

Research Questions

1. What is the effect of neighborhood conditions on parenting stress?
2. Is parenting stress of Blacks, Hispanics, and Whites affected differently by neighborhood conditions?

Hypotheses

- Higher levels of neighborhood disorder and lower levels of cohesion will show increases in parenting stress
- Parents of different race should be affected differently by neighborhood factors on parenting stress

Data

- The first three waves of Fragile Families and Child Wellbeing Study
- Stratified random sample of large US cities, populations of 200,000
- Longitudinal study on unmarried parents and their children
- Interviewed at child birth, and year 1, 3, and 5

Parenting Stress Measures

- 12 items, adapted from Parenting Stress Index
 - how well handles things (1)
 - whether giving up too much for the child (2)
 - feelings of being trapped (1)
 - inability to do new things (1)
 - affects romantic relationships (1)
 - feelings of loneliness (1)
 - less interest/enjoyment (4)
 - feeling bothered (1)
- Alpha = .87

Neighborhood Measures

- Previous studies used objective measures such as neighborhood mean income, poverty level, percent of single-mother families to measure neighborhood context
- Lack of data on perception
- Two dimensions: Neighborhood social disorder and social cohesion scales
- Reflect perception of parents on their neighborhood context

Social Disorder

- Neighborhood social disorder is adapted from Neighborhood Environment for Children Scale
- 8 items, include items on
 - drug dealing (1),
 - loitering (3),
 - disorderly behavior (3),
 - gang activity (1)
- Alpha = .93

Social Cohesion

- Neighborhood social cohesion is adapted from Social Cohesion and Trust Scale
- 5 items, include items on
 - how well neighbors get along (2),
 - trust each other (1),
 - help each other (1),
 - share values (1)
- Alpha = .83

Covariates

- Maternal:
 - Race
 - Age
 - Education
 - Employment
 - Social support
 - Relationship status
 - Health
 - Attendance at religious services
- Child:
 - Health
 - Temperament

Descriptive Results

- Overall, mothers had modest parenting stress, and neighborhood disorder was not frequently, although social cohesion in the neighborhood was not high
 - Parenting stress (1-5) = 2.08 (.69)
 - Social disorder (1-4) = 1.80 (.80)
 - Social cohesion (1-5)(reverse coded) = 2.52 (.99)

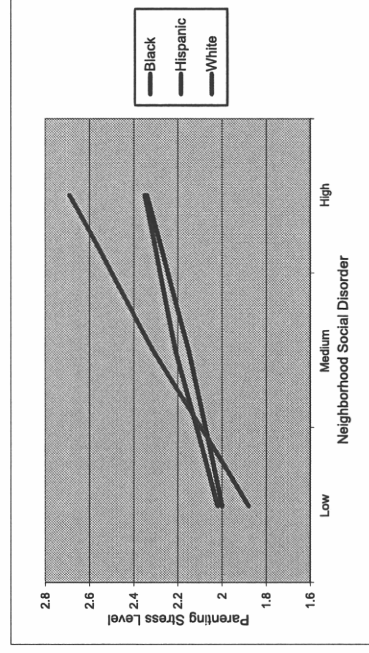
Bivariate Results

- Mothers lived in neighborhood with high social disorder were likely to have high parenting stress than mothers lived in low social disorder neighborhood, $r=23$ ***
- Mothers lived in neighborhood with low social cohesion were likely to have high parenting stress than mothers lived in high social cohesion neighborhood, $r=24$ ***

Regression Results

- Controlling for covariates, neighborhood context still makes significant effects on parenting stress
- Level of neighborhood social disorder had negative effects on parenting stress, $B=-.06$ **
- Extent of neighborhood social cohesion had positive effect on parenting stress, $B=.08$ ***

Interaction Effects



Discussion


- Race: minority parents such as Black and Hispanic mothers were more likely to live in distressed neighborhoods, however, experience less parenting stress than White mothers, holding others constant
- Why?
- Resiliency?

Intervention Points

- Neighborhood and Community Level:
 - Programs to reduce loitering, drugs, and gang activity
 - Programs to help build neighborhood relationships and ties
- Sensitive to race issues

Summary/Conclusion

- Early parenthood is important
- Bioecological system
- Individual, family, neighborhood, social policy all make difference
- Holistic approach to reduce parenting stress, improve parenting, and advance child's outcomes



First-year maternal employment and child development in the first seven years

Wen-Jui Han, Columbia University
(with Jeanne Brooks-Gunn and Jane Waldfogel)

International Workshop on Safety for Child-Rearing Families
Tokyo, Japan
February 8, 2011

The Fundamental Considerations

- Nature versus Nurture
 - Even when there is a gene (or set of genes) that places individuals at risk of poor health or development, the environment can play a decisive role in determining how that gene is expressed (e.g., the gene can pose no risk unless combined with a harsh environment).
- Primacy of early versus later experiences (timing)
 - Is there a critical period (or window) for human brain development?
- Influence of parents as opposed to peers



Theoretical Frameworks

- Developmental Psychology
 - Having to do with child and family characteristics
 - Attachment
 - Maternal sensitivity and Home Environment
 - Time spending together (quantity and quality)
 - Type and Quality of Child Care
- Sociology
 - Roles played by individuals
 - Roles at home and work (conflict and/or complementary) – role strain / spillover / crossover
- Economics
 - Time allocation
 - Specialization in home production vs. labor market activity
 - Family income (Investment in children)
 - Human Capital accumulation / early investment, returns to later achievement



Through Two Mechanisms

- By Maternal Employment itself per se
 - Reduced time caring for children physically/nutritionally
 - Reduced time supervising children
- By the “Packages” come with Maternal Employment
 - Work condition – stressful environment
 - Child care – quality and quantity
 - Support – friendly and supportive policies

Important Dimensions

- Related to Maternal Employment
 - Timing
 - Intensity
 - Schedules
- Mediating Mechanisms, changes in
 - Family's economic resources
 - Maternity sensitivity and Home environment
 - Type and quality of child care
- Moderating Contextual Factors
 - Child's gender / temperament
 - Race/Ethnicity
 - Mother's occupation (quality and complexity)
- Related to Families
 - Mother-father employment patterns
 - Mother-father availability

