Grandparenthood, Grandparenting, and Working Longer: Do the Genders of Grandparent and of Grandchild's Parent Matter?

In Jeong Hwang
Harvard University
A.M. in Sociology, May 2020
ihwang@g.harvard.edu
Faculty advisors: Alexandra Killewald, Mary C. Brinton, and Deborah Carr (Boston University)

Abstract

With the growing importance of grandparenting and working longer, grandparents might experience tensions between paid and unpaid work similar to younger workers. I examine changes in older workers' engagement in paid employment following their transitions to grandparenthood. Due to gendered expectations for caretaking, I expect the change in women's risk of quitting paid work to be more positive than men's when they become grandparents and the change in labor force exit risk to be more positive for older workers of both genders when daughters, compared to sons, become parents. Using the Health and Retirement Study (HRS), I find that becoming a grandparent is indeed associated with a higher exit risk for female workers only when their daughters become parents. Both paternal grandmothers' and maternal grandfathers' average exit risks remain unchanged from the pre-grandparenthood levels, while paternal grandfathers' risk drops. These findings suggest that gendered expectations surrounding caregiving persist across generations.

1. Introduction

Grandparenthood has become a prominent life stage for many Americans (Margolis 2016). Most older Americans become grandparents (Davies and Williams 2002) and, compared to prior generations, they are better equipped to play an active role in grandchild care due to gains in population health (Margolis and Wright 2017). Concurrently, demand for grandparental childcare has risen due to changes in family forms (Bengtson 2001), increased female labor force participation (Meyer and Kandic 2017), and insufficient public provision of childcare assistance. On the other hand, many Americans find working longer an essential, if not the only, antidote to post-retirement economic precarity (Ghilarducci and Papadopoulos 2018). As a result, grandparents may experience the same tension between paid and unpaid work that younger workers do and as a result may modify their work schedules (Meyer 2014; Meyer and Kandic 2017) or even stop working (Kridahl 2017; Lee and Tang 2015; Lumsdaine and Vermeer 2015; Van Bavel and De Winter 2013) due to the demands of grandparental care.

Like parenthood (Davies and Frink 2014), grandparenthood may entail gendered social roles that require women in particular, who take the lion's share of caretaking responsibility (Kaptijn et al. 2010), to forsake paid work. In light of this, numerous studies have examined the existence and the pattern of gender disparities in the effect[1] of grandparenthood on work exit, albeit without reaching consensus (e.g. Kridahl 2017; Van Bavel and De Winter 2013). However, none of these prior studies have considered the possibility that the gendered social roles for grandparents might intersect with those experienced by their adult children — the

[1] While the term "effect" abstracts from potential problems of endogeneity, which are not further pursued in this study, I employ it henceforth for brevity.

parents of their grandchildren. In this study, I enrich the understanding of gender disparity in the grandparenthood effect on labor market exit by investigating a novel dimension of possible disparity: gender of the grandchild's parent.

Investigation of this new dimension of disparity is motivated by sociological literatures on gendered caregiving and parent-child interactions. Given that maternal employment often clashes with the social expectation that women manage childcare (Blair-Loy 2003; Davies and Frink 2014), it is usually maternal employment that grandparental child care facilitates (e.g. Aassve, Arpino, and Goisis 2012). As parents' life trajectories are interlocked with their adult children's (Elder, Johnson, and Crosnoe 2003) and as older generations, compared to younger cohorts, are more likely to harbor gendered expectations for childcare (Cotter, Hermsen, and Vanneman 2011), I expect that parents with a daughter who becomes a parent are more likely to feel responsible for grandparental child care and forsake their work compared to parents whose son becomes a parent. Sociologists have long distinguished between daughters' and sons' interactions with their parents (see Fischer 1983), which can in turn lead to different patterns of interaction and support between parents and their sons' versus their daughters' children, especially when grandchildren are young (Chan and Elder 2000).

Using the Health and Retirement Study, I revisit the gender disparity in the effect of grandparenthood on work exit and then further examine differences in the effect by the gender of the grandchild's parent. By incorporating gender dynamics across two generations, I shed light on the interlocking of gender disparities across the life course.

2. Theoretical Framework

2.1. Working Longer, Grandparenthood, and Work-Family Conflict

While diminished post-retirement financial security push many older workers to work longer (Ghilarducci and Papadopoulos 2018), grandparenthood has become a salient life experience in the United States. On the one hand, increased length of healthy (disability-free) grandparenthood (Margolis and Wright 2017) suggests greater potential for grandparental care of grandchildren (Aassve et al. 2012). On the other hand, the need for grandparental childcare has risen in the United States, as the number of dual-income couples has risen (Raley, Mattingly, and Bianchi 2006) and substantial divorce rates and shorter-lived partnerships heighten the importance of childcare support from sources other than partners (Bengtson 2001; Cherlin 2010). More women are working and for longer hours (Ellis and Simmons 2014), while private childcare costs are high and rising, and universal paid family leave is lacking (Meyer and Kandic 2017). In this context, older workers are increasingly vulnerable to conflicts at the work-family interface (Meyer and Kandic 2017). Consequently, grandparents might adjust their labor supply by reducing paid work hours (e.g. Meyer 2014; Rupert and Zanella 2018), try to juggle both work and grandchild care (e.g. Ho 2015; Meyer 2014), or even exit the labor market altogether (e.g. Lumsdaine and Vermeer 2015). I focus on exit from paid work, because it is the most severe form of work interruption.

Previous findings on the association between grandparenthood and older workers' labor force attachment are inconsistent. On the one hand, some researchers have reported a negative association between grandparenthood and employment. Grandparents often express a preference to stop work (Raymo and Sweeney 2006; Hochman and Lewin-Epstein 2013) and, compared to their peers without grandchildren, are more likely to exit the labor force (Lee and Tang 2015), prefer and practice early retirement (Hochman and Lewin-Epstein 2013; Kridahl 2017; Lumsdaine and Vermeer 2015), and retire full-time rather than participating in post-retirement

employment (Dingemans, Henkens, and Solinge 2016). On the other hand, some researchers have found no association between having grandchildren and working (e.g. Pleau 2010) or have found that grandparents engage *more* in paid employment in order to provide financial support for their children and grandchildren (Bailey, Haynes, and Letiecq 2013; Cahill, Giandrea, and Quinn 2006).

I form my first hypothesis based on the majority of prior findings on the direction of the association between first-time grandparenthood and labor market participation, while recognizing that the opposite pattern is also possible.

Becoming a grandparent increases the risk of exiting paid employment (H1).

2.2. Grandparenthood and Work Exit: Difference by Grandparent's Gender

The effect of the newly acquired grandparent identity on work exit may vary in magnitude and direction by the gender of the grandparent, as it likely modulates the salience of the grandparent identity and the caregiver or provider roles associated with the identity. First, the salience of older adults' identities as grandparents likely differs by gender. Grandmothers compared to grandfathers tend to derive greater meaning and satisfaction and seek more hands-on influence on grandchildren (Somary and Strieker 1998; Stelle et al. 2010). Grandmothers generally have more contact with their grandchildren (Uhlenberg and Hammill 1998) and are more frequently engaged in grandchild care (Kaptijn et al. 2010).

Second, analogous to parenthood, grandmothers' identity is likely associated with a caregiver role, while grandfathers', a provider role. There is evidence that the idea of separate spheres (see a review by Davies and Frink 2014), which assigns women to the domestic sphere,

such as childcare and housekeeping, and men to the public sphere, such as paid work, remains in older age. Older adults have been shown to remain subject to gender norms in various domains such as employment (Barnes and Parry 2004), childcare (Wheelock and Jones 2002), and housework (Szinovacz 2000; Dorfman and Heckert 1988; Keating and Cole 1980). While some longitudinal studies suggest that gender roles may blur in old age respects (Leopold and Schulz 2018, 2020; Szinovacz 2000; Utz et al. 2004), gender norms are still a higher-order rule that shapes older adults' behaviors (Leopold and Schulz 2018; Szinovacz 2000; Utz et al. 2004). If gender norms continue to influence older adults, men compared to women would less readily reduce their work involvement in response to their newly acquired status as grandparents. Hence, I propose my second set of hypotheses:

The effect of grandparenthood on labor force exit is more positive for women than for men (H2). *The risk of exit from paid work increases for women when they become grandparents* (H2-1).

