



Type and Lengths of Family Leave Among New York City Women: Exploring the Composition of Paid and Unpaid Leave

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Abstract

Introduction Paid family leave (PFL) is an important protective policy mechanism to support the health of mothers and children and the economic security of families. This paper explores the links of employment and demographic characteristics on leave type and lengths of overall, paid, and unpaid leave in a large city in the United States.

Methods Using a sample of 601 women who worked during pregnancy from the 2016 New York City Work and Family Leave Survey, multinomial and linear regression models were used to assess disparities in the type and length of leave taking.

Results Women eligible for the Family and Medical Leave Act (FMLA) have higher relative likelihood to take only paid leave (RRR = 6.588, $p < 0.01$). While Black women utilized 3.739 weeks of leave more than white women overall, holding all else constant ($p < 0.1$), this additional leave is composed of 4.739 more weeks of unpaid leave ($p < 0.05$). Shortened leave taking by women with less than a college degree is driven by fewer weeks of paid leave ($p < 0.01$).

Discussion Using unique data from a survey of recent mothers in New York City, this study provides deeper understanding of disparities in the composition of leave. This study adds to the literature by identifying disparities in leave composition that are masked in consideration of total lengths of leave for Black women and those not eligible for FMLA protections. Given the consequences of short leave taking and reliance on unpaid leave, examination of leave composition is required to identify and address disparities.

Keywords Paid family leave · Maternity leave · Women employment

Significance

What is known? The literature points to disparities in access to leave both through employment and demographic pathways. Less understood is how disparities in the combination of paid leave and unpaid time off impacts both the overall length of leave as well as the economic impact on the family. This study aims to add to the literature by using recent data to first determine how employer and maternal demographic characteristics impact the type of leave taken following the birth of a child, and secondly how these characteristics impact the overall, paid, and unpaid lengths of leave taken.

Introduction

Paid family leave (PFL) is widely regarded as an important protective policy mechanism to support the health of mothers and children and the economic security of families. Mothers in the United States (US) compose a substantial part of the workforce: in 2017, 65.1% of women with young children were part of the labor force (Bureau of Labor Statistics 2018). Support for policies that provide replacement income for parents over a defined period following childbirth are gaining momentum across the USA—the only developed country that does not have a national policy (OECD 2020). However, without a focus on equity these policies might fail to reach workers most in need, including women in low-wage jobs unable to afford unpaid time off. PFL—as opposed to the unpaid leave provided by the federal Family and Medical Leave Act (FMLA)—supports the health of mothers and children by allowing mothers to take longer leaves, and supports the economic security of the household

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by providing replacement income while an employee is on leave.

The introduction of FMLA in the US in 1993 provided 12 weeks of unpaid leave and job protection for women working in workplaces with 50 or more employees (US Department of Labor 2020), however many women remained unprotected from job loss and even those eligible were often unable to afford to utilize it (Han et al. 2008, 2009; Ross 1998; Waldfogel 1999). In New York City, mothers who took only unpaid leave were more likely to report food insecurity compared with those who had at least some paid leave provided by their employers (Slopen et al. 2015).

Studies also suggest that the length of paid maternity leave matters for health: fewer than eight weeks of paid family leave increased the probability of reporting a poorer overall health status, and less than twelve weeks of total leave (paid and/or unpaid) was related to increased symptoms of depression (Chatterji and Markowitz 2005, 2012). Whether leave is paid is also independently associated with health outcomes, including higher breastfeeding initiation and duration (Baker and Milligan 2008; Pac et al. 2019), increased compliance with regular medical checkup and immunization schedules (Berger et al. 2005) and improved maternal mental health (Bartel et al. 2019; Jou et al. 2018; McGovern et al. 1997).