Background

- Negative associations between FT maternal employment in the first 9 months and cognitive outcomes at age 3 have been reported for non-Hispanic white children from the NICHD Study of Early Child Care (Brooks-Gunn, Han, & Waldfogel, 2002).
- Prior work with the NLSY-CS has found persistent effects as late as age 7 or 8 (Han, Waldfogel, & Brooks-Gunn, 2001; Waldfogel, Han, & Brooks-Gunn, 2002) but could not control for the quality of the home or child care.
- It was not known whether those effects would persist beyond age 3, or whether there would be effects for children of different race/ethnicity

Research Questions

- Any association between 1st-year maternal employment and cognitive, social, and emotional outcomes for children at age 3, at age 4-5, and in first grade?
 - Explicitly compare FT and PT effects
 - 1st-year maternal employment may alter children's trajectory as well as initial levels
- Do the results differ by child, family, and job characteristics?
 - Child's gender / temperament
 - Family race/ethnicity
 - Maternal occupation (professional vs. non-professional)
- What are the mechanisms in explaining the association?
 - Mother's earnings
 - Maternal sensitivity, mental health, and home environment
 - Type and quality of child care

Data

- **NICHD Study of Early Child Care**
 - Longitudinal study of 1,364 children from 10 sites around the nation, followed since birth (in 1991)
 - Home visits at 1, 6, 15, 24, 36, & 54 months
 - Phone interviews every three months to track maternal employment and child care use
 - Visits to child care settings at 6, 15, 24, 36, & 54 months
 - Home and Laboratory assessment at 15, 24, 36, 54 months
- **The Sample:** All children with no missing data on outcomes
 - Non-Hispanic White, $N = 1,074$ at age 3 (84% white non-Hispanic); about 900 after age 3 (again, 84% white non-Hispanic).
 - Non-Hispanic Black, $N = 113$

Cognitive Outcomes

- **At 36-months:** Bracken School Readiness Scale, (percentile rank)
- **At 54-months:**
 - Pre-School Language Scale (PLS)
 - Woodcock Johnson (WJR)-Language Skills Composite
 - WJR-Applied Problems
- **At First-grade:**
 - WJR Language Skills Composite
 - WJR Applied Problems
 - SSRS Academic Comprehension
 - Current School Performance

Social and Emotional Outcomes

- **At 15-month:** Attachment
- **At 36-month:**
 - Attachment
 - Mother- and Caregiver-report CBCL
- **At 54-month:**
 - Mother- and Caregiver-report CBCL
- **At First-grade:**
 - Teacher-report SSRS Social skills
 - Teacher-report SSRS Peer-Competence
 - Mother- and Caregiver-report CBCL

Methodology

- **Maternal Employment:**
 - FT (55%) or PT employment (23%) by 12 months postbirth
 - Subsequent employment (whether mother worked at 15, 24, 36 months, and between 42 months and time of the assessment).
- **Quality of Home Environment:**
 - The mean of HOME scores by the assessment date
 - The mean of Mother's Sensitivity by the assessment date
 - The mean of Mother's Depression by the assessment date
- **Child Care:**
 - # Times in Various Types of Child Care by the assessment date
 - The mean of Child Care Quality (ORCE) -- at 6, 15, 24, 36, and 54 months -- by the assessment date
- **Other Maternal and Family Characteristics**

Selection Into Early Employment

- **Differences in the raw data between children whose mothers worked early FT and those who did not work by 12 months:**
 - Non-Hispanic white children whose mothers worked early FT are more advantaged (fewer older siblings, higher incomes, lower poverty, better-educated mothers, & less depressed mothers 1-month post-birth). Early PT group is the most advantaged among all.
 - African-American children whose mothers worked early FT are even more advantaged, and these children have higher scores on 3 of the cognitive outcome measures. No advantage for early PT group.

Parental Job Characteristics by Mother's Employment Status in the First Year

Non-Hispanic White (N=900)	FT work by 12th month	PT work by 12th month	No work by 12th month
Mother occupation before birth (%)			
Professional	38.92	53.63	26.73
Non-Professional	61.08	46.37	73.27
Father occupation at 1 st month (%)			
Professional	38.36	52.24	45.88
Non-Professional	61.64	47.76	54.12
Mother's job completely or fairly flexible at 6 th month (%)	59.78	75.48	na
Father's job completely or fairly flexible at 6 th month (%)	46.44	42.27	54.27
Mother average weekly work hours by 12 th month	27.73 (8.67)	8.63 (5.47)	0
Father average weekly work hours by 12 th month	40.22 (15.98)	45.43 (13.41)	39.78 (18.13)
Combined mother and father average weekly work hours by 12 th month	67.96 (18.98)	54.07 (14.70)	39.78 (18.13)
Mother taking paid maternity leave (%)	72.18	36.06	11.22
N	496 (55.11%)	208 (23.11%)	196 (21.78%)

Maternal Separation and Social Interaction with Children

- Mothers who do not work by 12th month seem to have the highest level of maternal separation anxiety, and this is particularly true for mothers with nonprofessional jobs.
- Early FT mothers spent significantly less time on social interaction with children, followed by early PT and not-working groups: 96, 125, and 165 minutes, respectively, on weekdays, but the patterns shifts for weekends (157 vs. 130 minutes)

Any Association Between Early Maternal Employment and Children's Cognitive Outcomes and Do They Persist?