H2-1 describes a within-gender comparison between women's risk of exit when they are or are not grandparents, while H2 describes a between-gender comparison of the effect of grandparenthood on the risk of labor force exit. On the other hand, I do not anticipate a change in men's risk of exit. While grandmotherhood is associated with earlier retirement (Kridahl 2017; Lumsdaine and Vermeer 2015; Van Bavel and De Winter 2013) or reduction of work hours (Rupert and Zanella 2018) compared to women who are not grandparents, whether these findings apply to grandfathers remains inconclusive. For example, Van Bavel and De Winter (2013) found that in Europe grandparenthood does not affect men's retirement timing, while Kridahl (2017) found that Swedish grandfathers retire earlier than non-grandparents. Nonetheless, we

may not expect a phenomenon in Sweden, with its distinct gender norms and welfare state, to apply to post-communist countries or to liberal democracies (Kridahl 2017).

2.3. Grandparenthood and Work Exit: Difference by the Gender of Grandchild's Parent

Prior studies on grandparenthood and work exit pay insufficient attention to adult children's gender.[2] However, new grandparents' work-family decisions are closely tied to their adult children's needs for childcare assistance (Wheelock and Jones 2002). As the idea of separate spheres remains a strong force that shapes work and care behaviors (Blair-Loy 2003; Davies and Frink 2014), paternal employment is usually taken as a given (Nock 1998) while maternal employment still often clashes with the expectation that women manage childcare, even among cohorts of women who came of age in the late 20th century and have experienced dramatic changes in work and family roles (Blair-Loy 2003). In this context, it is usually maternal employment that grandparental child care facilitates (e.g. Aassve et al. 2012). As parents provide support based on children's needs (Fingerman et al. 2009), older adults who become grandparents through adult daughters may assist daughters' caregiving responsibilities and hence exit the labor force. Moreover, adult daughters might specifically call for their own parents', rather than their in-laws', help because of their familiarity with their own parents' childrearing practices (Covell, Grusec, and King 1995).

[2] Lumsdaine and Vermeer (2015) took a first step by incorporating the numbers of adult sons and married children as control variables, but their analyses do not separate new grandchildren by their parents' genders nor sons and daughters by their parenthood statuses. Wiese et al. (2016)'s small-scale study of first-time grandparents in Germany, Switzerland, and Austria, which differentiates the effect of grandparenthood by the gender of the associated adult parent, found that maternal grandparents express less psychological job involvement and retirement-related fears compared to paternal grandparents. This study differs from Wiese et al. (2016) by focusing on *actual* work behaviors. Furthermore, while their data are based on two time points over an interval of 6 months around the first grandchildren's births, this study utilizes a longer time frame and more time points to produce a more granular tracking of changes in outcomes and reduce bias in estimates, as further discussed in the next section.

The intergenerational system of support is also shaped by older adults' preferences and attitudes, which might lead to varying patterns of interaction with sons versus daughters. For example, given approximately the same geographic distance, grandparents have been shown to initiate more frequent face-to-face contact with their daughters' than sons' children (Pollet, Nettle, and Nelissen 2007). Older parents may feel more responsible for supporting their adult daughters' preferred work-family arrangements via childcare assistance compared to the arrangements preferred by their daughters-in-law.

Adult children's mediation of their relationships with their parents may also shape intergenerational support patterns (Danielsbacka, Tanskanen, and Rotkirch 2015; Thompson and Walker 1987). Daughters, compared to sons, tend to maintain closer ties with their parents because daughters are socialized to be kin-keepers (Chan and Elder 2000; Chong, Gordon, and Don 2017), and this discrepancy widens when they enter parenthood themselves (Fischer 1983). Thus, to the extent that intergenerational intimacy facilitates exchanges of non-monetary support, grandparents are more likely to arrange childcare assistance for their maternal grandchildren than for their paternal grandchildren.

At the aggregate level, a greater number of custodial single mothers than custodial single fathers (U.S. Census Bureau 2016) might lead to maternal grandparents' greater engagement with grandchildren. As grandparental childcare often takes place when adult offspring are single parents (Bengtson 2001; Douglas and Ferguson 2003; Pillonel, Hummel, and De Carlo 2013), one might expect more caring by maternal grandparents given that custodial mothers are five times more common than custodial fathers (Grall 2016).

Empirically, maternal grandparents, compared to paternal grandparents, have more frequent contact with their grandchildren (Pollet, Nelissen, and Nettle 2009; Uhlenberg and Hammill 1998) and are more engaged in grandchild care (see a review by Euler 2011). From grandchildren's perspectives, maternal grandmothers are considered closest in relation and most adored (Chan and Elder 2000; Kahana and Kahana 1970; Kennedy 1990; Pillonel, Hummel, and De Carlo 2013). After the divorce of grandchildren's parents, maternal grandmothers keep the closest ties with their grandchildren (Douglas and Ferguson 2003; Pillonel et al. 2013), and this post-divorce arrangement is usually a continuation from the pre-divorce relationship pattern (Pillonel et al. 2013).

Together, these findings inform my third and fourth hypotheses:

For male workers, the effect of grandparenthood on labor force exit is more positive for maternal than paternal grandparents (H3). *This prediction holds for female workers as well* (H4).

3. Data and Methods

I use the last 10 waves (conducted biennially 1998-2016) of the Health and Retirement Study (HRS), a representative panel survey of noninstitutionalized Americans over age 50, sponsored by the National Institute on Aging (grant number NIA U01AG009740) and conducted by the University of Michigan.[3] Over its history, the HRS sample has remained representative of Americans over age 50. I restrict my sample to observations in which the

[3] I use the RAND HRS Longitudinal File 2016 (V1) constructed from the HRS 1992-2016 core surveys to obtain older adults' demographic and work-related characteristics. I drop the first three waves (1992, 1994, and 1996) because these waves pose problems for identifying grandchildren's parents. I augment the RAND HRS Longitudinal file with the RAND HRS Fat Files for waves 2000-2016, the RAND HRS Family Data 2014 (V1) file, and the raw HRS files for wave 2016 to obtain information on grandparenthood and parents of grandchildren.

respondent is at least age 50 and at most 75.[4] I drop respondents who already have at least one grandchild when they are first observed, in order to zoom in on *transitions* to grandparenthood and respondents who do not have a new grandchild throughout the observation period.[5] I conduct Multiple Imputation by Chained Equations (MICE) for the observations with item-missing values (incomplete cases).[6] As described in more detail below, I estimate an event-history model, in which the risk set includes only those currently working for pay, so I drop observations in which the respondent did not engage in paid work in the preceding wave. This yields an analytic sample of 2,953 person-periods and 1,067 unique individuals.

My outcome or event is a binary variable that equals 1 if the respondent quits paid employment from the previous period to the current period and 0 otherwise. This indicator is based on the survey question, "Are you currently working for pay?" My main independent variables are a series of indicators for waves leading up to and following the transition to first-time grandparenthood instead of the conventional approaches of using a single indicator for whether the individual is a grandparent. I include two leads and two lags in addition to the indicator for the waves when respondents become grandparents. This approach permits the most granular tracking of changes in outcome allowed by the HRS data structure and offers conceptual and methodological benefits.[7]

---

[4] This choice reflects this paper's shifts from the traditional focus in the work-family literature on prime-age workers, often considered ages 29-49, to workers past the prime age. From a practical perspective, the lower threshold of 50 makes sense as it is the age at which the HRS starts to be representative. At the other extreme, age 75 is often used as an upper threshold for the "young-old", and the predictors of labor market exit might differ for those older than age 75.

[5] This includes both biological and adoptive grandchildren and step-grandchildren from higher-order marriages by the grandparents.

[6] I constructed 50 different multiply imputed datasets, with 10 burn-in iterations for each dataset. Analyses based on complete cases showed patterns that broadly converge with the ones based on MICE-produced dataset.

[7] First, it is realistic to expect that the effect of grandparenthood may be distributed pre- and post-transition. As pregnancy is a lengthy process, soon-to-be grandparents may plan their work schedules in expectation of their first grandchildren's arrivals. On the other hand, new grandparents might wait to adjust work schedules until their grandchildren are no longer infants or until the adult children can no longer afford to take parental leaves. Multiple wave indicators allow separately capturing these potential anticipation and lagged effects of transitions into

The transition to grandparenthood, operationalized as the wave in which a respondent who previously had zero grandchildren gains new grandchildren, is constructed based on the following question and its subsidiary question: "Do you have any new grandchildren (excluding great-grandchildren) -- new, that is, [since your previous interview 2 years ago]?" and "Which children are the parents of the new grandchildren?"[89] Using information on adult children's genders, I categorize the first grandchild(ren) as sons' or daughters'. I exclude approximately 7% of observations (206) in which at least one adult daughter and one adult son each become parents in the same two-year inter-wave period.[10] [11]

In all model specifications, I control for the total number of subsequent grandchildren because additional grandchildren create greater demands for grandchild care (Kridahl 2017). I derive the total number of grandchildren from the following question, "Altogether, how many grandchildren do you [or your [husband/wife/partner]] [or your] [late husband/late wife/late

grandparenthood. Second, this approach helps reveal time-varying selection (Dougherty 2006). Older workers might increasingly prioritize family over work as they approach what they consider to be retirement ages, which in turn might encourage adult children to coordinate their parenthood based on the greater availability of their parents' childcare support (Aassve et al. 2012; Kaptijn et al. 2010; Rupert and Zanella 2018). At the same time, prioritization of family over work might result in work exits. As a result, grandparenthood may be positively associated with work exits, but only because both are shaped by or associated with unobserved time-varying work preferences. Including leads and lags visualizes changes in the risk of work exit over time, which may be driven by spurious time trends as well anticipation and lagged effects. While including the distributed fixed effects does not on its own allow unpacking the causes of this hypothesized time trend, failure to include them is equivalent to treating the potential time-varying selection issue as time-invariant and leads to bias in estimates (Dougherty 2006).