Employment characteristics—including whether a workplace is subject to FMLA and if it falls in the public or private sectors—influence eligibility and extent of workplace benefits available to women following the birth of a child (Gerstel and Clawson 2014; Han et al. 2009). These benefits include paid family leave, short-term disability, and the ability to accrue and use sick and annual leave time. Employers in sectors that are unionized—including the public sector—are more likely to provide benefits. However, public sector workers are often excluded from paid leave legislation (New York State 2017) and an analysis of California's leave policy found that nearly half of public sector workers in low-quality jobs received no pay while on leave (Appelbaum and Milkman 2011). Recent immigrants are more likely to experience self-employment or precarious labor market conditions (Bureau of Labor Statistics 2018) and low-income women are less likely to be eligible for FMLA, less likely to have employer-provided paid and unpaid leave and are less likely to utilize leave for which they are eligible (Han et al. 2008).

Maternal characteristics have been shown across states, years, and datasets to have a significant impact on the length of leave a mother is able to take following childbirth (Appelbaum and Milkman 2011; Han et al. 2008; Lu et al. 2017). Overall, women with more privilege and resources are found to be more likely to access paid leave. Income is highly associated with length of leave, as well as with other maternal characteristics such as race/ethnicity, education and age (Appelbaum and Milkman 2011; Han et al. 2008; Lu et al.

2017). Lack of awareness of employees of their rights under the policy led to access barriers for young low-wage, immigrant, and Latino workers (Appelbaum and Milkman 2011).

Financial strain can operate in competing ways: poor women face considerable pressure to return to work quickly, but also face challenges such as affordable childcare that prevent them from returning (Klerman and Leibowitz 1999). The impact of additional income during early childhood has been noted to improve health outcomes for children into adulthood, further reinforcing the importance of economic security for families welcoming a new child (Ziol-Guest et al. 2012). Similarly, small amounts of additional income have been found to raise combined math and reading test scores (Dahl and Lochner 2012).

Overall, the literature points to disparities in access to leave both through employment and demographic pathways. However, little research has been done on how the composition of paid and unpaid leave might impact both the overall length of leave taken for new mothers as well as the economic impacts on the family. This study aims to add to the literature by using recent data to first determine how employer and maternal demographic characteristics impact the type of leave taken following the birth of a child, and secondly how these characteristics impact the lengths of total, paid, and unpaid leave.

Methodology

Data

The 2016 New York City (NYC) Work and Family Leave Survey (WAFLS) is a population-representative telephone survey of 1063 NYC resident women who gave birth in 2014. Respondents were randomly sampled from the 2014 Vital Statistics Birth file, with an oversample of women who worked during pregnancy. Exclusion criteria for the sampling frame included children who were subsequently adopted, died (based on NYC mortality records), records without a telephone number, records sampled for PRAMS, and women under age 18. The survey was conducted in English and Spanish in spring 2016, at least one year (14–24 months) following birth. The survey response rate was 37%. Data was weighted to be representative of the 2014 NYC birth cohort with respect to age, race, ethnicity, nativity, education level, marital status, and work status during pregnancy. Limitations of the dataset include a limited sample size and potential recall bias associated with the time between birth and survey participation at 12 to 24 months following the birth. Because the survey was offered in only English and Spanish, women who do not speak these languages may be under-represented, which may have resulted in biased results for Asian women. Data was collected under

the supervision of the NYC Department of Health and Mental Hygiene Institutional Review Board and has been conducted in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki. All respondents gave their informed consent to participate in the survey. All data are self-reported. The data is publicly available via the NYC Open Data Portal (NYC Department of Health and Mental Hygiene 2020).

Measures

Two dependent variables related to leave trajectories were assessed: the type of leave that was taken, and the length of leave or time off—in weeks—that a woman took from work. Leave type was assessed using the question “Which of the following describes the leave or time you took off from work after your child was born?” Response options were no time off or leave following birth, only unpaid leave, only paid leave, or a combination of paid leave and unpaid leave. With respect to the length of leave taken, the data provide lengths of four types of leave that women may have taken: employer-provided paid maternity leave, state-provided Temporary Disability Insurance (TDI), the use of accrued annual or medical leave, and unpaid time off. The number of weeks of paid leave is a summation of accrued leave, maternity leave, and TDI. Additionally, the overall total number of weeks of leave was reported.

