



Working, parenting and work-home spillover: Gender differences in the work-home interface across the life course

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ABSTRACT

In this study, we bring a life course approach to work-family research and ask how work-home spillover changes as men and women move through different parenting stages. We use two waves of the Mid-Life in the United States Study (MIDUS I and II, 1996–2004, N = 1319) and estimate change-score models to document the association between five parenting transitions (becoming a parent, starting to parent a school-aged child, an adolescent, young adult, or adult child) and changes in both positive and negative work-to-home (WHS) and home-to-work (HWS) spillover, testing for gender differences in these associations. We find that moving through parenting stages is related to within-person changes in reports of work-home spillover, and that mothers and fathers encounter changes in spillover at different points in the life course. Our findings detail how transitions through parenthood produce a gendered life course, and speaks to the need for policies to support working parents throughout the life course.

1. Introduction

While once considered “separate spheres”, work and family domains are now more interconnected than ever before (Greenhaus & Beutell, 1985; Voydanoff, 2002). In the U.S., several demographic trends have shaped the work-family experience of adults, such as the rise of women’s, and particularly mothers’, labor force participation (Goldin, 2006), the increased financial need for families to have dual earners (Warren & Tyagi, 2004), and increased fathers’ involvement in family life and childrearing (Kaufman, 2013; Sayer, 2005). Consequently, more men and women now must simultaneously juggle responsibilities as both parents and employees. Research documenting how individuals combine these social roles has resulted in an extensive empirical literature, examining variation in work-family experiences, as well as their consequences for individual and family well-being (Bianchi & Milkie, 2010).

Much of this research has focused on the transition to parenthood and the experience of parenting young children as moments in the life course that perturb the work-family ecosystem (Bianchi & Milkie, 2010; Martinengo, Jacob, & Hill, 2010). Yet, though the transition into parenthood can present initial challenges to maintaining paid employment, parenting is a life-long role. As children age from infancy to adolescence, parents are continually navigating their roles as mothers and fathers. The meaning and responsibilities of being a parent change, as

does the compatibility (or lack thereof) with paid employment. Examining the work and family experiences of only new parents truncates our understanding of parenthood, and ultimately of the work-home interface. Thus, in this article, we strive to broaden our understanding of how working and parenting shape the lives of working parents as they transition across multiple parenting stages. In doing so, we answer the recent call by other work-family and life course scholars to integrate a life course perspective into work-family research (Bianchi & Milkie, 2010; Demerouti, Peeters, & van der Heijden, 2012).

In particular, working parents experience both conflict and hardship as well as rewards and enjoyment, with the balance between the two potentially varying greatly across the life course. During some stages of parenthood, it may be easier to combine parenting and work responsibilities, whereas at other stages it could be more difficult. To capture such ebbs and flows, we study four measures of work-home spillover, defined as the degree to which work positively or negatively influences home, and vice versa (Greenhaus & Beutell, 1985; Greenhaus & Powell, 2006). Work-home spillover is a direct measure of the experience of combining worker and family roles, assessing the degree to which these roles are conflicting or enriching (Goode, 1960; Marks, 1977; Sieber, 1974). Spillover measures have been extensively studied in the work-family literature (for a review of negative spillover see Michel, Kotrba, Mitchelson, Clark, & Baltes, 2011 and of positive spillover see Crain & Hammer, 2013) but rarely have studies examined both positive and

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negative dimensions of spillover.¹ Moreover, many studies focus on a broad range of antecedents to spillover, treating parenthood as mostly a control variable (Martinengo et al., 2010). We contend that a multi-dimensional focus on spillover is important for understanding the work-family experiences of working parents across the life course. For example, earlier stages of parenthood might be associated with increases in negative spillover, as launching a career and building a family can pull one in different directions. However, later stages of parenthood might be characterized by more harmony between working and parenting roles (Rantanen, Kinnunen, Pulkkinen, & Kokko, 2012). Spillover is also related to health and well-being. Prior research has documented robust associations with depression (Grzywacz & Bass, 2003), psychological distress (Kelloway, Gottlieb, & Barham, 1999) self-rated health (Frone, Russell, & Barnes, 1996) and health behaviors like physical activity and tobacco/alcohol use (Allen & Armstrong, 2005; Grzywacz & Bass, 2003). This makes studying all four dimensions of spillover crucial to the broader goal of maintaining and improving the health and well-being of working parents.