	Age 3		Age 4 ½		First grade		WJIB- Applied Problems Composite	WJIB- Academic Competence	Current School Performance
	Readiness	Pre-School Language (PLS)	WJIB- Language Skills Composite	WJIB- Applied Problems	WJIB- Language Skills Composite	WJIB- Applied Problems			
FT by 12 th mo.	-5.41 (2.63)*	-5.52 (2.01)**	-2.99 (1.17)**	-4.58 (1.64)**	-2.54 (1.17)*	-4.32 (1.99)*	-3.63 (1.36)**	-0.28 (0.10)**	
PT by 12 th mo.	-1.61 (2.67)	-2.25 (2.05)	-1.36 (1.18)	-2.14 (1.66)	-1.28 (1.19)	-3.28 (2.03)	-1.48 (1.37)	-0.22 (0.10)*	
Diff. b/w FT & PT	* [-0.03]	* [-0.05]	* [-0.06]	* [-0.06]	ns [-0.05]	ns [-0.08]	* [-0.06]	ns [-0.11]	

Note: Bracken School Readiness is percentile score; PLS & WJIB are standardized scores. All models control for child's gender, having older sibling, log family income the year before the birth, family ever in poverty, and mother's PPVT-R score, marital status, education, & age at birth, depression at 1-month, and subsequent employment. Unstandardized beta coefficients are presented, standard errors in parentheses, standardized beta coefficients in brackets. * $p < .05$. ** $p < .01$.

More Results

- No particular timing effects were found, although there is some indication that it may have to do with the early maternal employment begun by 6th or 9th months
- Are the associations weaker or stronger over time?
 - Stable over time
 - through its links with early cognitive development before age 3 & through the trajectory of development thereafter or through competencies measured on later outcomes but not on the Bracken at age 3
- Subsequent maternal employment tends to be positive, but not significant

Do These Effects Vary by Contexts?

- Contexts / Moderators
 - Child's gender and temperament
 - Race/Ethnicity
 - Mother's Occupation
- Short Answer: No
- Some indication that boys with difficult temperament may be rated unfavorable by teachers on SSRS academic competence and current school performance

More Results

- Timing Effects:
 - Children whose mothers had worked FT by 3, 6, or 9 months have significantly more caregiver-report externalizing behavior problems at age 4.5 than those whose mothers did not work
- Are the associations weaker or stronger over time?
 - After controlling for behavior problem at age 3, the differences between FT and PT attenuated, thus
 - The found differences between FT and PT are through the links with early externalizing behavior problems at age 3

Any Association Between Early Maternal Employment and Children's Social and Emotional Outcomes?

	CBCT at Age 3		Age 4½		First-grade		SSRS Social Skills	SSRS Peer Competence
	Mothers' Report	Teacher's Report	Mothers' Report	Teacher's Report	Mothers' Report	Teacher's Report		
FT by 12 th mo.	0.80 (0.75) [0.06]	2.34 (1.47) [0.14]	2.00 (1.12) [0.11]	2.51 (1.38) [0.13]	1.01 (1.17) [0.05]	1.31 (1.03) [0.08]	-2.00 (1.62) [-0.08]	-0.61 (0.42) [-0.09]
PT by 12 th mo.	-0.28 (0.77) [-0.02]	-0.20 (1.30) [-0.01]	0.71 (1.13) [0.03]	-1.61 (1.40) [-0.07]	-0.84 (1.19) [-0.04]	-1.55 (1.04) [-0.08]	0.80 (1.64) [0.02]	0.11 (0.42) [0.01]
Diff. b/w FT & PT	*	**	ns	***	*	***	*	*

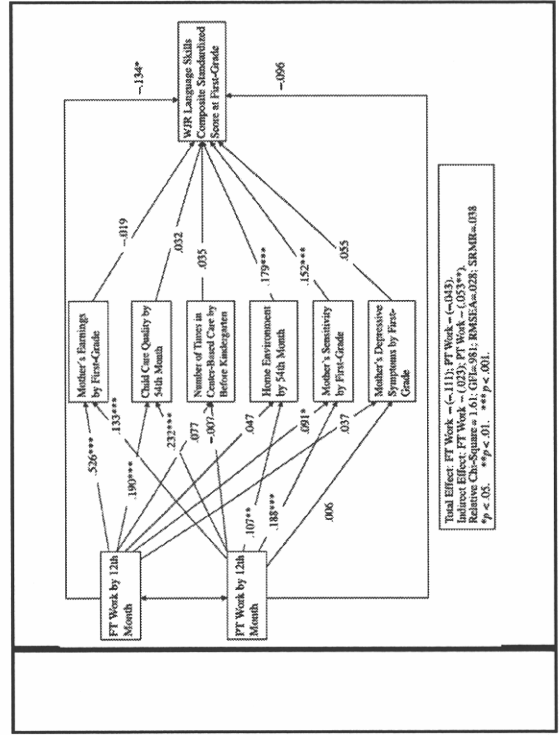
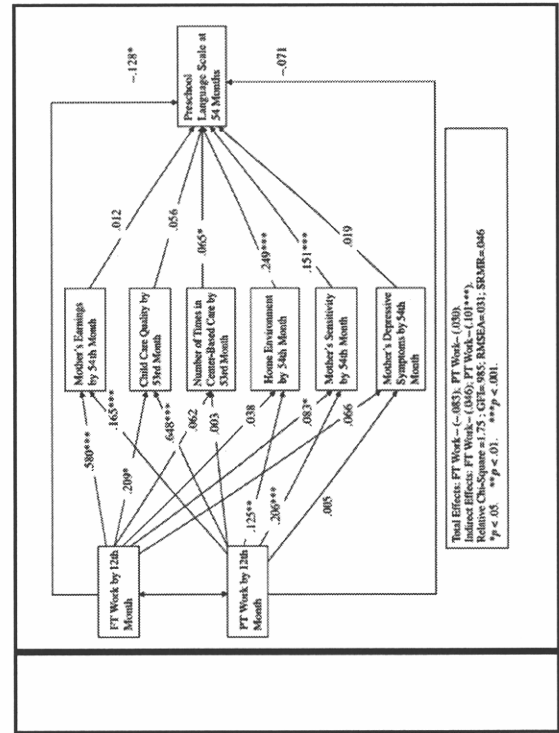
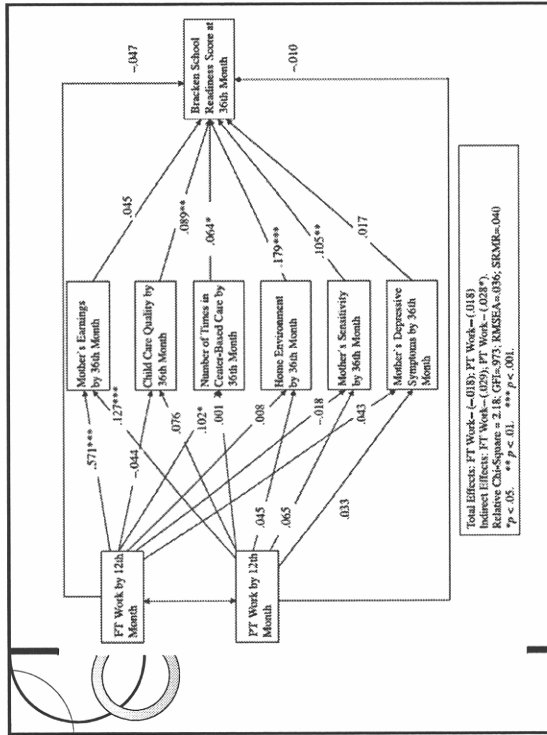
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Do The Effects Vary by Contexts?