Employment characteristics, maternal characteristics, and family factors were included as covariates. Employment characteristics included employment sector (public or private), pre-birth work status (full or part-time), and whether a woman was eligible for FMLA. Fulltime employment was considered 35 + h per week. FMLA-eligibility status was calculated based eligibility requirements—that is based on firm size larger than 50 employers and that the woman worked for more than a year for the same employer before giving birth.

Key demographic characteristics included race/ethnicity categorized into five groups (white non-Hispanic, Black non-Hispanic, Hispanic/Latino, Asian, other), nativity (US-born, foreign born), woman’s age in years categorized into three groups (18–24 years, 25–34 year, 35 + years;), and highest level of education grouped into three categories (less than or equal to high school completion, some college, college graduate). Benefits receipt during pregnancy was defined as receipt of welfare/public assistance or food stamps or money to buy food, implying a household income near or below the Federal Poverty Level. Family factors included parity (first birth, higher-order birth) and co-parent status, defined in the questionnaire through two questions. The first asked if there was “another person such as a spouse or partner helping with

your child when he/she was born” with a follow-up assessment on living arrangements.

Methods

To explore work and leave patterns, the sample was limited to women who worked for pay in the public or private sector during pregnancy who returned to work ($n = 601$). After demonstrating that the sample is representative of women giving birth in NYC, analyses utilize unweighted data to explore bivariate relationships between characteristics and leave-type using t-tests and 95% confidence intervals. Multinomial logistic regressions controlling for employment and demographic characteristics were then utilized to calculate relative risk ratios for each leave type among those who provided type of leave ($n = 590$). In analyses of lengths of leave, only those women who took leave following the birth of their child ($n = 568$) were included, and means, confidence intervals, and multivariate linear regressions were used to identify relationships between the independent characteristics and lengths of overall, paid, and unpaid leave. Observations missing covariate data were included in regression analyses (results not shown).

Results

Table 1 provides descriptive statistics (both weighted and unweighted) for the sample of NYC women who worked during pregnancy and returned to work following the birth of their child ($n = 601$), showing that the sample is representative of the NYC birth cohort. The only significant ($p > 0.05$) impact of weighting data to be population representative was for Asian women who were underrepresented in the survey. Most women were employed by the private sector and worked full time schedules. Over half were FMLA eligible. Over one in five women reported receiving cash or food benefits during her pregnancy. Almost half were first-time mothers and almost three-quarters lived with a co-parent at time of birth.

Type of Leave

Table 2 shows the bivariate relationships between employment and demographic characteristics and leave type. Overall 35.8% of women utilized a combination of paid and unpaid leave, while 27.1% took only paid leave, and 31.5% took only unpaid time off. Women who worked full time, and those who were FMLA eligible were more likely to access paid leave and combined leave, and less likely to rely on unpaid leave or no leave ($p < 0.01$). The only significant difference ($p < 0.05$) observed by race/ethnicity was that white women were more likely to use paid leave only. More highly

Table 1 Sample distribution of working women who return to work following birth, 2016 NYC Work and Family Leave Survey (N=601)