Moreover, what it means to be a good worker or parent is deeply embedded in our notions of femininity and masculinity (Blair-Loy, 2003; Hochschild, 2012). Scholars have suggested that mothers may be more susceptible to norms of “intensive parenting”, and that the mother identity is particularly inflexible, such that balancing paid labor and mother responsibilities can be especially difficult (Blair-Loy, 2003; Musick, Meier, & Flood, 2016). However, recent fatherhood research suggests that fathers are facing increasing pressures to be more involved in their children’s lives, in addition to being breadwinners, resulting in greater work-family conflict (Kaufman, 2013; Nomaguchi, 2009; Williams, 2010). Yet, our empirical knowledge of gender differences in how the relationship between parenting and work-home spillover ebbs and flows over the life course is thin. Prior research suggests that mothers experience more negative spillover than fathers during initial stages of parenthood, and that this gender gap declines as children age (Hill, 2005; Martinengo et al., 2010; Nomaguchi, 2009). But we know far less about how positive spillover can change differently for men and women across the life course (Crain & Hammer, 2013). In order to better understand how gender differences at interface of work and home shift across the life course, we examine patterns of positive and negative spillover for working mothers and fathers.

We analyze data from two waves of the Mid-Life in the United States Study (MIDUS I and II) to examine within-person changes in both positive and negative work-home spillover by gender and parental stage, indexed by oldest child’s age. Much of prior research has utilized cross-sectional data, which is subject to unobserved selection into working conditions and parenthood that could bias results. We improve on prior research by capitalizing on two waves of data and estimating change-score models to describe the association between changes in spillover and changes in parenting stages. We also test for significant gender interactions to determine whether men and women going through similar parenting transitions report different changes in spillover.

2. Role theories and work-home spillover

The concepts of positive and negative work-home spillover arise from theories of how individuals experience multiple social roles, such as those of parent, spouse, and worker. A role conflict perspective, rooted in a “scarcity” hypothesis, suggests individuals have fixed time and energy. Thus, taking on multiple social roles can lead to tension, as the demands of different roles, by definition, will not overlap entirely, and will compete for an individual’s limited time and energy (Goode,

1960). This idea finds particular applicability in work-family research, as work and family each can be seen as “greedy institutions” that make “total claims” on individuals, demanding full loyalty and undivided attention (Coser, 1974). Working parents may thus perceive their work and home lives as competing for limited time and energy, such as when stress from a work deadline means they are unable to pay attention to their children.

Conversely, a role enhancement perspective highlights the possibility that rather than depleting individuals of scarce or fixed resources, one social role may serve to enhance the experience of another social role. One role might provide resources, such as material wealth or access to social networks, which can be used to enhance performance in the other role (Sieber, 1974). Taking on multiple social roles may also generate a positive, synergistic energy, which could enhance the performance of each role (Marks, 1977). For example, having a steady job could improve perceived ability to parent by providing additional resources for the child, or a good day at work could lead to increased energy and patience to deal with matters at home.

Work-home spillover can be bi-directional, with work having the potential to spill over into home, and vice versa. For example, while a work deadline can deplete one’s ability to spend time with their children, resulting in negative work-to-home spillover (WHS), it is also possible that a hectic morning getting children ready for school prevents one from getting to work on time, resulting in perceptions of negative home-to-work spillover (HWS). Spending time with children at home could leave one relaxed and rejuvenated for the following day’s work-related activities, resulting in perceptions of positive home-to-work spillover (HWS). Prior work has shown that these four constructs, negative and positive WHS and HWS, exhibit low correlations with each other (Aryee, Srinivas, & Tan, 2005; Grzywacz & Marks, 2000; Lu, Siu, Spector, & Shi, 2009), demonstrating that each represents a unique experience. Yet, only a few studies have considered all four constructs. We contend that in order to develop a fuller understanding of how taking on multiple roles can shape individual well-being, including adjudicating between role conflict and role enhancement perspectives, we need to examine all four measures of spillover.

3. Applying a life course perspective to work-home spillover: the role of parenting stages

While role theories provide a foundation for understanding how different social roles can shape individual well-being, the meanings of being a parent or being a worker are not uniform across adulthood. Thus, a life course perspective is useful in deepening our understanding of how men and women experience multiple social roles as lives develop and unfold over time. A life course perspective frames social roles as being embedded within the larger life course project of an individual, with transitions between identities and social roles as important moments in a developmental life course trajectory (Elder, Johnson, & Crosnoe, 2003). Applying a life course perspective to role theories suggests that whether and how taking on multiple social roles represents a conflicting or enriching experience depends not only on the social roles themselves, but also on when in the life course individuals enact them.

