual earner couples(husband and wives personally)

Research design(2)

first day

첫째 날

| | | 1. 주로 한 행동 | | 2. 행위장소/이동수단 | | 3. 함께 한 사람 | 4. 동시에 한 행동 |] |
|------|------------------|------------------------|----------------------------------------|-------------------------------------------|------------------------------------|--------------------------------------------------------------------------|---------------------------------------|-----|
| time | Slot 새벽 이시 | 주된 행동을 10분 간격으로 기입합니다. | | 1.직장·학교 6.7 2.남의 집 7.7 (부모님댁 등) 8.3 | 걸어서 자전거 개인교통 공공교통 기타교통 | 1. 혼자 2.배우자 3.만10세미만 (손)자녀 4.만10세이상 (손)자녀 5.부모 9.기타 아는 사람 | 주로 한 행동과 동시에 다른 행동을 한 경우 기입합니다. | |
| 001 | 10 | 00:00 | main activity | locati | ion | with whom | simultaneous | 001 |
| 002 | 20 | 00:10 | ······································ | | | | activity | 002 |
| 003 | 30 | 00:20 | | | | | | 003 |
| 004 | 40 | | | | | | | 004 |
| 005 | | | | | | | | 005 |
| 006 | 50 | | | | | | | 006 |

Research design(3)

- method : event history(cox's proportional hazard model & parametric model for robustness check)
- dependant variable :
 - everyone experience event(=sleep)
 - duration between 20:00 and when people go to bed.

Research design(3)

- key variable :
 - gender(male=1, female=0)
 - their children(under 20 years old)'s latest bedtime

(duration between 20:00 and when they go to bed)

- husband housework time

-year

Research design(5)

- control variable :
 - personal and spouse characteristics
 - age, schooling-year, gender equality, job, paidwork time, leisure activity
 - couple characteristics
 - couples' total income, wives income rate per couples' total income, weekend

Result(1)

• Reporting control variable effect skip.

Result(2)

| | | model 1 | model 2 | model 3 |
|----------------------------|------|-----------|-----------|-----------|
| children's duration | | -0.053*** | -0.060*** | 0.026*** |
| | | (0.005) | (0.006) | (0.002) |
| gender(ref=female) | | | | |
| | male | -0.032 | -0.055 | -0.001 |
| | | (0.032) | (0.034) | (0.011) |
| male × children's duration | | 0.015* | -0.007** | |
| | | | (0.008) | (0.003) |
| year(ref=2004) | | | | |
| | 2009 | 0.077** | 0.078** | -0.023** |
| | | (0.024) | (0.024) | (0.008) |
| | 2014 | 0.127*** | 0.127*** | -0.036*** |
| | | (0.023) | (0.023) | (0.008) |
| husbands' housework time | | -0.058* | -0.056* | 0.080** |
| | | (0.024) | (0.024) | (0.026) |
| log-likelihood | | -122432.7 | -122430.8 | -6264.0 |
| N | | 14,240 | 14,240 | 14,240 |
| | | | | |

Result(3)

- If couples do not have children under 20 years old, they go to bed simultaneously.
- If couples have children under 20 years old, there is interaction effect between gender and
 - the latest children's bedtime.

Result(4)

- The later children sleep, the later parent sleep in order to care their children.
- Also, there is gender gap.

Result(5)



Result(6)

- Dual earner couples sleep earlier than in the past.
- However, there is not interaction between year and gender.

Result(7)

- The more husband do housework, the later couple sleep later.
- Probably, husband do housework much more when they are too busy.
- There is no interaction between husband housework time and others.

 conclusion : Husbands' doing housework does not affect wives' bedtime. Dual earner wives still experience discrimination.
Mothers' care work makes themselves unhealthy by staying up at night.



• Bedtime ->Subjective health