Characteristics	Unweighted percent (%)	Weighted percent (%)
Sector		
Public	15.6 (12.7–18.5)	15.4 (12.5–18.3)
Work status		
Full-time	70.7 (67.0–74.3)	71.6 (68.0–72.3)
FMLA eligibility		
FMLA eligible	64.1 (60.2–68.0)	63.1 (59.2–67.0)
Race/ethnicity		
Asian	9.7 (7.3–12.0)	15.6 (12.6–18.5)
Black/African American	21.9 (18.5–25.1)	22.8 (19.3–26.1)
Hispanic/Latina	22.9 (19.4–26.2)	18.0 (14.8–21.0)
Other	2.3 (1.1–3.5)	3.5 (2.0–4.9)
White	42.9 (39.0–46.9)	39.9 (35.9–43.8)
Nativity		
US-born	61.2 (57.3–65.1)	61.3 (57.3–65.1)
Foreign born	38.8	38.7
Age (years)		
18–24	12.1 (9.5–14.7)	9.8 (7.4–12.2)
25–34	51.4 (47.4–55.4)	51.7 (47.7–55.7)
35+	28.3 (24.7–31.9)	30.2 (26.5–33.9)
Highest level of education		
College degree or more	56.0 (51.9–59.9)	57.5 (53.5–61.5)
Some college	19.1 (16.0–22.3)	16.1 (13.2–19.1)
High school or less	24.8 (21.3–28.3)	26.2 (22.7–29.7)
Received government benefits during pregnancy		
Yes	22.4 (19.1–25.8)	21.4 (18.1–24.7)
No	77.6	78.6
Number of children		
First birth	48.8 (44.7–52.8)	47.4 (43.4–51.4)
Higher-order birth	51.3	52.6
Co-parent (at time of birth)		
Co-parent, co-residing	72.9 (69.3–76.4)	72.3 (68.7–75.9)
Co-parent, not co-residing	13.0 (10.3–15.7)	12.8 (10.1–15.5)
No co-parent	13.8 (11.0–16.6)	14.6 (11.8–17.4)

95% Confidence Intervals are provided in brackets

educated women were more likely to use combined and paid only leave compared to women whose highest level of education was high school, who relied more heavily on unpaid leave alone ($p < 0.01$). Conversely, women who received government benefits during pregnancy were more likely to rely on unpaid leave and less likely to be able to extend leave taking by combining paid and unpaid leave ($p < 0.01$). Younger women who gave birth when 18–24 years had the highest prevalence of taking no leave ($p < 0.01$), while women who worked full-time, were FMLA-eligible, and were college-educated had significantly lower rates of taking no leave ($p < 0.01$).

Table 3 presents the results of a multinomial logistic regression to assess which characteristics remain as independent predictors of the type of leave using no leave as

the reference category. Holding all else constant, women who are FLMA-eligible are more likely to take paid leave only (RRR = 7.212, $p < 0.01$) or to combine paid and unpaid leave than women who are not FMLA eligible (RRR = 4.531, $p < 0.01$). No significant differences were observed by race. Immigrant women are less likely to utilize a combination of paid and unpaid leave (RRR = 0.441, $p < 0.1$) than US-born women. Young women 18–24 years old are less likely to take paid leave, unpaid leave, or a combination of leave ($p < 0.05$).

Length of Leave

On average women reported taking 13.4 weeks of leave following the birth of their child, with an average of 6.4 weeks

Table 2 Percentages of women returning to work by type of leave taken, 2016 NYC Work and Family Leave Survey

Characteristics	% Unpaid only (n = 186)	% Paid only (n = 160)	% Combined paid and unpaid (n = 211)	% No leave (n = 33)
Sector				
Public	31.1	28.9	32.2	7.8
Work status				
Full-time	26.5***	30.1**	40.0***	3.4***
FMLA eligibility				
FMLA eligible	22.1***	33.6***	41.6***	2.7***
Race/ethnicity				
Asian	26.8	26.8	41.1	5.6
Black/African American	33.8	22.3	36.2	7.7
Hispanic/Latina	32.6	21.5*	38.5	7.4
Other	28.6	28.6	35.7	7.1
White	31.3	32.1**	32.9	3.6*
Nativity				
US-born	30.6	28.1	37.4	3.9
Age (years)				
18–24	35.2	22.5	29.6	12.7***
25–34	30.7	28.1	35.3	5.9
35+	28.0	28.6	40.5	3.0*
Highest level of education				
College degree or more	24.3***	31.7***	40.7***	3.3***
Some college	37.2	16.8***	37.1	8.8*
High school or less	44.4***	23.9	23.2***	8.5*
Received government benefits during pregnancy				
Yes	45.7***	20.9*	25.6***	7.8
Number of children				
First birth	29.6	29.6	36.8	4.1
Subsequent birth	33.5	25.2	33.2	8.1
Co-parent (at time of birth)				
Co-parent, co-residing	30.0	28.6	36.7	4.7
Co-parent, not co-residing	31.2	22.1	37.7	9.1
No co-parent	40.2*	23.2	29.3	7.3
Total	31.5	27.1	35.8	5.6