- Contexts / Moderators
 - Child's gender and temperament
 - Race/Ethnicity
 - Mother's Occupation
- Do not vary by contexts for the comparison between early FT and not-working nor between early PT and not-working
- Do vary by contexts for the comparisons between early FT and early PT:
 - Boys
 - Mothers with nonprofessional jobs

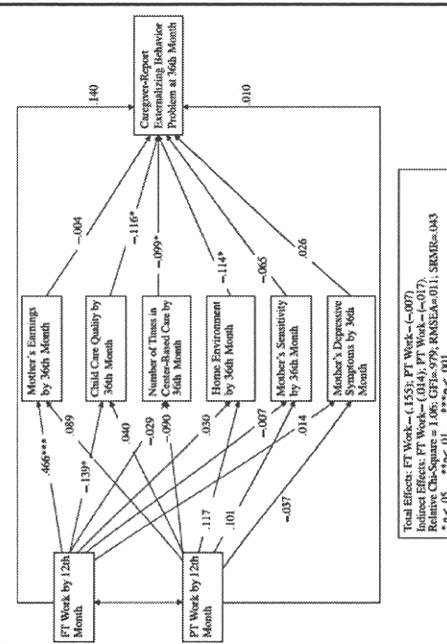
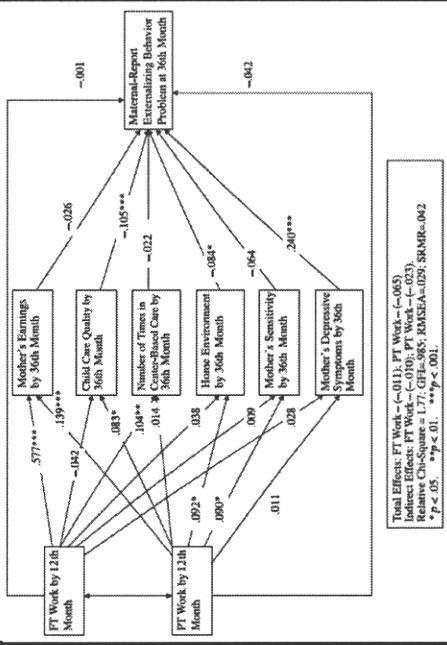
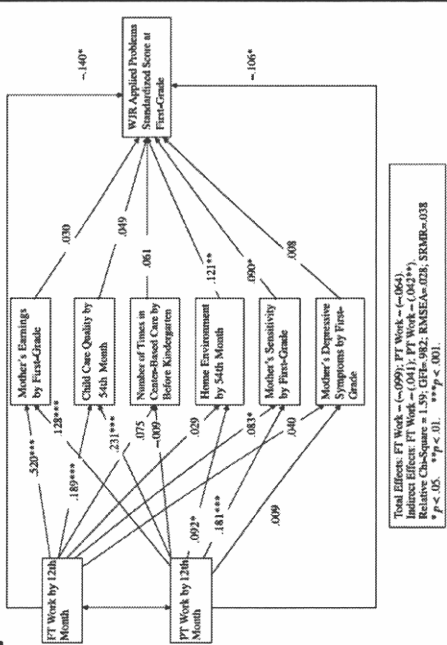
The Mechanisms

