(Minimum) Wages and Child Care Worker Health: Findings from Two Studies

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• These studies were supported by grants from:
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• We have no conflicts of interest to disclose.
AGENDA

1. Why minimum wages? Seattle’s Minimum Wage Ordinance
2. Longitudinal cohort: Baseline data
   a. Worker Health overall and by wage
   b. Worker Job and Center Characteristics by wage
Responding to an Increased Minimum Wage: A Mixed Methods Study of Child Care Businesses during the Implementation of Seattle's Minimum Wage Ordinance

Co-Authors: Katherine Getts, Anne Althauser, James Buszkiewicz, Ekaterina Jardim, Heather Hill, Jennifer Romich, Scott Allard
MAP OF LOCAL MINIMUM WAGE POLICY CHANGES UP TO 2018 (FEDERAL: $7.25/HR)

- San Fran. ($15 by 2018)
- Seattle ($15 by 2017-2021)
- Chicago ($13 by 2019)
- San Diego ($11.50 by 2017)
- Minneapolis ($15 by 2022-2024)

Vulnerable systems, such as early childhood care and education (ECE), may experience mixed impacts.

Largest revenue source: Families

“Between a rock and a hard place.”

Largest expense: Labor

Low wages
High turnover

ECE settings
In 2014, WA state minimum wage was $9.32/hour.

- Average 2014 WA wages: $10.67 for ECE assistants and $12.82 for teachers

In King County, Washington in 2012, the turnover rate was 38% for child care teaching assistants and 18% for child care teachers.

- For comparison, turnover was 7% for elementary school teachers
RESEARCH QUESTIONS

- How will Seattle’s minimum wage ordinance affect wages paid in the child care sector?

- Given increased labor wages, how are child care centers responding?
BACKGROUND
LOW WAGES ARE A PERSISTENT FEATURE OF CHILD CARE JOBS.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>1997 Actual Mean Hourly Wage</th>
<th>1997 Real Mean Hourly Wage in 2013 Dollars</th>
<th>2013 Actual Mean Hourly Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child care workers</td>
<td>$7.03</td>
<td>$10.20</td>
<td>$10.33</td>
</tr>
<tr>
<td>Preschool teachers</td>
<td>$9.09</td>
<td>$13.19</td>
<td>$15.11</td>
</tr>
<tr>
<td>Kindergarten teachers</td>
<td>$16.42</td>
<td>$23.83</td>
<td>$25.40</td>
</tr>
<tr>
<td>Nonfarm animal caretakers</td>
<td>$7.67</td>
<td>$11.13</td>
<td>$10.82</td>
</tr>
<tr>
<td>Fast food cooks</td>
<td>$6.11</td>
<td>$8.87</td>
<td>$9.07</td>
</tr>
<tr>
<td>Tellers, financial services</td>
<td>$8.24</td>
<td>$11.96</td>
<td>$12.62</td>
</tr>
</tbody>
</table>


Note: Hourly wages calculated by dividing the annual mean wage by 40 hours per week, 52 weeks per year.
How do child care jobs compare?

Selected Occupations Ranked by Mean Annual Salary, 1997 and 2013

Shared with school bus drivers and mobile home installers.

Shared with parking lot attendants, hotel desk clerks, and laundry and dry-cleaning workers.

Mean Annual **Salary** of Teachers, by Student Age/Grade Level, 2013

METHODS

Three datasets
Policy Context: The Seattle Minimum Wage Ordinance

<table>
<thead>
<tr>
<th></th>
<th>Large Employers</th>
<th>Small Employers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(501+ employees worldwide)</td>
<td>(1-501 employees worldwide)</td>
</tr>
<tr>
<td>No benefits</td>
<td>$9.47</td>
<td>$9.47</td>
</tr>
<tr>
<td>With benefits</td>
<td>$9.47</td>
<td>$9.47</td>
</tr>
<tr>
<td>No benefits or tips</td>
<td>$9.47</td>
<td>$9.47</td>
</tr>
<tr>
<td>Benefits or tips</td>
<td>$9.47</td>
<td>$9.47</td>
</tr>
</tbody>
</table>

Before Seattle MW Ordinance (i.e., State Minimum Wage)