*p < 0.1

**p < 0.05

***p < .01

of paid leave and 6.6 weeks of unpaid leave (Table 4). Table 4 presents the mean lengths of overall, paid, and unpaid leave taken following the birth among those women who took leave by each employment and demographic characteristic, with 95% confidence intervals. Women working full-time and those with college degrees took an average of 3 weeks longer leaves than those who worked part time or had a high-school degree or less ($p < 0.05$). Considering the composition of leave, however, the overall average number of weeks masks significant differences. Though there was not a significant difference in average length of overall leave by FMLA-eligibility status, a significant 5-week difference

in the mean length of paid leave and 3-week difference in unpaid leave is observed ($p < 0.05$). Black women are more likely to take unpaid leave, with 9.8 weeks of unpaid leave reported among Black women, compared to 5.4 weeks of unpaid leave taken by white women. Conversely, paid leave is more often accessed by women with college degrees (8.0 weeks), women who do not receive government benefits (7.1 weeks), and those experiencing their first birth (7.2 weeks).

Table 5 presents the results of a multivariate linear regression of the relationship between employment and family characteristics and the number of overall, paid, and unpaid weeks

Table 3 Relative Risk Ratios of leave reimbursement type—compared to taking no leave—among mothers who return to work, 2016 NYC Work and Family Leave Survey (n = 590)

Characteristics	Paid leave only RRR	Unpaid leave only RRR	Combined paid and unpaid leave RRR
Employment sector (reference = private)			
Public	0.513 (0.281)	0.585 (0.306)	0.420 (0.224)
Work status (reference = full time)			
Part-time	0.548 (0.280)	0.572 (0.274)	0.512 (0.250)
FMLA eligible	7.212*** (3.560)	1.677 (0.783)	4.631*** (2.185)
Race/ethnicity (reference = White)			
Asian	0.591 (0.512)	0.639 (0.540)	0.980 (0.828)
Black/African American	0.394 (0.242)	0.629 (0.369)	0.727 (0.433)
Hispanic/Latina	0.520 (0.317)	0.667 (0.391)	0.955 (0.566)
Other	0.467 (0.634)	0.539 (0.710)	0.634 (0.841)
US-born	0.566 (0.260)	0.552 (0.245)	0.441* (0.197)
Age in years (reference = 35 +)			
18–24	0.190** (0.142)	0.202** (0.142)	0.205** (0.148)
25–34	0.539 (0.312)	0.541 (0.306)	0.457 (0.260)
Highest educational attainment (reference = college degree)			
Some college	0.536 (0.327)	1.038 (0.591)	0.715 (0.411)
High school or less	1.032 (0.656)	1.341 (0.812)	0.584 (0.362)
Received government benefits during pregnancy	1.505 (0.839)	1.667 (0.856)	1.404 (0.749)
First birth	0.432* (0.207)	0.463* (0.215)	0.531 (0.248)
Co-parent status at time of birth (reference = resident co-parent)			
Co-parent, not co-residing	0.801 (0.469)	0.822 (0.451)	0.937 (0.521)
No co-parent	0.706 (0.411)	0.970 (0.530)	0.592 (0.335)
Constant	16.45*** (12.92)	28.90*** (22.09)	27.87*** (21.42)
Observations	590	590	590