To that end, we focus on how the roles of parent and worker unfold over time. Research has shown that the responsibilities and rewards of being a parent can vary depending on whether children are infants, school-aged, adolescents, or young adults (Galinsky, 1987). While new parents and parents of toddlers may experience more time-intensive caregiving responsibilities that require significant investment in the home domain, parents of school-aged and adolescent children might encounter more scheduling difficulties as school schedules are reconciled with work schedules. Conversely, though parenting younger children might be more time intensive, it may also be more rewarding, as the close bonds formed between parents and younger children have been shown to promote parental satisfaction and psychological well-

¹ While several terms have been used to describe how work and home roles can interact (e.g. conflict, facilitation, enhancement, enrichment) we use the term “spillover” as an umbrella concept that includes all of these, following Zimmerman and Hammer (2010) and other MIDUS researchers (Grzywacz & Marks, 2000).

being, compared to parental relationships with older children (Lam, McHale, & Crouter, 2012; Nomaguchi, 2012). Given that the parenting experience shifts as children age, we would expect the ways in which parents combine their work and family responsibilities to also shift over time. We thus examine patterns of work-home spillover across parenting stages, and use oldest child's age to index the "parental learning curve", with parents experiencing parenting stages for the first time as their oldest children age (Nomaguchi, 2012).

Additionally, we focus on within-person changes in spillover, as opposed to group differences between parents of different aged children. One of the key limitations of existing research on parenthood and work-home spillover is a reliance on cross-sectional data. Estimates from cross-sectional data rely on between-group differences (parent versus non-parent, or parent of infant versus parent of adolescent), leaving them vulnerable to bias in two ways. First, cross-sectional data cannot rule out unobserved selection into working and parenting roles. We might observe a significant association between spillover and working and parenting if those who select into being a working parent are also more likely to report higher levels of spillover due to some third, unmeasured factor. Second, comparing mean differences across parents of different-aged children does not take into account prior work-family experiences, which are likely to shape current experiences of spillover. For example, how parents fared earlier in combining their work and home roles might shape how they perceive their work and home roles to interact later in the life course. Men and women might apply different strategies to solving their work-family dilemmas, with some women more likely to scale back at work to balance with their parenting responsibilities. This heterogeneity in earlier work-family experiences could lead to very different reports of work-home spillover later, confounding the association between parenting stage and work-home spillover. To ameliorate some of these biases, we analyze within-person changes in reports of spillover.

4. Gender, parenting stages, and changes in work-home spillover

Past research on work-home spillover has not explicitly examined variation by parenting stage, though many studies account for parenthood status in some way. The most prominent approach examines how having a young child (usually preschool-aged or less than six years of age) shapes spillover (e.g. Aryee et al., 2005; Grzywacz & Marks, 2000; Hill, 2005). However, this approach groups together parents with older children and childless adults in the reference category, potentially biasing the parenthood coefficient towards the null (Nomaguchi & Fetto, 2017). These studies also tend to focus on negative, rather than positive spillover (Crain & Hammer, 2013; Greenhaus & Powell, 2006), which truncates our understanding of how parenthood shapes the full range of spillover experiences. Finally, since much of the research on gender differences in work-family experiences has focused on mothers and fathers of young children we know less about how this gender gap changes as children become adolescents and adults. A wide body of scholarship has demonstrated how parenthood reinforces a gendered division of household labor, and that mothers and fathers participate in different childcare activities (Collins & Russell, 1991; Musick et al., 2016; Sanchez & Thomson, 1997; Sayer, 2005). Such a division of childcare responsibilities could continue across the life course. We utilize past research to develop intuition for how such dynamics could shape gender differences in the way changes in parenting stage could generate changes in work-home spillover.

4.1. Becoming a parent

The bulk of prior research suggests that becoming a parent is associated with an increase in negative spillover (Grzywacz, Almeida, & McDonald, 2002; Grzywacz & Marks, 2000; Innstrand, Langballe, Espnes, Aasland, & Falkum, 2010; Wayne, Musisca, & Fleeson, 2004; Winslow, 2005) as new parenting responsibilities could prove

incompatible with work responsibilities. Prior research on the antecedents of perceived negative spillover has found that home-related characteristics are more likely to influence home-work spillover (HWS) and that work-related characteristics are more likely to influence work-home spillover (WHS) (Byron, 2005; Michel et al., 2011). Such a pattern is known as *domain specificity* and speaks to the ability of individuals to be able to identify the source of spillover, work or home. Domain specificity suggests that becoming a parent should be more strongly associated with a change in negative HWS compared to WHS, and there is some evidence to support this (Grzywacz et al., 2002; Grzywacz & Marks, 2000; Wayne et al., 2004). Finally, past research has found that new mothers are more likely to report higher levels of negative spillover, with the greatest gender difference in reports of negative HWS, whereas new fathers report higher levels of negative WHS (Hill, 2005; Martinengo et al., 2010; Nomaguchi, 2009). Past research thus suggests the following hypotheses for the nature of the association between becoming a parent and changes in negative spillover:

H1a. Becoming a father will be associated with an increase in negative WHS.