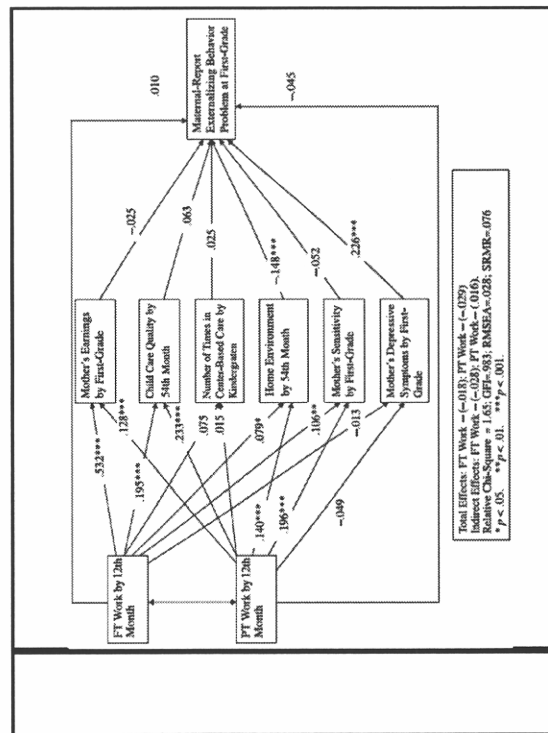
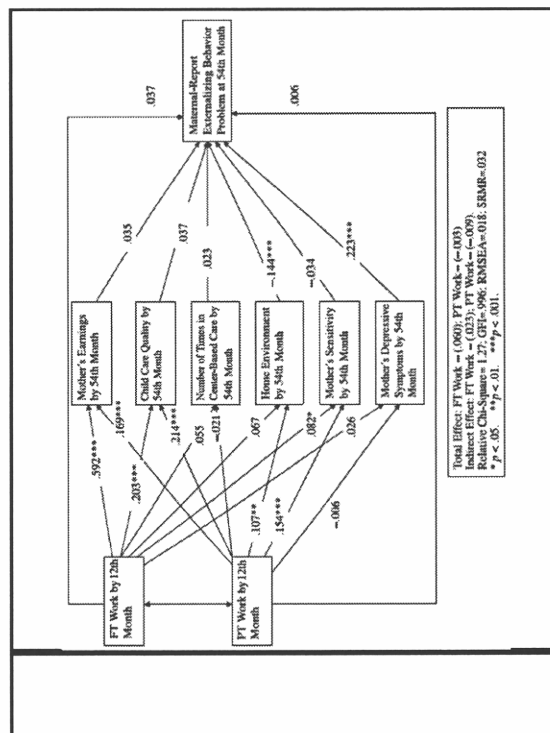
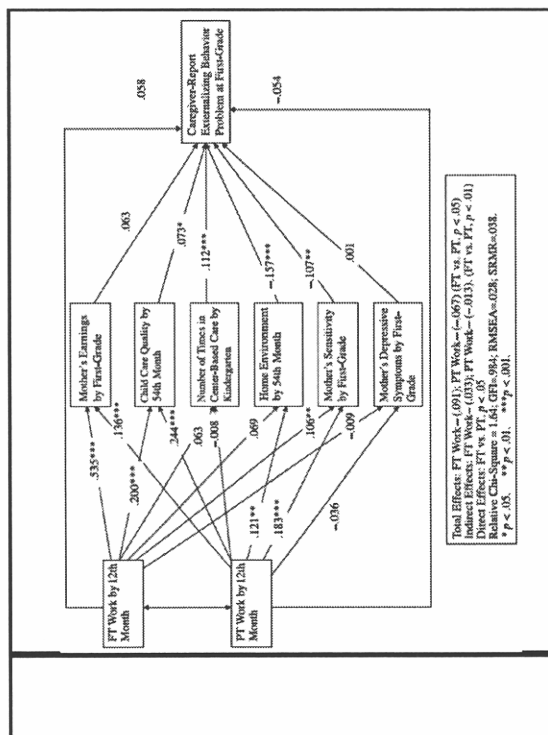
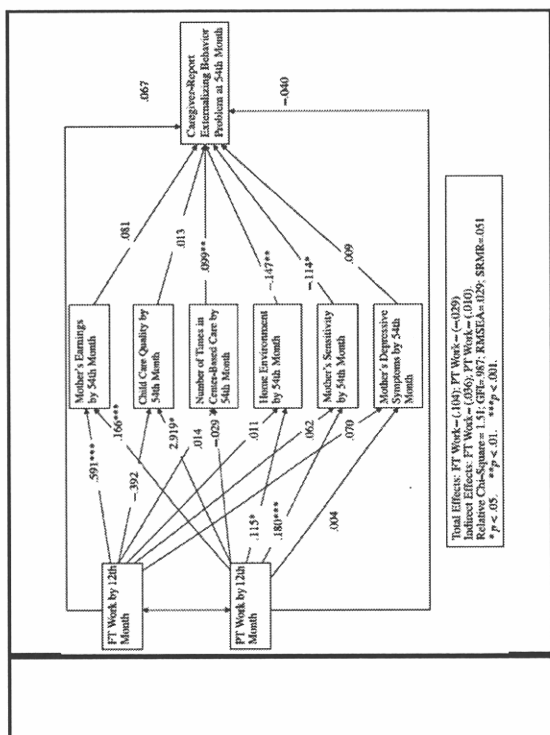
- Early FT is significantly associated with:
 - Higher earned income
 - Higher depression
 - Lower quality of HOME (vs. early PT)
 - Lower maternal sensitivity (vs. early PT)
 - More low- and high-quality of care
 - More use of center-based care
- Early PT is significantly associated with:
 - Higher maternal sensitivity
 - Higher quality of the HOME
 - More high-quality of care



Pathways of Early Maternal Employment to Cognitive Outcomes

- Early FT
 - Significant negative direct effects at age 4.5 and first grade but overall non-significant total effects
 - Through increased use of center-based care
 - Somewhat through greater maternal sensitivity
- Early PT
 - Significant positive indirect effects at ages 3 and 4.5 and first grade and significant negative direct effects at first grade but overall non-significant total effects
 - Through Home Environment
 - Through maternal sensitivity





No significant direct, indirect, nor total effects of FT & PT on Social and Emotional Outcomes

- Early FT, some indication, the offsetting role played by:
 - Higher maternal sensitivity
 - Higher quality of home environment
- Early PT, consistently:
 - Higher quality of care
 - Higher quality of home environment
 - Greater maternal sensitivity

The Big Picture

- The overall effect of 1st-year maternal employment for contemporary American children is neutral
 - With the use of rich longitudinal
 - With the use of analysis focusing on total effects
- Significant negative direct effects of FT balanced by significant positive indirect effects
- Significant positive indirect effects of PT balanced by non-significant negative direct effects
- Important mediators and offsetting factors are related to:
 - Quality of parenting
 - Children's experiences of child care