Standard errors in parentheses

*p < 0.1

**p < 0.05

***p < 0.01

of leave a woman takes following birth. While there is not a significant difference in the overall length of leave taken by FMLA status, holding all else constant, women who are FMLA eligible take 3.498 fewer weeks of unpaid leave (p < 0.01) and 3.827 more weeks of paid leave (p < 0.01). Additionally, while

Black women take an overall 3.739 weeks of leave more than white women holding all else constant (p < 0.1), this additional leave is accounted for by their expected 4.739 longer weeks of unpaid leave (p < 0.05). The effect of education observed in the reduction of weeks of overall leave taken by women with

Table 4 Average number of weeks of total, paid and unpaid leave among mothers who took leave by employment and demographic characteristics, 2016 NYC Work and Family Leave Survey (n = 568)

Characteristic	Mean weeks total leave	Mean weeks paid leave	Mean weeks unpaid leave
Sector			
Public	13.5 (12.6–14.3)	5.7 (4.4–6.9)	7.0 (5.0–9.1)
Private	12.4 (10.6–14.2)	6.5 (5.9–7.2)	6.6 (5.7–7.4)
Work status			
Full-time	14.1 (13.2–15.0)	7.5 (6.7–8.2)	6.2 (5.3–7.1)
Part-time	11.4 (9.9–12.9)	3.7 (2.8–4.6)	7.6 (6.0–9.2)
FMLA eligibility			
Mother is FMLA eligible	13.8 (12.9–14.6)	8.1 (7.4–8.9)	5.3 (4.6–6.1)
Mother is not FMLA eligible	12.7 (11.2–14.2)	3.3 (2.6–4.1)	8.8 (7.1–10.5)
Race/ethnicity			
Asian	12.7 (10.2–15.2)	7.2 (5.3–9.1)	5.1 (3.3–6.8)
Black/African American	15.2 (13.2–17.2)	6.0 (4.8–7.2)	9.8 (7.4–12.1)
Hispanic/Latina	13.1 (11.4–14.7)	6.1 (5.0–7.3)	6.6 (5.0–8.3)
Other	16.7 (10.5–22.8)	6.6 (2.3–10.8)	7.6 (1.6–13.6)
White	12.6 (11.6–13.6)	6.4 (5.5–7.3)	5.4 (4.5–6.4)
Nativity			
US-born	13.4 (12.4–14.5)	6.3 (5.6–7.0)	6.7 (5.7–8.0)
Foreign born	13.5 (12.4–14.7)	6.5 (5.4–7.6)	6.5 (5.3–7.7)
Mother's age in years			
18–24	12.8 (9.7–16.0)	4.9 (3.2–6.5)	9.2 (5.7–12.8)
25–34	13.5 (12.4–14.6)	6.4 (5.6–7.2)	6.6 (5.6–7.7)
35+	13.9 (12.6–15.2)	6.8 (5.7–7.9)	6.0 (4.7–7.3)
Mother's highest level of education			
College degree or more	14.4 (13.4–15.4)	8.0 (7.2–8.8)	6.0 (5.1–6.9)
Some college	12.6 (10.8–14.4)	4.8 (3.6–6.0)	8.1 (5.9–10.3)
High school or less	11.4 (9.7–13.1)	3.7 (2.8–4.5)	7.2 (5.4–8.9)
Received government benefits during pregnancy			
Yes	13.2 (11.0–15.4)	3.7 (2.6–4.7)	9.0 (6.7–11.3)
No	13.5 (12.7–14.3)	7.1 (6.5–7.8)	6.0 (5.2–6.8)
Number of children			
First birth	14.4 (13.2–15.6)	7.2 (6.4–8.1)	7.0 (5.8–8.2)
Subsequent birth	12.4 (11.4–13.3)	5.6 (4.8–6.4)	6.2 (5.2–7.1)
Co-parent (at time of birth)			
Co-parent, co-residing	13.5 (12.6–14.3)	6.7 (6.1–7.5)	6.2 (5.4–7.0)
Co-parent, not co-residing	14.3 (12.0–16.6)	5.9 (4.4–7.4)	7.4 (4.9–10.0)
No co-parent	12.4 (10.1–14.7)	5.2 (3.8–6.6)	8.0 (5.3–10.6)
Total working mothers	13.4 (12.6–14.2)	6.4 (5.8–7.0)	6.6 (5.8–7.4)

95% Confidence Intervals are provided in brackets

less than a college degree is based on their relatively fewer weeks of paid leave compared to women who have a college degree ($p < 0.01$).