[8] Because the transition outcome also captures changes from the previous wave to the current wave, I cannot completely rule out the possibility that work exit might have preceded transition to grandparenthood. This is another reason to inspect the lead and lag terms.

[9] The new grandchild might not be a newborn, as new grandchildren may be step-grandchildren from new marriages.

[10] I do not exclude cases in which one adult child has multiple babies during one period or multiple same-gender adult children each become parents (potentially to multiple babies) during the same period.

[11] The overall patterns are similar when I include bilineal observations (in which respondents report both sons' and daughters' births) in both groups, even though I cannot directly test the statistical significance of the difference between sons' and daughters' parenthoods based on this specification (results are available upon request).

partner] have?". Then I subtract the total number of initial grandchildren[12] to calculate the total number of *subsequent* grandchildren.[13] Albeit smaller in importance than *becoming* a grandparent, having an additional grandchild may also affect older workers' labor supply (Rupert and Zanella 2018). Hence, including the control helps focus my analysis on *transitions* to grandparenthood.

I also include the following covariates, measured in each wave, in all my models: age, gender, race, health, individual income, education level, household wealth, job tenure, partnership status, spousal employment status, number of adult children, and survey wave. Each of these control variables are lagged so that they are measured before the risk period for exiting the labor force begins. I include the respondent's age with a quadratic specification to accommodate non-linearity. I capture the grandparent's gender by an indicator for female and race with a set of three categories: white (reference category), African American, and other.[14] I capture health with self-reported health scores, recoded to 0 for bad health ("Fair' or "Poor") and 1 for good health ("Excellent", "Very Good", or "Good"). To capture opportunity costs of quitting work, I utilize individual income adjusted to 2018 dollars and log-transformed.[15] [16] I use completed education as an indicator of socioeconomic status, categorized as the following: less than high school (reference group), high school (GEDs and high school diplomas), some college but less than a BA, and a BA or greater. For family wealth (sum of housing and non-housing

[12] Number of initial grandchildren corresponds to the number of new grandchildren reported in the survey waves when respondents become unilateral grandparents for the first time based on the question, "Do you have any new grandchildren (excluding great-grandchildren) -- new, that is, [since your previous interview 2 years ago]?"
[13] An alternative analysis with controls for total number of additional grandchildren through sons and daughters separately yields qualitatively same results (results are available upon request).
[14] "Other" includes Asian, Pacific Islander, Native American, Alaskan Native, or any other racial identification than white or African American.
[15] Individual income is the sum of wage/salary income, bonuses/overtime pay/commissions/tips, 2nd job or military reserve earnings, and professional practice or trade income.
[16] For zero income values, I added 0.0001 before log-transforming them.

assets minus debt, adjusted to 2018 dollars), I create three separate variables: log transformed positive wealth, log transformed absolute value of negative wealth, and an indicator for zero wealth. Because how long the respondent has worked on a job can be a proxy for his or her attachment to the labor market, which in turn likely shapes his or her work exit risk and also G2 children's planning for parenthood and career, I control for the length of tenure (in years) on the most recent job. I take into account older workers' partnership status with *solo,* an indicator variable that equals 1 if respondent does not have a partner because childcare patterns, and hence the impact of grandparenthood, may differ for coupled versus single older workers, due to the household division of labor (Bailey et al. 2013). I include an indicator that equals one if the respondent's spouse or cohabiting partner is working for pay because spouses tend to coordinate work exits (Ho and Raymo 2009). I control for the number of adult children the respondent has, as a greater number might increase the need for older adults to work and support them. Finally, I include survey wave to capture macro-level socioeconomic conditions.

I implement a multiple-spell discrete-time event history analysis with a logit link function and account for multiple spells via the shared frailty approach. I incorporate shared variance across spells from the same individual with random intercepts. I also cluster standard errors by individual in order to account for within-cluster correlations that are not fully captured by random effects. Because log odds are difficult to interpret beyond the sign and statistical significance of effects, I generate the predicted probability of work exit for each person-period observation, using observed covariate values except manipulating the dummy variables that relate to the transition to grandparenthood. Because I anticipate the grandparenthood effect will be the largest immediately following the transition to grandparenthood, I examine, as the main test of my hypotheses, whether the risk of work exit during the wave in which the transition

occurs is different from the immediately preceding wave. Additionally, in recognition of a potential spurious time trend as well as anticipation effects of grandparenthood, I test whether the change in the predicted probability of work exit between the wave of the transition and the immediately preceding wave is statistically significantly different from the change between the two pre-transition waves. To capture potential delayed effect of grandparenthood, I compare the risk of work exit in the last pre-grandparenthood wave with the post-transition waves.[17] A statistically significant change suggests the possibility of (delayed) grandparenthood effects even if no immediate effect is found in the main test.[18] All discussion of statistical significance refers to these changes in predictive margins rather than in log odd coefficients.

To test my hypotheses, I examine three different sets of multiple-spell discrete-time event history models. To test Hypothesis 1, that becoming a grandparent increases the risk of exiting paid employment, I pool female and male older workers and implement the following baseline model (Model A):

$$\text{logit}(h_{it}) \equiv \log\left(\frac{h_{it}}{1-h_{it}}\right) = \alpha_i + \sum_{j=1}^{J} \beta_j x_{it-1}^{j} + \sum_{k=J+1}^{K} \beta_k \omega_i^k + \sum_{p=-2}^{2} \lambda_p d_{it}^{p},$$

where *t* refers to the end of the period over which the employment transition is measured, and *i, j*, and *k* index over individuals, time-varying covariates, and time-invariant covariates, respectively. h_{it} is the hazard rate of quitting paid work since the previous wave for individual i at time t. α_i picks up unobserved individual-specific traits, x_{it-1}^{j}, time-varying covariates, and ω_i^k, time-invariant covariates. d_{it}^{p} is a dummy variable where *p* is the number of waves since the transition to grandparenthood, if positive, and the number to transition, if negative.

[17] I use the last wave prior to the transition to grandparenthood as the reference point for any changes that happen *after* the transition in all of my illustrations because of the possibility of a pre-transition trend.

[18] Statistical significance in this case is a necessary but not sufficient condition. *If* the change is statistically significant, comparison of this change with the pre-transition pattern of change would be required to fully support a delayed grandparenthood effect.

Hypothesis 1 is supported if there is a statistically significant increase in the predictive margin between the last pre-grandparenthood wave and any of the post-transition waves and if these changes are also significantly different from any pattern of change during the pre-transition period. In other words, Hypothesis 1 is supported if grandparenthood changes both the exit risk *and* its rate of change.

I test Hypothesis 2, that the association between grandparenthood and work exit is more positive for female than male older workers, in two steps, based on the following modified specification (Model B):

$$\log\left(\frac{h_{it}}{1-h_{it}}\right) = \alpha_i + \sum_{j=1}^{J} \gamma_j x_{it-1}^{j} + \sum_{k=J+1}^{K} \gamma_k \omega_i^k + \sum_{p=-2}^{2} \sigma_p d_{it}^{p} + \sum_{p=-2}^{2} \varphi_p (Female_i * d_{it}^{p}),$$

where $Female_i$ is an indicator for a female older worker. First, I look for statistically significant changes in the now worker-gender-specific predictive margin upon or after the grandparenthood transition which differ from the pre-transition pattern of change. Second, I test whether the patterns are significantly different by worker gender. For Hypothesis 2-1, that the risk of exit from paid work increases for women when they become grandparents, I follow the same first step but based on Model A.[19]

To test Hypotheses 3 and 4, that the effect of grandparenthood is more positive for maternal than paternal grandparents for both male and female workers, I employ the following model (Model C) stratified by worker gender:

$$\log\left(\frac{h_{it}}{1-h_{it}}\right) = \alpha_i + \sum_{j=1}^{J} \theta_j x_{it-1}^{j} + \sum_{k=J+1}^{K} \theta_k \omega_i^k + \sum_{p=-2}^{2} \tau_p d_{it}^{p} + \sum_{p=-2}^{2} \rho_p (Daughter_i * d_{it}^{p}) + \theta_{K+1} (Daughter_i),$$

[19] Estimating Model A separately by worker gender corresponds to interacting all right-hand-side variables in Model B with worker gender.

where $Daughter_i$ is an indicator for the gender of the adult child associated with the first grandchild set to equal one if the adult child is a daughter and to zero if the adult child is a son. x^j_{it-1} is the same vector of time-varying control variables as in Models A and B but without grandparent gender. Similar to the test of Hypothesis 2, I conduct the following two steps. First, I look for statistically significant changes in the predictive margin specific to an adult child's (and a grandparent's) gender upon or after the grandparenthood transition which differ from the pre-transition pattern of change. Second, I test whether the patterns are significantly different by grandparent gender.