H1b. Becoming a mother will be associated with an increase in negative HWS.

If becoming a parent reduces the compatibility between working and family lives, then we might also expect positive spillover to decrease. Some studies have demonstrated that parents report lower levels of positive HWS, particularly for mothers compared to fathers (Grzywacz & Marks, 2000; Innstrand et al., 2010). Conversely, for men, employment could positively spillover into family if having a job made one feel better about, or enhanced the experience of being a father. As breadwinning remains a dominant activity for fathers (Kaufman, 2013; Williams, 2010), maintaining paid employment while becoming a father could thus be associated with increased positive work to home spillover. This suggests a few hypotheses regarding the relationship between becoming a parent and changes in positive work-home spillover:

H2a. Becoming a father will be associated with an increase in positive WHS (Breadwinner hypothesis).

H2b. Becoming a mother will be associated with a decrease in positive HWS.

4.2. Parenting school-aged children

As children grow older, parenting responsibilities could shift in ways that present new challenges to balancing work and parent roles. Particularly, as children enter school, parental responsibilities could change from more energy-intensive, but primarily home-based activities associated with caring for a toddler, to activities that span work and home domains as school and work schedules are reconciled. For example, Erickson, Martinengo, and Hill (2010) find parents report greater negative WHS as children reach school-age, suggesting that as children age, work may be seen as prohibiting a parent from being fully involved with their child's developing lives, particularly in school (Erickson et al., 2010). Becoming a parent to a school-aged child could influence negative WHS if work is seen as preventing one from being fully involved in one's parenting role. It could also influence negative HWS if increased scheduling and management responsibilities at home are seen to conflict with work responsibilities. Moreover, gendered parenting practices could continue as children enter school, with mothers more likely assuming the role of family planner and organizing children's academic and leisure activities (Hawkins, Amato, & King, 2006). Thus the association between parenting a school-aged child and changes in negative spillover may be stronger for mothers, compared to fathers:

H3. Parenting a school-aged child is associated with an increase in negative WHS and HWS, particularly for mothers.

With respect to positive spillover, parenting a school-aged child might yield less satisfying family-based relationships as children experience growing pains, diminishing the ability for home lives to enrich work lives. Two empirical studies of positive spillover find that those with school-aged and adolescent children report lower levels of positive HWS compared to those who are childless (Grzywacz et al., 2002), or those with younger children (Lu et al., 2009), supporting this second hypothesis. If mothers were more likely to take on the bulk of the new parenting responsibilities that comes with having a school-aged child, then we might expect the decline in positive spillover to be greater for mothers compared to fathers.

H4. Parenting school-aged children is associated with a decrease in positive WHS and HWS, particularly for mothers.

4.3. Parenting adolescent, young adult and adult children

As much of the work-family literature has focused on the experience of new parents, empirical knowledge on how parenting adolescent, young adult, and adult children can shape work-home spillover is sparse. Moreover, there has been no longitudinal research on this association, which is particularly important, as parents of adolescent and adult children's work-home spillover may be highly dependent on prior parenting and working experiences. Thus we offer only a few hypotheses regarding the relationship between parenting older children and changes in spillover. For example, as children age into adolescence and adulthood, we might expect parents' experience of negative WHS and HWS to decline. This is because as children age into adulthood, they become increasingly independent, which could result in a reduction of day-to-day parenting responsibilities, potentially interfering less with paid employment.

H5. Parenting adolescent, young adult, and adult children, is associated with a decrease in negative WHS and HWS, for both mothers and fathers.

Being a parent to an older child may provide a sense of fulfillment as one watches their child age and mature, and this could consequently spillover into one's work life, providing energy (and more time) to fulfill one's work responsibilities. However, prior research suggests that there might be gender differences in these patterns. Mothers are more likely to be involved in the day-to-day management of children's lives, and this closeness can continue as children reach maturity and their relationships with their mothers to improve over time (Thornton, Orbach, & Axinn, 1995). Conversely, fathers are more likely to spend time in leisure activities with their children. This could translate into more variable quality in the relationship with their children as they grow older, gain independence and leave the household (Hawkins et al., 2006). To the extent that such shifts in familial relationships spill over into parents' work lives, this implies a possible increase in positive HWS, particularly for mothers:

H6. Parenting adolescent, young adult, and adult children is associated with an increase in positive HWS, particularly for mothers.