<table>
<thead>
<tr>
<th>Date</th>
<th>Large Employers</th>
<th>Small Employers</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1, 2015</td>
<td>$9.47</td>
<td>$9.47</td>
</tr>
<tr>
<td>April 1, 2015</td>
<td>$11.00</td>
<td>$11.00</td>
</tr>
<tr>
<td>January 1, 2016</td>
<td>$13.00</td>
<td>$12.00</td>
</tr>
<tr>
<td>January 1, 2017</td>
<td>$15.00</td>
<td>$13.00</td>
</tr>
<tr>
<td>January 1, 2018</td>
<td>$15.00</td>
<td>$14.00</td>
</tr>
<tr>
<td>January 1, 2019</td>
<td>$15.00</td>
<td>$15.00</td>
</tr>
<tr>
<td>January 1, 2020</td>
<td>$15.00</td>
<td>$15.00</td>
</tr>
<tr>
<td>January 1, 2021</td>
<td>$15.00</td>
<td>$15.00</td>
</tr>
</tbody>
</table>

Source: City of Seattle
MIXED METHODS APPROACH: TO EXAMINE HOW SEATTLE’S $15/HR POLICY AFFECTED THE CHILD CARE SECTOR.

(1) state administrative records from n~200 Seattle-based child care businesses, 2014 to 2016

(2) a longitudinal employer survey conducted annually from 2015 to 2017 (n=41 child care centers)

(3) in-depth interviews of 15 Seattle child care center directors in 2016

Otten et. al, in press, Social Work & Society
PRINCIPAL FINDINGS: ADMINISTRATIVE DATA

Administrative data (4 slides)

How will Seattle’s minimum wage ordinance affect wages paid in the child care sector?
I. THE TOTAL # OF BUSINESSES INCREASED SLIGHTLY DURING POLICY IMPLEMENTATION.

Otten et al, in press, Social Work & Society
2. MORE SITES MEANS MORE CHILD CARE WORKERS. BUT THE AVERAGE # PER SITE REMAINED THE SAME DURING POLICY IMPLEMENTATION.

Source: Authors calculations based on UI records from State of WA.

Otten et. al, in press, Social Work & Society

Source: Authors calculations based on UI records from State of WA. Wage rates and earnings are expressed in constant prices of 2016 Q3.

Otten et. al, in press, Social Work & Society
4. The majority of businesses would not have incurred large costs in complying with the $11 minimum wage phase-in, but this changes markedly as the wage phase-ins increase to $15 per hour.

Distribution of costs of compliance with Seattle's minimum wage ordinance at policy phase-ins ($/hour wage rates) in child care businesses (n=192) in Seattle, Washington

Source: Authors calculations based on UI records from State of WA. Costs of compliance calculated based on average payroll structure in 2014 Q2.

Otten et. al, in press, Social Work & Society
Survey data (2 slides)

Given increased labor wages, how are child care centers responding?
GIVEN INCREASED LABOR WAGES, HOW DID CHILD CARE CENTERS RESPOND?

- The majority raised wages and decompressed.
- Most had to adjust their business strategy in one or more ways to respond to increased labor wages.
- The most common compensatory strategies were: (1) raising prices/adding fees and (2) reducing hours/headcounts.

Otten et. al, in press, Social Work & Society
PRINCIPAL FINDINGS: INTERVIEW DATA

Interview data, 2016 (3 slides)

Given increased labor wages, how are child care centers responding?
• Payroll = biggest expense/worry.
  • Payroll + benefits comprised 74% of expenses (range: 60%-91%).

• Child tuitions = biggest income
  • 77% of income (range: 12-99%)

Otten et. al, in press, Social Work & Society
COMPENSATORY STRATEGIES

• Increase income
  • Tuition → hardship for lower income families
  • Less subsidy-reliant families

• Targets for cutting expenses
  • Many: Specialists, supplies, professional development, staff hours
  • Fewer: Cheaper employee healthcare plans, reducing staff sick leave, and increasing child-teacher ratio, food/food budgets

• Smaller centers hardest hit
TENSIONS: ILLUSTRATIVE QUOTES

• “.I think that it's good that people who do this type of professional work have to make more money […] people working early childhood work for 10 or 11 dollars an hour doesn't feel right or fair, but I do think that this work should be significantly above minimum wage and now it is more minimum wage work.”