4. Results

4.1. Descriptive Statistics and Overall Trends

I first present descriptive statistics for my analytic sample. All values in Table 1 are unweighted.

Table 1. Descriptive Statistics

	Total		Male Older Worker		Female Older Worker		Gender
	Mean	SD	Mean	SD	Mean	SD	Difference
Person-wave							
Age	60.60	4.77	61.27	4.84	59.68	4.51	1.59***
Healthy[a]	88%		86%		90%		-4pp**
Income[b]	$53,217	$63,908	$58,621	$71,872	$45,883	$50,263	$12,738***
(Median)	$37,451		$42,542		$33,943		
Household Wealth[c]	$725,050	$1,503,107	$793,381	$1,610,982	$632,301	$1,338,007	$161,080**
(Median)	$303,123		$308,423		$298,580		
Number of Adult Children	2.64	1.25	2.68	1.21	2.51	1.16	0.06
Year of Tenure on Current Job	13.96	12.17	0.28		0.36		3.66***
Not Partnered[d]	12%		8%		17%		-9pp***
Spouse Works for Pay[e]	64%		64%		64%		0pp
Individual							
Race							
Black	8%		7%		9%		-2pp
Other Race[f]	8%		8%		8%		0pp
Level of Education[g]							
High School or GED	25%		24%		26%		-2pp
College Less than BA	27%		23%		33%		-10pp***
BA or Greater	42%		45%		38%		7pp *
Had First Grandchild(ren)							
From Son(s)	51%		52%		50%		2pp
From Daughter(s)	49%		48%		50%		-2pp
Had Subsequent Grandchild(ren)[h]							
One Wave After Transition	20%		18%		22%		-4pp
Two Waves After Transition	58%		56%		59%		-3pp
Individuals	1,067		606		461		

Unweighted values.
[a]Healthy: 0 = fair/poor health, 1 = excellent/very good/good health.
[b c]Adjusted to 2018 dollars.
[d]Not Partnered: 1 if respondent does not have a partner ("Married, Spouse Absent", "Separated", "Divorced", "Separated/Divorced", "Widowed", or "Never Married").
[e]This is among the reponsdents who have partner, with the exception of 4 observations in which a non-partnered individual reported working spouse.
[f]Other Race includes Asian, Pacific Islander, Native Americans, Alaska Natives, and any other racial identification than caucasian and African Amercian.
[g]Level of Education: less than high school, GEDs and high school diplomas, college less than BA, and BA or greater.

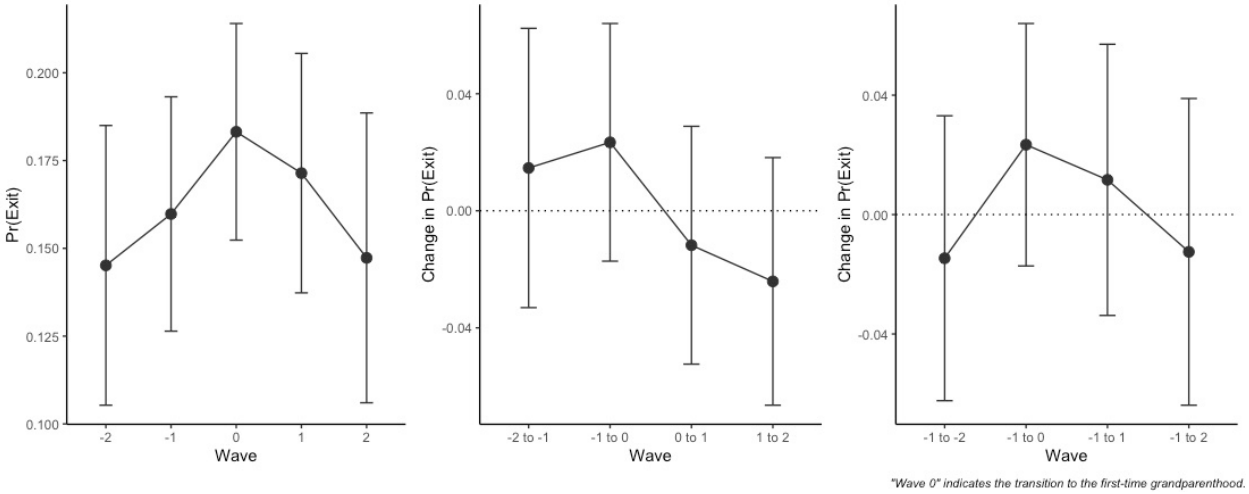
[h]Among those observed one wave and two waves after the transition to grandparenthood, respectively.
+ p<0.1, * p<0.05, ** p<0.01, *** p<0.001

Roughly equal shares of first grandchildren were associated with adult sons and daughters, with slightly more from sons. A fifth of the respondents observed by the first wave after the wave of becoming a grandparent had at least one subsequent grandchild while about three fifths of those observed in the second wave after the transition did so, implying the importance of taking additional grandchildren into account.

4.2. Results from Event History Analysis

I compare the results from event history analysis to each of the proposed hypotheses. I use 0.1 as the level of significance. I use Wald tests to assess whether changes across waves vary by subgroups and across pre- and post-transition periods.

Figure 1. Predictive Margins of Waves around Transition to Grandparenthood - Model A (Male and Female Older Workers)



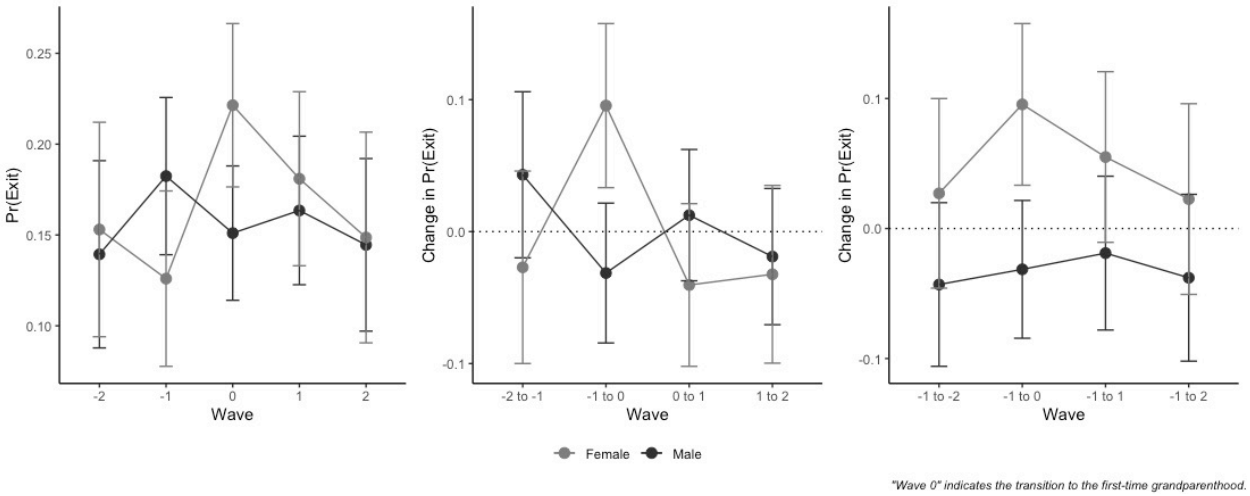
The leftmost panel of Figure 1 shows the mean predicted probability of work exit if all observations were at each of the five waves, pooling female and male older workers. The five waves indicate the number of survey waves since the transition to first-time grandparenthood, if positive, and the number to transition, if negative. The middle and rightmost panels show

changes ("contrasts") in predictive margin from two difference reference points: the immediately preceding wave (middle panel) and the last wave before becoming a grandparent (right panel). For example, the vertical height of the datapoint at "-1 to 0" on the x-axis in the middle panel shows the amount of change in the predictive margin from one wave before the transition to the wave of transition.