Limitations / Future Directions

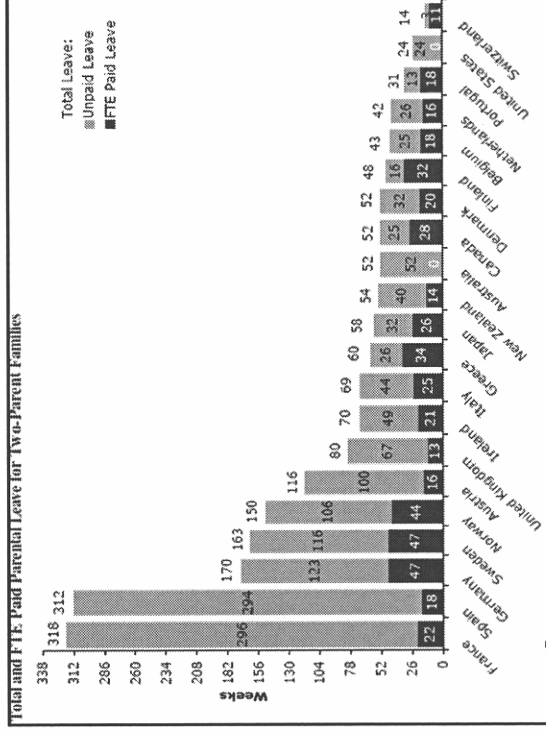
- Racial/Ethnic Differences
 - Small sample size
 - Cultural beliefs / Normalize experience about maternal employment
 - Inadequate set of mediators
- The Role of Fathers and other family members
- Causality / Selection Bias
- Employment-related factors (e.g., nature, type, and quality of jobs)
- The role played by mother's earnings / material hardship and financial strain

Balancing Work & Family

- Extending paid parental leave
- Rights to request PT or flexible work schedules
- Support good-quality child care

1. Parental Leave Policy

- An average of 10-month leave (the OECD averages)
- Universal Coverage
- Paid
- Need to consider gender equity (e.g., non-transferable quotas of leave for each parent)



2. Child Care Policy

- Support for the costs of child care for children under 3
- Moving toward universal and publicly funded preschool provisions for children ages 3-5
- Improve the quality of the care
- Bottom-Line
 - Providing more opportunities for parents to use high-quality care (e.g., star-rating systems; quality with subsidy)
 - Tighten existing regulations
 - Expand Early Intervention programs (e.g., Head Start in the US)

Directions Pursued by Most Countries

- Growing Convergence across countries:
 - importance of children in high-quality care and education; and
 - the responsibility of government (rather than parents or the private market) to provide or fund care
- Preschool is increasingly seen as education and is coming to be universal, particularly in a year or two immediately prior to formal school entry.
- Most countries are moving in the direction of providing a free or low-cost preschool place, on at least a part-day basis, to all children aged 3 and older.

Publicly Supported Child Care in 11 Advanced Industrialized Nations

Country	Percentage of Children in Publicly Supported Care		Share of Child Care Costs Covered by Government	
	Age 0-2	Age 3-6	Age 0-2	Age 3-6
United States	5%	54%	25%-30%	25%-30%
Canada	5%	53%	N/A	N/A
Denmark	48%	82%	70%-80%	70%-80%
Finland	21%	53%	85%	85%
Norway	20%	63%	68%	68%
Sweden	33%	72%	82%-87%	82%-87%
Austria	3%	80%	N/A	N/A
France	23%	99%	72%-77%	100%
Germany	2%	78%	N/A	N/A
Italy	6%	91%	N/A	N/A
United Kingdom	2%	60%	N/A	N/A

Sources: Data on percentage of children in subsidized care from Kauerman, S.B. Early childhood education and care: An overview of developments in the OECD countries. *International Journal of Educational Research* (2007) 33:7-29. Table 1, and Meyer, M.K. and Cornick, J. Cross-national variation in ECEC service organization and financing. In: *Early childhood education and care: International perspectives*, S.B. Kauerman, ed. New York: Institute for Child and Family Policy, Columbia University, 2001, pp. 141-35, Table 4. Data on share of child care costs covered by government calculated relative data from Meyer and Cornick (2007), Table 5.

N/A indicates not available.

Employment Policy

- Scheduling flexibility
- The availability of part-time
- Sick and Vacation Leave, and flexibility
- Needs to be packaged with comprehensive social welfare benefits (e.g., health insurance, income support)

**An Empirical study on relations between
 contraception behavior and health/socio-
 economic status among Japanese women**

National Institute of Population and
 Social Security Research
 Haruko Noguchi

INTERNATIONAL WORKSHOP
 ON SAFETY NET FOR CHILD-REARING FAMILIES
 2011/Feb/8

Objectives

- Investigate the trend of contraception behavior among Japanese single and married women in the last two decades (medically provided versus non-medically provided).
- Evaluating the relations between contraception behavior and health and socio-economic status (SES) of Japanese women.

Background (1)

- Negative correlation between (induced) abortion and contraception rate after 1960s'

Background (2)

Background (3)

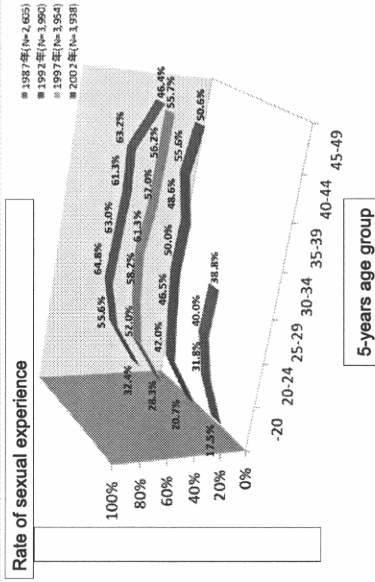
Nevertheless...

- The number of abortion among teenagers or less than 25-year-old and married women in 30-44 years old increases (Fujiyama-Koriyama, Fukao, et al. (2000)).
- ¼ experienced premarital pregnancy in 2009 (The Ministry of Health, Labour and Welfare).
- Even after the removal of ban for oral contraceptive pills finally in 1999, Japanese women inclines to the traditional and classic contraception technology with comparatively high risk of pregnancy (Ogawa and Retherford (1991), Kitamura (1999), Goto, Reich, and Aitken (1999), Kihara, Kramer, Brain, et al. (2001) etc.).