• “…increasingly, people can get jobs that are a lot less emotional, that are a lot less taxing for the same amount of money as we're able to offer. And so it's much harder for me to find staff who will do this job…..if they could flip burgers for 13 or they could work in child care for 13, then flipping burgers I think is easier for people.”

• “… this is my concern about the workforce … why should I go back to school when I can go to Walmart or Target or any other place and make the same amount without having the debt that comes with going back to school?”

Otten et. al, in press, Social Work & Society
The increase to $15/hr affects the majority of Seattle child care businesses.

Wages increased but compensatory strategies strain workers, families, and children:

- Increased tuition costs to families
- Reducing the number of publicly subsidized spots
- Staffing: cut hours and training
- Increased child-staff ratios

Otten et. al, in press, Social Work & Society
WAGES ARE ALSO ASSOCIATED WITH INDIVIDUAL HEALTH AND WELL-BEING.

1/3 OF ECE PROVIDERS ARE ENROLLED IN PUBLIC ASSISTANCE AND AN ESTIMATED 25-30% DO NOT HAVE HEALTH INSURANCE.

World Health Organization's Social Determinants of Health Conceptual Framework

Whitebook 2016, Linnan 2017, Tovar 2017
Exploring the Role of Workforce Health as a Component of the Culture of Health in Early Childhood Education

**Presenters:** Jennifer J. Otten, PhD, RD, Assistant Professor, University of Washington School of Public Health (UW SPH)
Tori Bradford, MPH, Research Coordinator, Center for Public Health Nutrition, UW SPH

**Co-Authors:** Katherine Getts, Bert Stover, Heather Hill, Noah Seixas, Cynthia Osborne
Research Aims:
• To understand how Seattle’s minimum wage ordinance might affect child care.
• To understand how this might be related or trickle down to health of the providers and the children they serve.

Full Study: Impacts at the Center, Provider, and Child-Level on Health

Variability in Wage
Changes in distribution of wage to target population via influence of varying minimum wage policies

Center-level
- Staffing budget/benefits packages
- Staffing: schedules; access to, quality of, and turnover of workers
- Budgets for food, physical space, and enrichment activities

Provider-level
- Income (individual, family, public assistance)
- Social conditions (housing, food access, transportation)

Provider-level health behaviors and outcomes
Short-Term
- Mental health/wellbeing
- Diet quality
- Food security
- Physical activity
Long-Term
- Chronic disease
- Mental and physical health and wellbeing

ECE Care Environments
ECE Environments
- Healthfulness of nutrition and physical activity in ECE environments

Quality of Care
- Positive relationships between provider and child
- Supportive, nurturing, and interactive environments
AIMS OF THIS BASELINE DATA ANALYSIS

- Describe the health of our sample overall and by wage.
- Describe ECE workers by wage and job/center characteristics.
BACKGROUND
HEALTH IN THE ECE WORKFORCE

• Higher rates of obesity and chronic disease (hypertension, diabetes, asthma, migraines)

• Poor mental health, high levels of stress
  • Depressive symptoms at rates 2-5 greater than national averages.
  • Related to working conditions.

• Risky health behaviors
  • Smoking, lack of physical activity, unhealthy diet.

LONGITUDINAL COHORT, 3-ARMS

MW schedule: Jan 1 2017
- Sea: $13/hr or $11/hr
- WA: $11/hr
- Austin: $7.25/hr

TP 1 (Aug-Dec 2017)

MW schedule: Jan 1 2018
- Sea: $14/hr or $11.50/hr
- WA: $11.50/hr
- Austin: $7.25/hr

TP 2 (Sept-Nov 2018): Post $14/hr

Focus Groups (June 2018)

MW schedule: Jan 1 2019
- Sea: $15/hr or $12/hr
- WA: $12/hr
- Austin: $7.25/hr

TP3 (Feb-March 2019): Post $15/hr

Focus Groups (June 2019)