The middle and right panels show that older workers' mean predicted probability of quitting paid work does not statistically significantly change upon or after their transitions to grandparenthood. Hence, Hypothesis 1 was not supported.[20]

Next, I examine patterns of labor force exit separately for men and women as they transition to grandparenthood. When birth waves were interacted with grandparent gender based on Model B, it became clear that the lack of change was driven by grandfathers, or male workers, who composed a greater share of my sample (see Figure 2).

Figure 2. Predictive Margins of Waves around Transition to Grandparenthood - Model B (Male and Female Older Workers)



[20] Among the covariates in Model A, grandparent attributes such as age, gender, partnership status, health, income, job tenure, spousal employment, and number of adult children statistically significantly affected older workers' log odds of work exit. Exit risk was greater when the older worker was a female or older, as expected (Aine and Debra 2017). Exit risk was lower for older workers who are healthy or with working partners, consistent with prior findings (Kridahl 2017; Lumsdaine and Mitchell 1999; Munnell, Webb, and Chen 2016). Corresponding log odds results are available upon request.

Female older workers' probability of work exit jumped by 9.5 percentage points during the wave when they became grandparents, compared to the immediately preceding wave (p=0.003), while male adults' probability did not statistically significantly change throughout (Figure 2, middle panel).

This difference between female and male older adults in the change across these waves was statistically significant (p=0.091). Moreover, the jump in women's exit probability in the wave of transition statistically significantly differed from the change between the two pre-transition waves (p=0.038), which further validates the existence of a grandparenthood effect. Hence, Hypothesis 2 that the effect of grandparenthood is more positive for women than for men was supported. Women's increased risk of labor force exit was concentrated in the wave in which she became a grandmother: in subsequent waves they did not have a statistically significantly higher risk of labor force exit than they did one wave before the transition.

Conducting separate analyses for female and male older workers based on Model 1, which corresponds to interacting every right-hand-side variable in Model 1 with worker gender, yielded qualitatively similar results and retained statistical significance (Figure 3). Hence, Hypothesis 2-1 is supported. These results are consistent with Van Bavel and De Winter (2013)'s finding that grandparenthood only affects women's retirement timing, seemingly supportive of the idea that men continue to adhere to the financial provider role.

Figure 3. Predictive Margins of Waves around Transition to Grandparenthood - Model A (by Worker Gender)

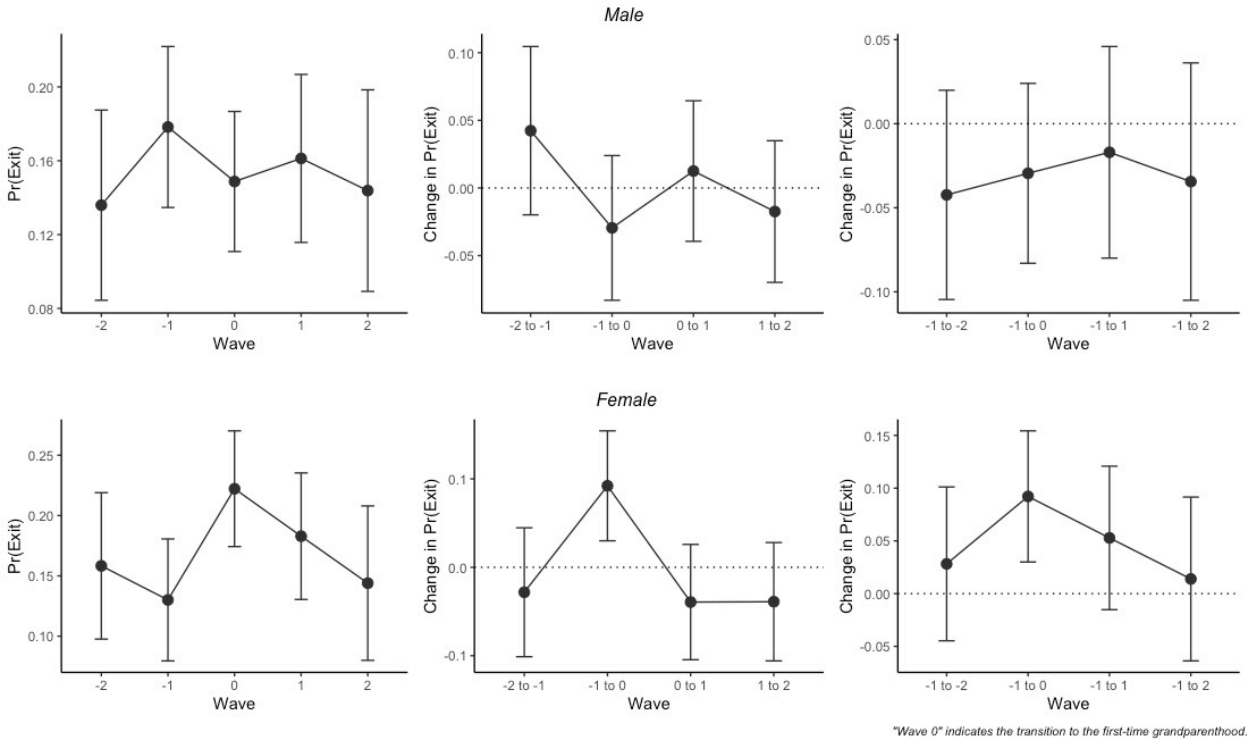
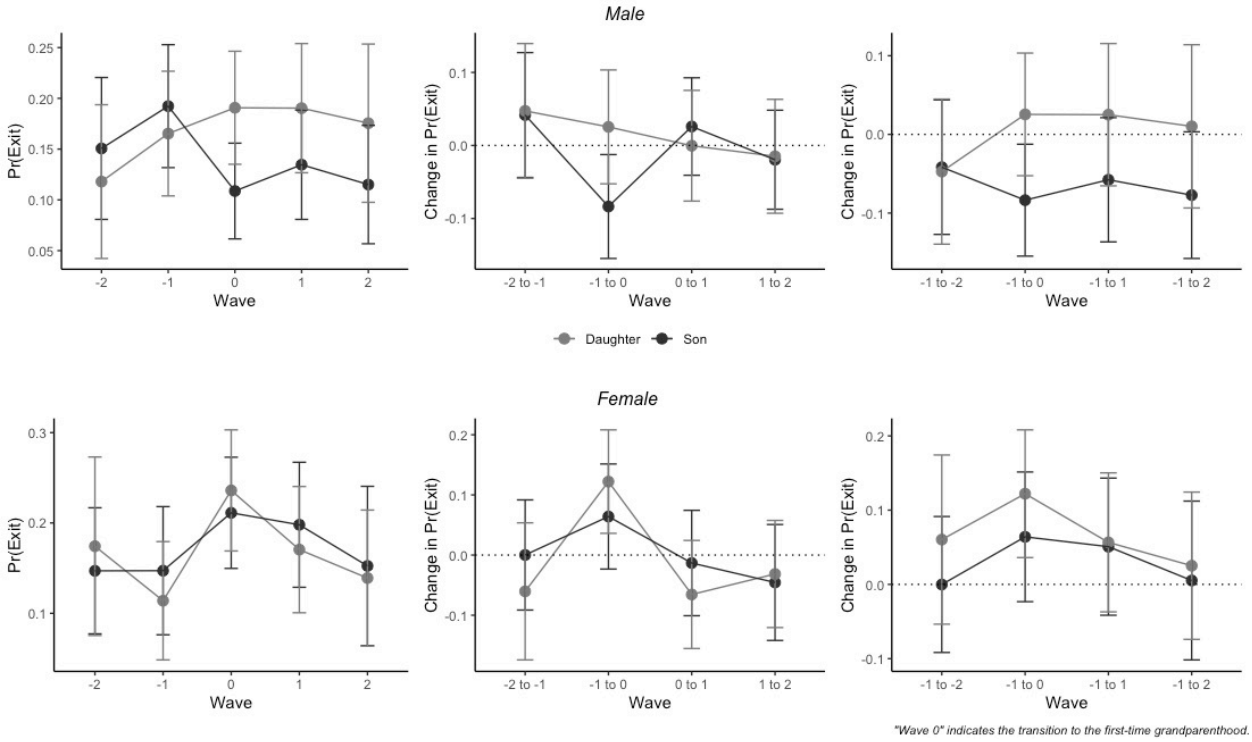


Figure 4, corresponding to Model C, separates births of first grandchildren by their parents' genders. For grandparents, or male older workers, the probability of quitting paid work changes differently depending on whether the first grandchild is from adult sons or daughters. Male older workers' mean predicted exit probability *dropped* by 8.3 percentage points (p= 0.021) from the immediately preceding wave when they became grandfathers through their adult sons' children and did not change in the case of adult daughters' children. This drop in paternal grandfathers' risk of work exit was statistically significantly different from the change between the two pre-transition waves (p= 0.073), which further validates the grandparenthood effect for paternal grandfathers. Moreover, these different changes in the exit risk for paternal versus

maternal grandfathers in the wave of transition were statistically significant (p= 0.060). Hence, Hypothesis 3 is supported.