5. Data

We use data from two waves of the National Survey of Midlife in the U.S. (MIDUS I and II). The initial round of data collection occurred between 1995 and 1996 (Wave 1) with follow up interviews conducted between 2004 and 2006 (Wave 2). MIDUS respondents first completed a telephone survey (W1 response rate 70%, W2 response rate 71%) and then a mailed self-administered questionnaire (W1 response rate 89%, W2 response rate 81%). The first wave of data was collected from 7108

Americans aged 25 to 74 years, drawn from a representative sample of English-speaking, non-institutionalized adults residing in the contiguous 48 states attained by random digit dialing (RDD), with an oversampling of five metropolitan areas, twin pairs, and siblings. Of the original 7108 MIDUS participants, 4963 were successfully re-contacted and completed the MIDUS II survey ten years later. Further information about the study design can be found elsewhere (Radler & Ryff, 2010).

Our sample consists of those who responded to both waves of the self-administered questionnaire (where the dependent measures were assessed) ($N = 3929$), who were working for pay in both waves, and thus answered questions about spillover at both waves ($N = 2148$), and provided responses on all measures ($N = 2010$). We further drop respondents who have discrepant child age reports between W1 and W2 ($N = 127$).² We also restrict our main analyses to those who remain married at both waves of data collection ($N = 285$ remain single, $N = 279$ undergo marital transition). This last restriction ensures that transitions in and out of marriage, which are also a predictor of change in work-home spillover, though unrelated to our mechanisms of interest, do not influence our results. Our final analytic sample is $N = 1319$ (736 men, 583 women).

To our knowledge, MIDUS is the only data source that collects all four spillover measures at two time points from a large, national sample of adults in the United States. Thus, the MIDUS data present a unique opportunity to study how parenting transitions shape reports of work-home spillover. While a full decade elapsed between waves, this allows the observation of more parenthood transitions. The MIDUS data have been used to examine within-person change over follow-up in other measures, such as physical health, perceived control, social support, and personal growth (e.g. Gerstorf, Röcke, & Lachman, 2010; Pudrovskaya, 2010). We comment on the potential influence of analyzing decade-long within-person change in our discussion.

6. Measures

6.1. Negative and positive WHS and HWS

Perceived spillover measures were calculated from a series of survey items in the MIDUS self-administered questionnaire that assessed how often in the past year a respondent experienced a variety of ways the work or home domain could spill over into the other. Negative WHS (W1 and W2 alpha = 0.82) was assessed using the following items: 1) *Your job reduces the effort you can give activities at home.* 2) *Stress at work makes you irritable at home.* 3) *Your job makes you feel too tired to do things that need attention at home.* 4) *Job worries or problems distract you when you are at home.* Negative HWS (W1 and W2 alpha = 0.79) was assessed with the following items: 1) *Responsibilities at home reduce the effort you can devote to your job.* 2) *Personal or family worries and problems distract you when you are at work.* 3) *Activities and chores at home prevent you from getting the amount of sleep you need to do your job well.* 4) *Stress at home makes you irritable at work.* Positive WHS (W1 alpha = 0.73, W2 alpha = 0.71) was assessed with the following items: 1) *The things you do at work help you deal with personal and practical issues at home.* 2) *The things you do at work make you a more interesting person at home.* 3) *Having a good day on your job makes you a better companion when you get home.* 4) *The skills you use on your job are useful for things you have to do at home.* Positive HWS (W1 alpha = 0.68, W2 alpha = 0.71) was assessed with the following items: 1) *Talking with someone at home helps you deal with problems at work.* 2) *Providing for*

² While some of this is probably due to respondent recall or refusal (i.e., reporting presence of children in W1 or W2, but not providing their ages, or older respondents who do not remember their children's ages), this restriction largely drops those who gained or lost non-biological children either through adoption or relationship formation or dissolution. While this pathway into parenthood is an important and increasingly prominent one, we lack the sample size to be able to fully test associations between this kind of parenting transition and work-home spillover.

what is needed at home makes you work harder at your job. 3) The love and respect you get at home makes you feel confident about yourself at work. 4) Your home life helps you relax and feel ready for the next day's work. Responses to each item ranged from 1 "All the time" to 5 "Never". We reverse-code each item such that a higher score indicated a greater amount of spillover. Measures of positive and negative WHS and HWS were calculated by taking the mean response to the four items. We used all the information provided by the respondents, and thus a spillover score was calculated for a respondent even if they did not answer all of the survey items. Less than 1% of the sample had any of their spillover scores calculated from fewer than four items, and the majority among that small group had spillover measures calculated from three items.

Similar to previous research, we find that these measures of work-home spillover capture four separate dimensions of the work-home interface. A correlation matrix (available on request) reveals that the highest correlation between the four measures is between negative WHS and negative HWS, at $r = 0.49$. Importantly, the correlations between measures of positive and negative spillover are close to zero, demonstrating that lack of strain between work and home does not imply that these domains are perceived as mutually enhancing.