TP4 (Aug-Nov 2019): Post $15/hr
PRINCIPAL FINDINGS

Health of the ECE Workforce
SAMPLE: DEMOGRAPHICS

<table>
<thead>
<tr>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 94% female and 68% White</td>
</tr>
<tr>
<td>• 21% Hispanic</td>
</tr>
<tr>
<td>• 85% full-time</td>
</tr>
<tr>
<td>• 65% college degree or higher</td>
</tr>
<tr>
<td>• ~10 years of ECE experience</td>
</tr>
<tr>
<td>• 23% on public food assistance</td>
</tr>
<tr>
<td>• 10% no health insurance</td>
</tr>
<tr>
<td>• Hourly wage: $15.64 (SD: $4.10)/hour</td>
</tr>
<tr>
<td>• &lt; site median average hourly wage: $13.03 (2.01) (LOW)</td>
</tr>
<tr>
<td>• ≥ site median average hourly wage: $18.20 (4.00) (HIGH)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lower wage workers (&lt; site median, $/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Younger</td>
</tr>
<tr>
<td>• &lt; education</td>
</tr>
<tr>
<td>• &lt; ECE experience</td>
</tr>
<tr>
<td>• &gt; non-white, Hispanic</td>
</tr>
<tr>
<td>• &gt; public food assistance</td>
</tr>
</tbody>
</table>
MENTAL WELL-BEING

• 41% clinically significant categories of **depression** (CESD-R)
  • Double the prevalence in low-income women (19.8%)
  • Similar to other ECE worker samples (36%, 24%)
• 67% experienced moderate or high **stress** (PSS-14)
  • Higher than population means, but slightly lower than ECE worker sample (63% high)
• **Mental health** (SF-12: well-being, distress) lower than 84% of the population

CDC/USDA national rates, Linnan 2017, Tovar 2017
• 42% food insecure (20% very low food security)
  • Much higher than national rates: 11.8% (4.5% very low)
• 23% of our sample used government food assistance benefits

CDC/USDA national rates, Linnan 2017, Tovar 2017
• 34% **obese**, 27% **overweight**
  • (National: 40%, 32%; other ECE worker samples: 55-65%, 22-24%)

• 17% **high blood pressure**
  • (National: 29%; other ECE workers: 36%)

• 7% **diabetes**
  • (National: 9.4%)

CDC/USDA national rates, Linnan 2017, Tovar 2017
HEALTH BEHAVIORS

• **Fruits and vegetables**: 2.3 times per day
  • (ECE worker sample: 2.6 times per day)
• 86% met **aerobic activity** recommendations
  • (National: 53%; ECE worker sample: 20%)

CDC/USDA national rates, Linnan 2017, Tovar 2017
PRINCIPAL FINDINGS

ECE Workforce by wage and job/center characteristic
53% centers participated in CACFP, 82% in QRIS, 25% NAEYC
88% accepted state subsidies and 49% accepted city subsidies
   82% one child enrolled (state), 35% one child enrolled (city)
   39% had more than 25% enrolled (state)
58% centers offered health insurance
80% paid sick leave
72% offered leave, only 24% paid
ECE WORKER JOB/CENTER CHARACTERISTICS BY WAGE

- Smaller and less financially well-off centers more likely to have lower wage workers
- **Lower wage workers** more likely to work at centers that enroll >\# of **low-income/subsidized** families
  - 50% of lower wage workers at centers with 25% or more vs. 27% of higher wage
- Lower wage workers more likely to work at centers that **did not offer** health insurance, paid sick leave, or parental/family leave
• Mental well-being a bigger priority than physical health for them.
• Devaluation of their profession by society tied to low-wages and mental well-being
  • Felt this and stress of the job explained high rates of depression and poor mental health
• Don’t always feel they can take paid sick leave
• Directors did not always feel they could fully support staff health the way they wanted to due to limited resources
IMPLICATIONS

• Change society’s perception of this work and this workforce
• Ways to increase worker wages
• Ways to support mental well-being
• Fully cover subsidized families (equity goals)?
• CACFP coverage for workers (offset food insecurity)?
• Professionalize ECE workforce (19% professional membership)
NEXT STEPS
Questions for the group:

• What center/job characteristics do you think are most likely related to health?

• Were you surprised by food insecurity rates? Are they possibly tied to mental health? Curious to hear your thoughts.

• What kinds of policy implications does this work bring to mind?

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