Figure 4. Predictive Margins of Waves around Transition to Grandparenthood - Model C (by Worker Gender)



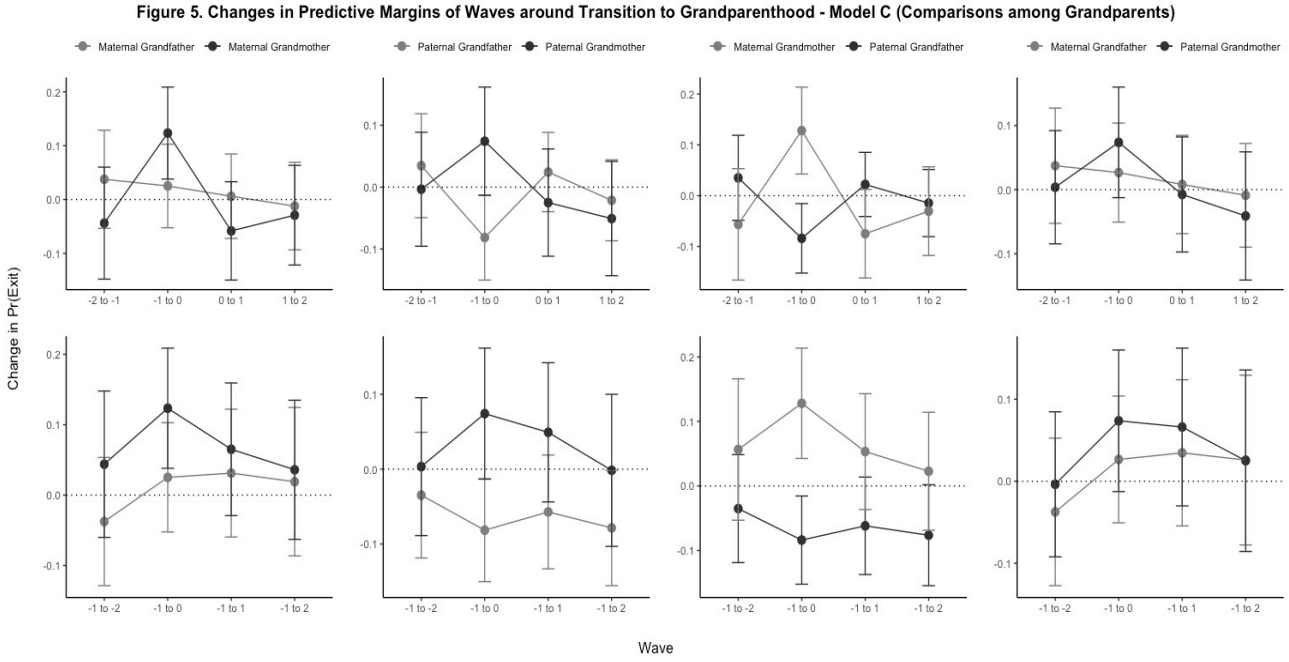
For female older workers, exit probability statistically significantly increased, by 12.2 percentage points, only when they became grandparents through daughters' children, with respect to the immediately preceding wave (p=0.005). Moreover, this increase in maternal grandmothers' exit risk was statistically significantly different from the change between the two pre-transition waves (p= 0.034), further supporting the existence of grandparenthood effect for maternal grandmothers. However, the difference in the changes of exit risk for maternal and paternal grandmothers was not statistically significant, so I do not have strong evidence in favor of Hypothesis 4. Furthermore, consistent with the pattern observed in Figure 3, the increase in

maternal grandmothers' risk of labor force exit was restricted to the wave in which she became a grandmother.[21]

Given that the grandparenthood effect is moderated by both grandparents' and adult children's genders, I further conducted pairwise comparisons among different types of grandparents (Figure 5). Among maternal grandparents (Column 1) and among paternal grandparents (Column 2), the change in exit risk in the wave of becoming a grandparent was statistically significantly more positive for grandmothers than grandfathers. Between paternal grandfathers and maternal grandmothers (Column 3), maternal grandmothers experienced a statistically significantly more positive grandparenthood effect. However, when maternal grandfathers were compared to paternal grandmothers, I did not find strong evidence that the changes, or the lack thereof, in exit risk that they experience were different from each other (Column 4).

In sum, the association between grandparenthood and work exit risk was the most positive for maternal grandmothers and the least positive for paternal grandfathers. This association lies somewhere in between for both maternal grandfathers and paternal grandmothers, and there is no strong evidence that the experiences of these two groups are different from each other.

[21] Even though the conceptual focus of this study is on the exit from paid work, the most severe form of work interruption, I checked the sensitivity of my findings from Figure 4 by examining transitions out of full-time work instead, including both work exits and moves to part-time work. Similar to the main findings, the results from this robustness check also provide support for Hypothesis 3 and not for Hypothesis 4 (results are available upon request).



5. Discussion and Conclusion

This study has shown how gender across different generations jointly stratifies the labor market implications of grandparenthood. Female older workers' probability of exiting paid employment increases upon the transition to grandparenthood, while male workers' probability does not change. The risk of quitting paid work increases for maternal grandmothers and decreases for paternal grandfathers, while there is no strong evidence that paternal grandmothers and maternal grandfathers experience any change or that their experiences differ from each other. In other words, the grandparenthood effect on labor market exit was most positive for maternal grandmothers and least positive (most negative) for paternal grandfathers, and the effect lies somewhere in between for both maternal grandfathers and paternal grandmothers. Hence, the impact of grandparenthood is stratified by not only older workers' own genders but also by the genders of the grandchildren's parents.

This suggests that the previous depiction of grandmothers' work lives being more interrupted than those of grandfathers by grandparenthood might be overly simplistic. It is not grandmothers' work lives in general, but more specifically, those of *maternal* grandmothers that are more interrupted than both paternal and maternal grandfathers'. Moreover, grandmothers' work lives in general are more interrupted than those of paternal grandfathers, rather than grandfathers in general.[22]

It is well-known that women, especially mothers, are disadvantaged in the labor market (e.g. Blau and Kahn 2017; Budig and England 2001). My findings illustrate one channel through which mothers *to mothers* might be additionally disadvantaged in the labor market as they disproportionately disengage from paid work in their middle to old ages, perhaps due to gendered social expectations that persist across generations. Considering that female older workers are already likely to suffer from lower job prospects, savings and pension benefits compared to their male counterparts due to their shorter and inconsistent work histories (Aine and Debra 2017), maternal grandmothers' greater movement out of the labor market that is even tighter for older adults (Ghilarducci, Papadopoulos, and Webb 2018) can amplify this difficulty for them and cause irrecoverable damage to their financial, and hence, physical and mental health (e.g. Carr 2019; Olivera and Ponomarenko 2017; Tucker-Seeley et al. 2009).

This study also brings attention to maternal grandfathers, who are often forgotten when gender inequality in middle to old age is discussed. Unlike paternal grandfathers, maternal grandfathers' work prospects are not enhanced upon grandparenthood. Pairwise comparisons

[22] Of course, my analyses do not permit an evaluation of how grandparents experience the transition to grandparenthood and its effects on their work lives. Grandparenthood can provide workers considering retirement a new source of meaning (Wiese et al. 2016; Wink and James 2012). In this sense, paternal grandfathers' less interrupted work lives may come with relational or emotional costs, just as they are often the least memorable grandparents from young grandchildren's perspectives (Euler 2011).

among grandparents suggest[23] that their experience in terms of grandparenthood and employment exit might actually differ more from paternal grandfathers' than that from paternal grandmothers'. In other words, the effect of becoming a maternal grandfather might more closely resemble that of becoming a paternal grandmother than a paternal grandfather. What differentiates paternal and maternal grandfathers' experiences might lie in the interlocking of gender norms across generations. For maternal grandfathers, male breadwinner norms and the gendering of childcare responsibility in their adult children's generation may partially offset, resulting in no strong effect of grandparenthood on the risk of labor force exit. For paternal grandfathers, their own identity as breadwinners may be reinforced by their sons' transition to fatherhood, leading to a reduction in labor force exit for paternal grandfathers.