Discussion

Using unique data from a survey of recent mothers in New York City, this study provides deeper understanding of disparities in the composition of leave. It finds that while

women working in FMLA eligible jobs do not take longer leaves on average, they are significantly more likely to access those weeks in paid leave compared to unpaid leave. Additionally, while other research found that Black mothers are less likely to take unpaid leave (Han et al. 2009), this study finds that Black women in NYC took leaves that are 3 weeks longer than their white counterparts holding all else constant, with 4 more weeks of unpaid leave. Findings of 3.5-week shorter leave taking among women who do not have college degrees are similar to what has been found in

Table 5 Relationship between maternal and employment factors and total, paid, and unpaid lengths of leave among working mothers who took leave, 2016 NYC Work and Family Leave Survey

Characteristics	Weeks total leave OLS coefficient	Weeks paid leave OLS coefficient	Weeks unpaid leave OLS coefficient
Employment sector (reference = private)			
Public	- 0.739 (1.188)	- 1.522* (0.835)	1.026 (1.281)
Work status (reference = full time)			
Part-time	- 1.650 (1.073)	- 0.339 (0.739)	- 0.381 (1.181)
FMLA eligible	0.553 (1.040)	3.827*** (0.650)	- 3.498*** (1.076)
Race/ethnicity (reference = White)			
Asian	0.724 (1.442)	0.721 (1.025)	0.445 (1.202)
Black/African American	3.739*** (1.236)	0.526 (0.817)	4.739*** (1.342)
Hispanic/Latina	2.239** (0.993)	0.804 (0.823)	1.904** (0.964)
Other	4.244 (2.730)	0.280 (1.957)	2.116 (2.743)
US-born	0.634 (0.798)	-0.0392 (0.656)	0.308 (0.818)
Age in years (reference = 35 +)			
18–24	- 1.450 (1.492)	- 0.593 (1.142)	0.906 (1.660)
25–34	- 0.941 (0.886)	- 0.627 (0.642)	- 0.223 (0.880)
Highest educational attainment (reference = college degree)			
Some college	- 3.522*** (1.157)	- 2.199*** (0.764)	- 0.506 (1.384)
High school or less	- 3.633*** (1.146)	- 2.962*** (0.850)	- 1.366 (1.314)
Received government benefits during pregnancy	1.094 (1.215)	0.213 (0.793)	0.300 (1.413)
First birth	- 1.482* (0.808)	- 0.747 (0.621)	- 0.645 (0.837)
Co-parent status at time of birth (reference = resident co-parent)			
Co-parent, not co-residing	0.960 (1.243)	0.161 (0.845)	- 0.140 (1.274)
No co-parent	- 0.787 (1.251)	- 0.803 (0.819)	0.972 (1.436)
Constant	14.42*** (1.334)	5.984*** (0.881)	7.881*** (1.372)
Observations	552	568	538
R-squared	0.100	0.171	0.083

Robust standard errors in parentheses

*p < 0.1

**p < 0.05

***p < 0.01

literature on unpaid leave taking (Han et al. 2008, 2009; Klerman et al. 2013; Waldfogel 1999). Additionally, while not significant in multivariate analyses, the challenges of low-income women who received government benefits during pregnancy in accessing paid leave further demonstrates

that families who might benefit most from income replacement are least likely to receive it. The differential impact of unpaid leave is often masked when only overall lengths of leave taken are considered: this study further points to the double penalty of the lack of income replacement during

the months following birth experienced by low income, less educated women.