6.2. Oldest child age and parenting transitions

We measure parenting transitions based on reports of a respondent's oldest child's age collected at W2, as this marks their first time making a particular transition. We consider parents whose oldest child is between the ages of 0 and 5 to have made the transition to being a new parent.³ We consider becoming a parent to a school-aged child as having one's oldest child between the ages of 6–11. Having one's oldest child's age be between the ages of 12 and 17 years of age is considered becoming a parent to an adolescent; between 18 and 25 years of age is considered becoming a parent to a young adult; between 26 and 34 years of age is considered becoming a parent to an adult child. Respondents who report their oldest child being 35 years or older is considered to have "remained" a parent to an adult child.

Due to the almost decade long difference between W1 and W2, parents who recently underwent the transition to parenting a school-aged child are somewhat heterogeneous with respect to their W1 parenting stage – some were non-parents at W1, had a child between W1 and W2, and saw their child age to school-aged by W2 ($N = 41$). Others were already parents at W1, and had their child age into older school-age by W2 ($N = 61$). We test the sensitivity of our analyses to combining these two groups by estimating models where these two groups are separated. We find that the results for these two groups are substantively similar, though parents who were not parents at W1 and then became parents of school-aged children at W2 (the former category) reported greater increases in negative WHS. No differences were found for other spillover measures. Thus, we present results for parents of school-aged children at W2 grouped together, regardless of their W1 parenting status. We comment more on how this coding decision influences our findings in the results and discussion.

6.3. Potential confounders and mediators

Our models account for confounding by parent age, as well as assess to what extent our focal relationship is mediated by characteristics of other children in the household, and parent's work hours. Older parents are more likely to have older children, and given the known age patterns of spillover, we obtain estimates of the relationship between parenting transitions and spillover net of this pattern. Respondent age

was self-reported. We also estimate models that account for youngest child age, as well as whether or not a respondent gained multiple children between the two waves. Changes in oldest child's age may be associated with changes in spillover partly due to related changes in family composition, such as having more children. Thus, our models include indicators of youngest child age, and whether or not a respondent gained 1, 2, and 3+ children (reference category = no change in total number of children). This also includes an indicator for whether or not a respondent lost a child, though such an event is relatively rare in this sample. We also estimate models that account for changes in work hours, as one reason spillover change could be associated with changes in oldest child age is that parents may adjust work hours to accommodate shifting parental responsibilities, which could lead to a change in perceptions of spillover. Work hours were ascertained by respondent self-report of total hours worked during an average week at all of their jobs. Though prior research has found a wide variety of antecedents of spillover (Crain & Hammer, 2013; Michel et al., 2011) we are interested in the relationship between parenting transitions and changes in work-home spillover rather than all determinants of spillover. Thus, we only account for the above limited number of potential confounders and mediators to minimize the risk of over controlling.

7. Analytic strategy

To model the influence of parenting transitions, we estimate change-score models predicting change in spillover between waves 1 and 2 (Allison, 1990; Johnson, 2005). The change-score model is derived when we subtract the cross-sectional model of spillover at time 1 from the parallel equation for time 2. More precisely, we can imagine that spillover at two different time points can be estimated with the following equations:

$$Y_{1i} = \beta_{0i} + \beta_1 X_{1i} + \beta_2 S_i + e_{1i} \quad (1)$$

$$Y_{2i} = \beta_{0i} + \beta_1 X_{2i} + \beta_2 S_i + e_{2i} \quad (2)$$

Eq. (1) is for time 1 and Eq. (2) is for time 2. Y_{1i} represents reported spillover at time 1 and Y_{2i} represents reported spillover at time 2, for individual i . X is a dummy variable for whether or not an individual undergoes a specific parenting transition (and in the case of analyzing transitions, X_1 is assumed to be 0 for all respondents as they have not undergone the specific transition (Johnson, 2005)). S_i is a series of time-constant individual-level predictors and e_i is a time-specific, individual-level, error term. We assume that the constant term and regression coefficients are the same for spillover at time 1 and time 2. When we subtract Eq. (1) from Eq. (2), we obtain the following:

$$Y_{2i} - Y_{1i} = \beta_1 X_{2i} + e'_i \quad (3)$$

This subtraction differences out time-constant individual-level variables, as well as the constant term. Importantly, this provides an estimate of the average within-person change in spillover (β_1) associated with each specific parenting transition (i.e. from non-parent to new parent, from new parent to parent of a school-aged child), relative to how spillover may change for individuals experiencing other parenting transitions, over the same period of time. Implicitly, this approach estimates change in spillover relative to prior parenting stage (i.e. those parenting adolescents were all parenting school-aged children in the prior wave). This analytic approach also has the advantage of calculating average change that is not biased by time-invariant individual-level characteristics (such as unobserved selection into parenthood or work environments, or stable reporting bias). Estimates however are still subject to bias from unobserved time-varying characteristics. In the two-wave context, β_1 is equivalent to the fixed-effects pooled time-series estimator (Allison, 1990; Johnson, 2005). Thus, we estimate all of our models using the fixed effects option in the XTREG procedure in Stata 14.1. All models are estimated with robust standard