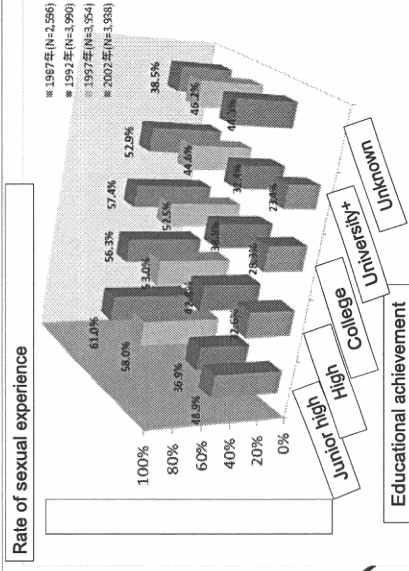
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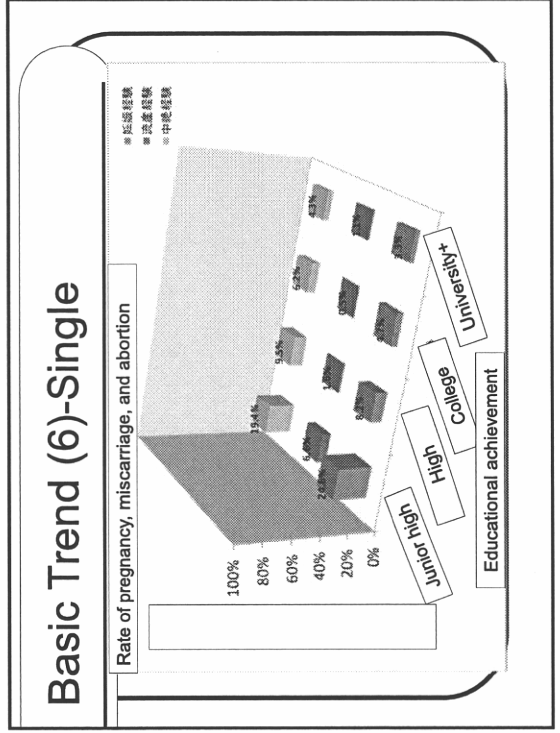
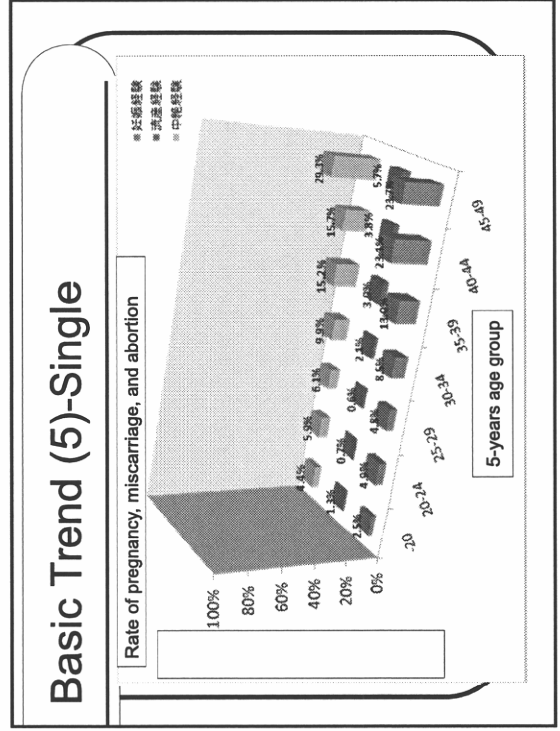
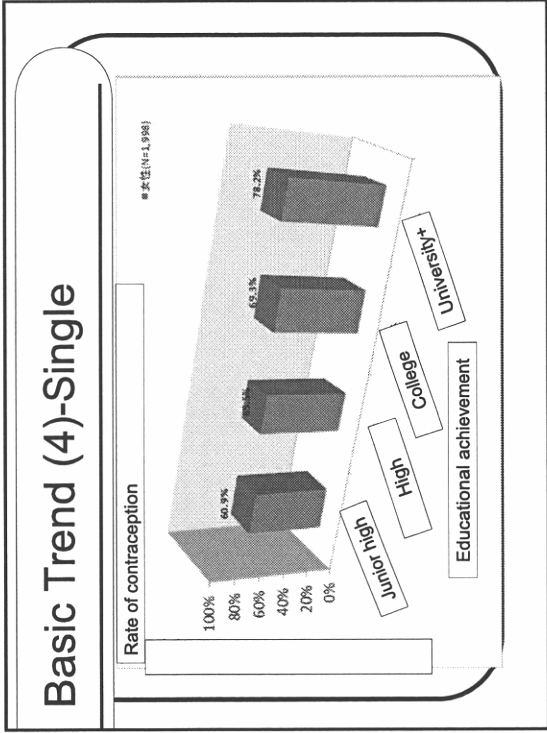
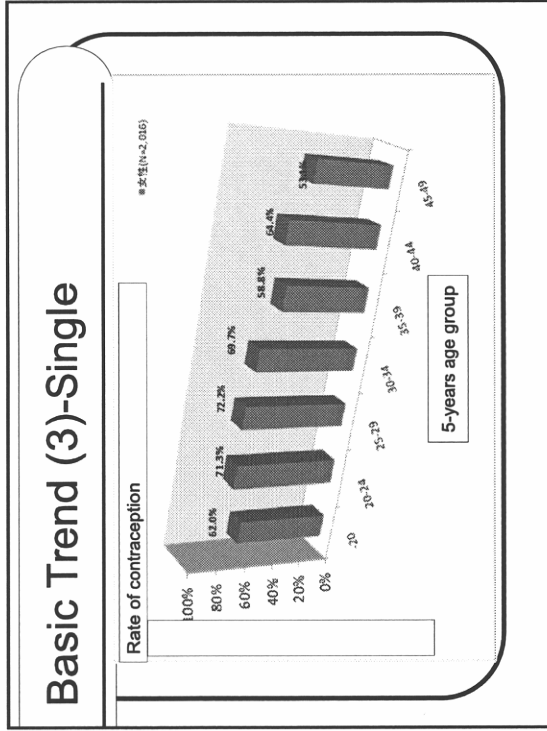
- Annual Population and Social Security Surveys (The National Fertility Survey) in 1987-2002, conducted by NIPSS
- Questionnaires for both single/married women aged 18-49, randomly selected
- Almost repeated cross-sectional data (Not panel-setting)