This study has several limitations. First, the limited timeframe of the current study does not allow capturing grandparenthood in its entirety. Grandfathers, for example, might focus on financial provision when their grandchildren are babies or toddlers but might engage in different types of activities with their grandchildren when they are growing up (Kahana and Kahana 1970). In other words, parents might provide different "currencies of assistance" to their adult children (Soldo and Hill 1995) at different stages of grandchildren's development, just as parents distribute material support based on their children's needs (Fingerman et al. 2009). Furthermore, the choice of the currency might be differentiated between adult daughters and sons at a given stage of grandchildren's development.

Second, the current study reflects the experience of becoming a grandparent *in older adulthood*, not the average experience of becoming a grandparent in the United States because

[23]To prove this implication from the pairwise comparisons, a formal test of whether the gap between paternal grandfather and maternal grandfather is different than the gap between maternal grandfather and paternal grandmother Is necessary.

my sample excludes those who become grandparents before they were first observed in the HRS (i.e. at age 50 or above). This restriction also has consequences for the demographic composition of my sample. On average, African Americans become grandparents earlier than whites (Szinovacz 1998). This means that African Americans are disproportionately excluded from my sample. Finally, this study does not match maternal and paternal grandparents given a particular grandchild, even though intergenerational resource allocations and transfers may be coordinated among all parents of adult children's spouses (Chong et al. 2017).

Despite these limitations, this study shows that gender matters and intersects *across multiple generations* to form new patterns of inequality. No previous study in has shed light on this intergenerational aspect of gender dynamics in the relationship between grandparenthood and employment. My findings provide support for the intergenerational linkage of gender norms and promotes a broader understanding of the gender dynamics surrounding unpaid and paid work.

References

Aassve, Arnstein, Bruno Arpino, and Alice Goisis. 2012. "Grandparenting and Mothers' Labour Force Participation: A Comparative Analysis Using the Generations and Gender Survey." *Demographic Research* 27:53–84.

Aine, Ni Leime, and Street Debra. 2017. *Gender, Ageing and Extended Working Life: Cross-National Perspectives*. Policy Press.

Bailey, Sandra J., Deborah C. Haynes, and Bethany L. Letiecq. 2013. "'How Can You Retire When You Still Got a Kid in School?': Economics of Raising Grandchildren in Rural Areas." *Marriage & Family Review* 49(8):671–93. doi: 10.1080/01494929.2013.803009.

Bengtson, Vern L. 2001. "Beyond the Nuclear Family: The Increasing Importance of Multigenerational Bonds." *Journal of Marriage and Family* 63(1):1–16. doi: 10.1111/j.1741-3737.2001.00001.x.

Blair-Loy, Mary. 2003. *Competing Devotions : Career and Family among Women Executives*. Cambridge: Harvard University Press.

Blau, Francine D., and Lawrence M. Kahn. 2017. "The Gender Wage Gap: Extent, Trends, and Explanations." *Journal of Economic Literature* 55(3):789–865. doi: 10.1257/jel.20160995.

Budig, Michelle J., and Paula England. 2001. "The Wage Penalty for Motherhood." *American Sociological Review* 66(2):204. doi: 10.2307/2657415.

Cahill, Kevin E., Michael D. Giandrea, and Joseph F. Quinn. 2006. "Retirement Patterns From Career Employment." *The Gerontologist* 46(4):514–23. doi: 10.1093/geront/46.4.514.

Carr, Deborah. 2019. *Golden Years?: Social Inequality in Later Life*. Russell Sage Foundation.

Chan, Christopher G., and Glen H. Elder Jr. 2000. "Matrilineal Advantage in Grandchild–Grandparent Relations." *The Gerontologist* 40(2):179–90. doi: 10.1093/geront/40.2.179.

Cherlin, Andrew. 2010. "Demographic Trends in the United States: A Review of Research in the 2000s." *Journal of Marriage and the Family* 72(3):403–19. doi: 10.1111/j.1741-3737.2010.00710.x.

Chong, Alexandra, Alynn E. Gordon, and Brian P. Don. 2017. "Emotional Support from Parents and In-Laws: The Roles of Gender and Contact." *Sex Roles* 76(5–6):369–79. doi: 10.1007/s11199-016-0587-0.

Cotter, David, Joan M. Hermsen, and Reeve Vanneman. 2011. "The End of the Gender Revolution? Gender Role Attitudes from 1977 to 2008." *American Journal of Sociology* 117(1):259–89. doi: 10.1086/658853.

Covell, Katherine, Joan E. Grusec, and Gillian King. 1995. "The Intergenerational Transmission of Maternal Discipline and Standards for Behavior." *Social Development* 4(1):32–43. doi: 10.1111/j.1467-9507.1995.tb00049.x.

Danielsbacka, Mirkka, Antti O. Tanskanen, and Anna Rotkirch. 2015. "Impact of Genetic Relatedness and Emotional Closeness on Intergenerational Relations." *Journal of Marriage and the Family* 77(4):889–907. doi: http://dx.doi.org.ezp-prod1.hul.harvard.edu/10.1111/jomf.12206.

Davies, Andrea Rees, and Brenda D. Frink. 2014. "The Origins of the Ideal Worker: The Separation of Work and Home in the United States From the Market Revolution to 1950." *Work and Occupations* 41(1):18–39. doi: 10.1177/0730888413515893.

Davies, Curt, and Dameka Williams. 2002. *The Grandparent Study 2002 Report*. Washington, D.C.: American Association of Retired Persons.

Dingemans, Ellen, Kène Henkens, and Hanna van Solinge. 2016. "Access to Bridge Employment: Who Finds and Who Does Not Find Work After Retirement?" *The Gerontologist* 56(4):630–40. doi: 10.1093/geront/gnu182.

Dorfman, Lorraine T., and D. Alex Heckert. 1988. "Egalitarianism in Retired Rural Couples: Household Tasks, Decision Making, and Leisure Activities." *Family Relations* 37(1):73–78. doi: 10.2307/584433.

Douglas, Gillian, and Neil Ferguson. 2003. "The Role of Grandparents in Divorced Families." *International Journal of Law, Policy and the Family* 17(1):41–67. doi: 10.1093/lawfam/17.1.41.

Elder, Jr., G. H., MK Johnson, and R. Crosnoe. 2003. "The Emergence and Development of Life Course Theory." in *Handbook of the Lifecourse*. New York: Kluwer Academic/Plenum.

Ellis, Renee R., and Tavia Simmons. 2014. "Coresident Grandparents and Their Grandchildren: 2012." 35.

Euler, Harald A. 2011. "Grandparents and Extended Kin." *The Oxford Handbook of Evolutionary Family Psychology*. doi: 10.1093/oxfordhb/9780195396690.013.0012.

Fingerman, Karen, Laura Miller, Kira Birditt, and Steven Zarit. 2009. "Giving to the Good and the Needy: Parental Support of Grown Children." *Journal of Marriage and Family* 71(5):1220–33. doi: 10.1111/j.1741-3737.2009.00665.x.

Fischer, Lucy Rose. 1983. "Married Men and Their Mothers." *Journal of Comparative Family Studies* 14(3):393–402.

Ghilarducci, T., M. Papadopoulos, and A. Webb. 2018. *40% OF OLDER WORKERS AND THEIR SPOUSES WILL EXPERIENCE DOWNWARD MOBILITY IN RETIREMENT*. Schwartz Center for Economic Policy Analysis and Department of Economics, The New School for Social Research.

Ghilarducci, Teresa, and Michael Papadopoulos. 2018. *The Retirement Crisis in New York*. Schwartz Center for Economic Policy Analysis, The New School for Social Research.

Health and Retirement Study, (2016 HRS Core, RAND HRS Longitudinal File 2016 (V2), RAND HRS Family Data 2014 (V1), and RAND HRS Fat Files 2000-2016) public use dataset. Produced and distributed by the University of Michigan with funding from the National Institute on Aging (grant number NIA U01AG009740). Ann Arbor, MI, (2019).

Ho, Christine. 2015. "Grandchild Care, Intergenerational Transfers, and Grandparents' Labor Supply." *Review of Economics of the Household; Dordrecht* 13(2):359–84. doi: http://dx.doi.org.ezp-prod1.hul.harvard.edu/10.1007/s11150-013-9221-x.

Ho, Jeong-Hwa, and James M. Raymo. 2009. "Expectations and Realization of Joint Retirement Among Dual-Worker Couples." *Research on Aging* 31(2):153–79. doi: 10.1177/0164027508328308.

Hochman, Oshrat, and Noah Lewin-Epstein. 2013. "Determinants of Early Retirement Preferences in Europe: The Role of Grandparenthood." *International Journal of Comparative Sociology* 54(1):29–47. doi: 10.1177/0020715213480977.