³ In the U.S. context, children enter kindergarten between the ages of 5 and 6 years old. We conducted sensitivity analyses for our school-age cut-off to determine whether parents of 5 year olds were more similar to parents of 0–4 year olds vs. 6–11 year olds. Analyses demonstrated that parents of 5 year olds were more similar to new parents (vs. parents of school-aged children).

errors, accounting for clustering at the family level, to adjust for non-random sampling of twins and siblings in the MIDUS sample.

We first estimate a model that includes only parenting transitions as the key predictor of change in spillover, to obtain the bivariate association between transitions in parenting stage and changes in spillover (M1). As parenting transitions are strongly correlated with age, in a second model, we add a control for the respondent's age to net out developmental influences in changes in spillover (M2) (Rantanen et al., 2012). If the association between parenting stages and spillover change were due entirely to the aging process of the parents (i.e., older parents parenting older children) we might observe a reduction of the coefficients on parenting transitions with the inclusion of this control. If associations persist with the inclusion of age, this would support the idea that parenting transitions have a unique influence on change in spillover, independent of the aging process of the parents. In a third model we adjust model estimates for youngest child age, as well as transitions in total number of children (M3). If model estimates decrease then it is possible that spillover change associated with parenting transitions are in part due to related changes in presence of younger children, or total number of children in the household. Finally in our last model we adjust model estimates for changes in total work hours (M4). Parents may make adjustments to their work schedule to accommodate family transitions and this may be one possible mechanism for why spillover can change with parenting stage. Introducing these factors in a step-wise manner allows us to estimate both the full association between change in parent stage and change in spillover, as well as the portion that is related to changes in family and work environments.

Utilizing a change-score approach differences out all stable, individual-level characteristics, including gender. Thus, in order to obtain gender-specific estimates of the association between parenting stage and spillover, we estimate two models – one for men and one for women – for each model progression (M1–M4), and each measure of work-home spillover (negative WHS and HWS, positive WHS and HWS). We then estimate a third model (for each model progression and each measure of spillover), pooling male and female samples, and interacting every covariate with gender, to test whether men and women undergoing similar parenting transitions report different changes in spillover.

Our reference group in the multivariate models are those who remain childless between the two waves. As childless adults are not experiencing any work-home spillover changes related to parenthood, we consider their changes in spillover over follow up as a “baseline” level of change to which we compare parenting transition-related changes in the multivariate context. To assess whether the associations between different parenting transitions and spillover differ from each other (i.e. transition to new parent vs. transition to parenting school-aged child), rather than from those who remain non-parents, we predict spillover change for each parenting transition with model estimates, holding all other variables at their means, using the “margins” command in Stata 14.1. This allows us to test for significant differences between each pair of parenting transitions. We report any significant differences in the text.

8. Results

Table 1 presents descriptive information about our analytic sample. On average, negative spillover (WHS and HWS) declines slightly for both men and women during this observation window, with men's scores declining faster compared to women's ($p < 0.01$). Positive spillover (WHS and HWS) increases over the same window, with no significant gender difference. About 6% of men and 7% of women remain childless, while about 2% become new parents and 7–8% become parents of school-aged children. About 11% of men and women become parents to adolescent children, while the remainder of the sample experienced later parenting stage transitions. Slightly less than a quarter of our sample remain parents to adult children. The average age at

Table 1
Descriptive Information about Analytic Sample, MIDUS I and II (1996–2004) N = 1319.

	Men	Women	Gender diff?
Work-home spillover change			
Change in Neg. WHS	−0.14 (0.65)	−0.03 (0.74)	**
Change in Neg. HWS	−0.09 (0.57)	−0.05 (0.62)	
Change in Pos. WHS	0.04 (0.67)	0.01 (0.73)	
Change in Pos. HWS	0.03 (0.71)	0.03 (0.72)	
Parenting Stage			
Remain never parent	5.7%	7.0%	
Become a new parent (oldest child 0–5 yrs)	2.2%	1.9%	
Parent school-aged child (oldest child 6–11 yrs)	7.6%	8.0%	
Parent adolescent child (oldest child 12–17 yrs)	11.0%	11.8%	
Parent young adult child (oldest child 18–25 yrs)	24.6%	22.6%	
Parent adult child (oldest child 26–34 yrs)	26.9%	25.2%	
Remain parent to adult child (oldest child 35+ yrs)	22.0%	23.5%	
Age at baseline	43.64 (9.47)	41.95 (8.99)	*
Youngest child age at W2 (among those with children)	20.90 (10.77)	20.83 (10.47)	
Change in total number of children			
No change	79.1%	80.3%	
Gain 1 child	9.7%	8.4%	
Gain 2 children	5.0%	4.3%	
Gain 3+ children	3.8%	4.1%	
Lost a child	2.5%	2.9%	
Change in total work hours	−4.32 (17.68)	−2.73 (18.77)	
N	736	583	