Whether leave is paid or unpaid has implications for both maternal and child health as well as family economic security (Berger et al. 2005; Baker and Milligan 2008; Chatterji and Markowitz 2005, 2012). However, much of the prior literature focuses either on the unpaid leave obtained via FMLA (Han et al. 2008; Han et al. 2009; Klerman et al. 2013) or evaluates the California state PFL policy using data which does not distinguish between paid and unpaid leave (Rossin-Slater et al. 2013). This study expands understanding of leave taking by women who worked during pregnancy by providing data on the type of leave women access following the birth of their children. Disaggregating total leave taking into paid and unpaid weeks revealed masked disparities that have implications for the economic stability of the household. While FMLA eligibility does not have a significant impact on the length of total leave taking in our multivariate analysis, women who were eligible for FMLA were found to use 3 weeks more paid leave and 3 fewer weeks of unpaid leave than those who were not FMLA eligible. That absence of significant difference in overall length of leave furthers the disparities in income replacement experienced by women already lacking the job security protections of FMLA. While FMLA is itself unpaid, FMLA eligibility is dependent on stable employment at a large employer. To reduce disparities in the composition of leave, policy makers should ensure the inclusion of workers who are not FMLA eligible.

The extended leave lengths utilized by Black women are primarily composed of unpaid leave: additional inquiry into the rationales for such leave taking as well as the implications for household economic security are warranted, particularly given the higher rates of pregnancy and birth complications for Black women (DeSisto et al. 2018; Margerison-Zilko et al. 2017) which may require longer leaves to address health concerns. Further, unpaid leaves might increase stress, which is itself associated with premature births (Bartel et al. 2019). Future work to increase the directionality of the relationship between length of leave and birth outcomes is indicated.

It is important to note the double penalty facing low-income women who lack a college degree, some of whom cannot afford to take any form of leave, and some of whom cannot afford to stay in the labor force. The current study reinforces this dynamic, demonstrating that even where working women can access similar lengths of leave, less privileged women are more likely to incur economic penalties because they must rely on unpaid leave or leave the workforce, accruing additional penalties upon return (Klerman and Leibowitz 1999). Further work to consider drivers of return to work timing would increase understanding of how to support working women to remain on leave long enough to incur health benefits.

Limitations

This study—based in New York City—is generalizable to diverse urban settings with a highly educated population of working women. Young women and Latinas were less likely to be included in the analyses because they are less likely to return to work than their counterparts (NYC Department of Health and Mental Hygiene 2016). Participation in government benefits programs (SNAP and welfare/cash assistance) was used as a proxy for pre-birth income, however some families who are eligible or faced enrollment challenges may not have enrolled, and stigma may have prevented others who are enrolled from reporting their receipt in the data. Total length of paid leave includes weeks where NYS' Temporary Disability Insurance (TDI) was utilized, however it is important to note that TDI reimbursement rates are relatively low, and that TDI may be taken concurrently with other forms of employee provided paid leave. However, the potential overestimation of the length of paid leave strengthens these findings of disparities in the relative proportion of paid and unpaid leave utilized by working women. Finally, the analyses excluded self-employed workers because they lack access to workplace benefit structures. While self-employed workers will be eligible for paid family leave in New York State beginning in 2018, they will continue to face significant barriers to enroll as well as a 2-year waiting period to receive benefits (NY Department of Labor 2020). Given the proportion of Latinas who are self-employed (NYC Department of Health and Mental Hygiene 2016), future research and policies should focus on access to PFL for self-employed women.

Conclusion

This study adds to the literature by identifying disparities in leave composition that are masked when considering total lengths of leave. Given the consequences of short leave taking and reliance on unpaid leave for family economic security and maternal and child health, moving beyond total length of leave available in commonly used datasets is essential to identify and address disparities. Policy makers should ensure that universal income replacement is provided to support the health and well-being of families welcoming new children.

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