Basic Trend (1)-Single

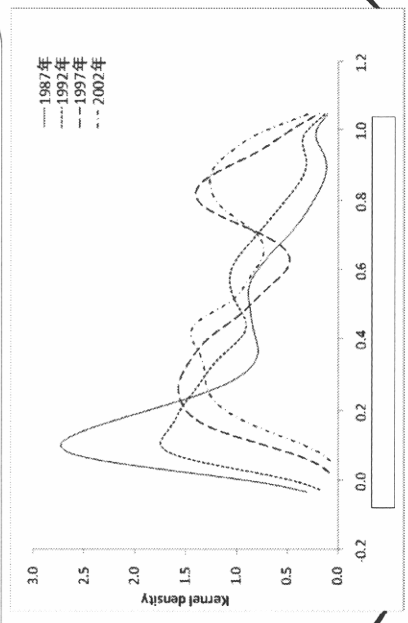


Basic Trend (2)-Single

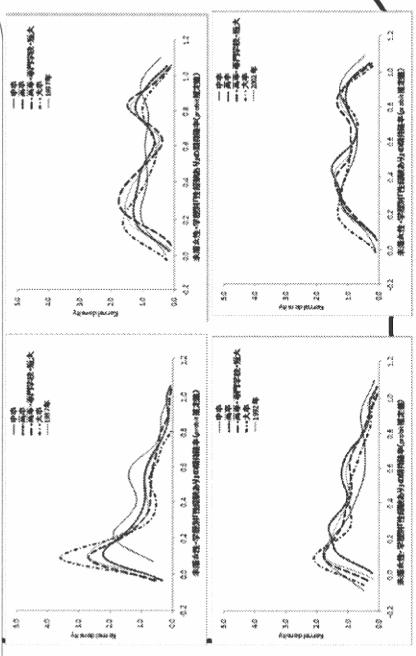




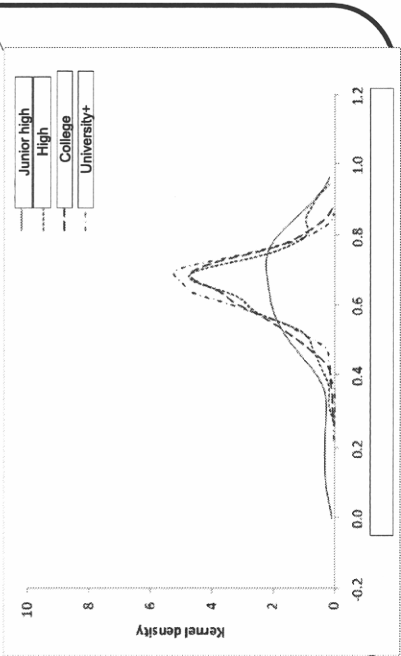
Kernel density of predicted value of sexual experience based on probit analysis (1)-Single



Kernel density of predicted value of sexual experience based on probit analysis (2)-Single



Kernel density of predicted value of contraception based on probit analysis (3)-Single



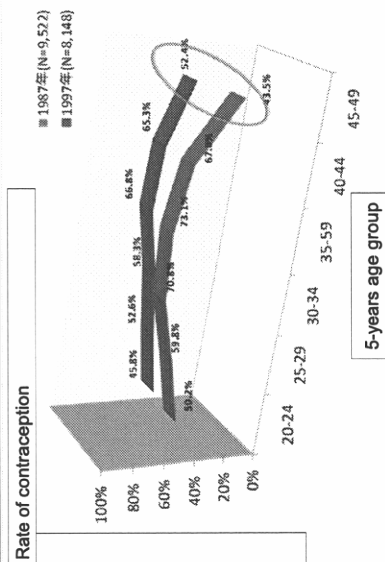
Propensity score matching estimates

	No contraception	Contraception	ATT	Std Error	t
Number of pregnancy	480	1108	0.077	0.034	2.297
Number of miscarriage	480	1108	0.017	0.009	1.888
Number of abortion	480	1108	0.064	0.028	2.224

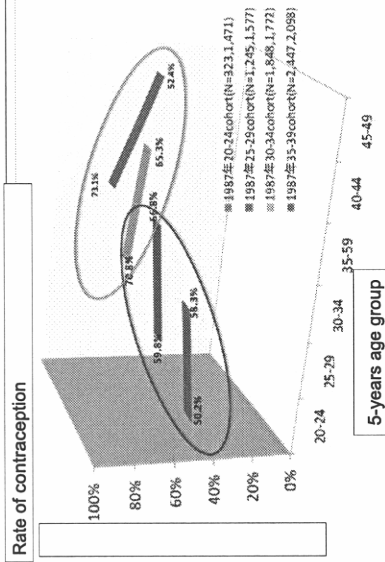
Among those with experience of contraception	No miscarriage	ATT	Std Error	t
Wage	9	49.779	28.038	1.775
Full time status	9	-0.041	0.0273	-0.152
Large firm or public sector	9	-0.201	0.178	-1.134

Among those with experience of abortion	No abortion	ATT	Std Error	t
Wage	68	9.145	4.527	2.02
Full time status	68	0.054	0.061	1.038
Large firm or public sector	68	-0.08	0.061	-1.308

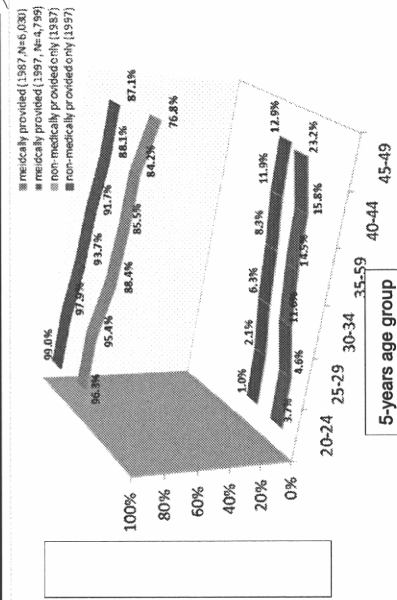
Basic Trend (1)-Married



Basic Trend (2)-Married



Basic Trend (3)-Married



Basic Trend (4)-Married