Kahana, Boaz, and Eva Kahana. 1970. “Grandparenthood from the Perspective of the Developing Grandchild.” *Developmental Psychology* 3(1):98–105. doi: 10.1037/h0029423.

Kaptijn, Ralf, Fleur Thomese, Theo G. van Tilburg, and Aart C. Liefbroer. 2010. “How Grandparents Matter.” *Human Nature* 21(4):393–405. doi: 10.1007/s12110-010-9098-9.

Keating, N. C., and P. Cole. 1980. “What Do I Do With Him 24 Hours a Day? Changes in the Housewife Role After Retirement.” *The Gerontologist* 20(1):84–89. doi: 10.1093/geront/20.1.84.

Kennedy, Gregory E. 1990. “College Students’ Expectations of Grandparent and Grandchild Role Behaviors.” *The Gerontologist* 30(1):43–48. doi: 10.1093/geront/30.1.43.

Kridahl, Linda. 2017. “Retirement Timing and Grandparenthood in Sweden: Evidence from Population-Based Register Data.” *Demographic Research* 37:957–94.

Lee, Yeonjung, and Fengyan Tang. 2015. “More Caregiving, Less Working.” *Journal of Applied Gerontology* 19.

Leopold, Thomas, and Florian Schulz. 2018. “Health and Housework in Later Life: A Longitudinal Study of Retired Couples.” *The Journals of Gerontology: Series B*. doi: 10.1093/geronb/gby015.

Leopold, Thomas, and Florian Schulz. 2020. “Health and Housework in Later Life: A Longitudinal Study of Retired Couples” edited by D. Carr. *The Journals of Gerontology: Series B* 75(1):184–94. doi: 10.1093/geronb/gby015.

Lumsdaine, Robin L., and Olivia S. Mitchell. 1999. “New Developments in the Economic Analysis of Retirement.” P. 47 in *Handbook of Labor Economics*. Vol. 3.

Lumsdaine, Robin L., and Stephanie J. C. Vermeer. 2015. “Retirement Timing of Women and the Role of Care Responsibilities for Grandchildren.” *Demography* 52(2):433–54. doi: 10.1007/s13524-015-0382-5.

Margolis, Rachel. 2016. “The Changing Demography of Grandparenthood.” *Journal of Marriage and Family; Minneapolis* 78(3):610–22. doi: http://dx.doi.org.ezp-prod1.hul.harvard.edu/10.1111/jomf.12286.

Margolis, Rachel, and Laura Wright. 2017. “Healthy Grandparenthood: How Long Is It, and How Has It Changed?” *Demography* 54(6):2073–99. doi: 10.1007/s13524-017-0620-0.

Meyer, Madonna Harrington Harrington. 2014. *Grandmothers at Work: Juggling Families and Jobs*. NYU Press.

Meyer, Madonna Harrington, and Amra Kandic. 2017. “Grandparenting in the United States” edited by J. J. Suitor. *Innovation in Aging* 1(2). doi: 10.1093/geroni/igx023.

Munnell, Alicia H., Anthony Webb, and Anqi Chen. 2016. “DOES SOCIOECONOMIC STATUS LEAD PEOPLE TO RETIRE TOO SOON?” 11.

Nock, Steven L. 1998. *Marriage in Men’s Lives*. 1 edition. New York: Oxford University Press.

Olivera, Javier, and Valentina Ponomarenko. 2017. “Pension Insecurity and Wellbeing in Europe.” *Journal of Social Policy* 46(3):517–42. doi: 10.1017/S0047279416000787.

Pillonel, Alexandre, Cornelia Hummel, and Ivan De Carlo. 2013. “Les Relations Entre Adolescents et Grands-Parents En Suisse : Séparation Conjugale et Équilibre Entre Lignées.” *Population* 68(4):643. doi: 10.3917/popu.1304.0643.

Pleau, Robin L. 2010. “Gender Differences in Postretirement Employment.” *Research on Aging* 32(3):267–303. doi: 10.1177/0164027509357706.

Pollet, Thomas V., Mark Nelissen, and Daniel Nettle. 2009. “Lineage Based Differences in Grandparental Investment: Evidence from a Large British Cohort Study.” *Journal of Biosocial Science* 41(3):355–79. doi: 10.1017/S0021932009003307.

Pollet, Thomas V., Daniel Nettle, and Mark Nelissen. 2007. “Maternal Grandmothers Do Go the Extra Mile: Factoring Distance and Lineage into Differential Contact with Grandchildren.” *Evolutionary Psychology* 5(4):147470490700500400. doi: 10.1177/147470490700500412.

Raley, Sara B., Marybeth J. Mattingly, and Suzanne M. Bianchi. 2006. “How Dual Are Dual-Income Couples? Documenting Change From 1970 to 2001.” *Journal of Marriage and Family* 68(1):11–28. doi: 10.1111/j.1741-3737.2006.00230.x.

RAND HRS Longitudinal File 2016 (V2), RAND HRS Family Data 2014 (V1), and RAND HRS Fat Files 2000-2016. Produced by the RAND Center for the Study of Aging, with funding from the National Institute on Aging and the Social Security Administration. Santa Monica, CA (2019).

Raymo, James M., and Megan M. Sweeney. 2006. “Work–Family Conflict and Retirement Preferences.” *The Journals of Gerontology: Series B* 61(3):S161–69. doi: 10.1093/geronb/61.3.S161.

Rupert, Peter, and Giulio Zanella. 2018. “Grandchildren and Their Grandparents’ Labor Supply.” *Journal of Public Economics* 159:89–103. doi: 10.1016/j.jpubeco.2017.12.013.

Somary, Karen, and George Strieker. 1998. “Becoming a Grandparent: A Longitudinal Study of Expectations and Early Experiences as a Function of Sex and Lineage.” *The Gerontologist* 38(1):53–61. doi: 10.1093/geront/38.1.53.

Stelle, Charlie, Christine A. Fruhauf, Nancy Orel, and Laura Landry-Meyer. 2010. “Grandparenting in the 21st Century: Issues of Diversity in Grandparent–Grandchild Relationships.” *Journal of Gerontological Social Work* 53(8):682–701. doi: 10.1080/01634372.2010.516804.

Szinovacz, Maximiliane E. 1998. “Grandparents Today: A Demographic Profile 1.” *The Gerontologist* 38(1):37–52. doi: 10.1093/geront/38.1.37.

Szinovacz, Maximiliane E. 2000. “Changes in Housework after Retirement: A Panel Analysis.” *Journal of Marriage and Family* 62(1):78–92.

Thompson, Linda, and Alexis J. Walker. 1987. “Mothers as Mediators of Intimacy between Grandmothers and Their Young Adult Granddaughters.” *Family Relations* 36(1):72–77. doi: 10.2307/584651.

Tucker-Seeley, Reginald D., Yi Li, SV Subramanian, and Glorian Sorensen. 2009. “Financial Hardship and Mortality among Older Adults Using the 1996-2004 Health and Retirement Study.” *Annals of Epidemiology* 19(12):850–57. doi: 10.1016/j.annepidem.2009.08.003.

Uhlenberg, Peter, and Bradley G. Hammill. 1998. “Frequency of Grandparent Contact With Grandchild Sets: Six Factors That Make a Difference.” *The Gerontologist* 38(3):276–85. doi: 10.1093/geront/38.3.276.

Utz, Rebecca L., Erin B. Reidy, Deborah Carr, Randolph Nesse, and Camille Wortman. 2004. “The Daily Consequences of Widowhood: The Role of Gender and Intergenerational Transfers on Subsequent Housework Performance.” *Journal of Family Issues* 25(5):683–712. doi: 10.1177/0192513X03257717.

Van Bavel, J., and T. De Winter. 2013. “Becoming a Grandparent and Early Retirement in Europe.” *European Sociological Review* 29(6):1295–1308. doi: 10.1093/esr/jct005.

Wheelock, Jane, and Katharine Jones. 2002. “‘Grandparents Are the Next Best Thing’: Informal Childcare for Working Parents in Urban Britain.” *Journal of Social Policy* 31(3):441–63. doi: 10.1017/S0047279402006657.

Wiese, Bettina S., Christian L. Burk, and Dalit Jaeckel. 2016. “Transition to Grandparenthood and Job-Related Attitudes: Do Grandparental Sex and Lineage Matter?: Transition to Grandparenthood.” *Journal of Marriage and Family* 78(3):830–47. doi: 10.1111/jomf.12307.

Wink, Paul, and Jacquelyn Boone James. 2012. *The Life Course Perspective on Life in the Post-Retirement Period*. Oxford University Press.