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

baseline is in the early 40s, with men slightly older than women. The majority of our sample do not experience change in the total number of children they have between the two waves. However, just less than 10% gain an additional child, and about 8% gain more than two children between the two waves. On average, we observe declines of about 3–4 work hours for both men and women between the two waves.

Tables 2A and 2B displays characteristics of the subsamples experiencing each parenting stage, separately for men and women. In terms of average age of those in each parenting transition, we can see a general life course pattern. There is slightly greater age variation among those who remain never parents, with a standard deviation of about 7 years, compared to 3–5 years for other parenting stages. Age of respondents increases with parenting stage, with those that become new parents, or parents of school-aged children on average younger than those who are parenting older children (ages in the early 30s vs. 40s). Age of youngest child also increases with parenting stage. New parents, and parents of school-aged and adolescent children, are more likely to gain additional children as their oldest child ages into different age brackets, compared to parents who have adult children. For example, 48.2% of fathers and 32.6% of mothers who start parenting a school-aged child also gain an additional child between the two waves. In contrast, about 90% of mothers and fathers of young adults experience no change in the total number of children. On average, working hours decline with parenting stage, though we see the biggest declines in work hours among those who remain parents to adult children. This is likely because this is the oldest group, and thus also likely to be entering their retirement years.

We note here that our new parents are a very select, and small group (N = 16 new fathers, N = 11 new mothers). The average age at baseline for this group implies that many of these parents are having their

Table 2A
Descriptive information by parenting stage, among Men, MIDUS I and II (1996–2004) N = 736.

	Remain never parent	New Parent	School-aged child	Adolescent	Young Adult	Adult Child	Remain adult child
Age at baseline	38.40 (7.39)	30.94 (4.34)	31.34 (3.85)	35.59 (5.88)	39.72 (5.06)	46.15 (4.52)	55.83 (5.93)
Youngest child age	NA	2.56 (1.79)	5.50 (2.78)	10.16 (3.66)	16.43 (4.54)	24.57 (5.56)	33.91 (6.73)
Change in # of children							
No change	100%	0.00%	7.14%	65.43%	87.85%	90.91%	88.89%
Gain 1 child		31.25%	48.21%	24.69%	5.52%	3.03%	1.85%
Gain 2 children		43.75%	28.57%	4.94%	2.76%	1.52%	1.23%
Gain 3 + children		25.00%	16.07%	4.94%	2.21%	1.52%	2.47%
Lost child		0.00%	0.00%	0.00%	1.66%	3.03%	5.56%
Change in work hours	-0.29 (14.83)	-1.88 (13.66)	-2.54 (12.77)	1.80 (16.54)	-2.36 (15.35)	-3.68 (16.20)	-12.23 (22.03)
N	42	16	56	81	181	198	162

first child in their early 30s, which is relatively late in the U.S context. Those who are parenting school-aged children have a comparable age at baseline (also in the early 30s), which this implies that many had their first child in their early to mid-20s. While we include this sample in our analyses, as becoming a new parent is a crucial parenting transition, the atypical nature of this sample suggests that we should interpret our new-parent estimates with caution. Our sample of new parents could be a selective group who have chosen to delay child-bearing in order to accommodate career growth, which would have implications for their reports of work-home spillover.

Table 3 displays coefficients from change-score models of negative work-home spillover (WHS). The leftmost column starts with a bivariate association between parenting stages and negative WHS. The second column adds a control for age, the third includes youngest child age, and change in total number of children. The final model adds change in work hours. We first display estimates for men, then women, and then indicate where we detect significant gender differences.

We find that many of the differences in change in negative WHS by parenting stages are driven by parent’s own age, as many of the associations are reduced to insignificance with the inclusion of age. In the bivariate model, we find that becoming a new parent is not significantly associated with a change in negative WHS for new fathers or new mothers. Later in the life course, we find that fathers experience a decline in negative WHS as their children age, particularly when their children become young adults ($\beta = -0.13, p < 0.01$). This decline is about one-fifth (0.13/0.65) of a standard deviation in change in negative WHS. In contrast, we find that becoming a mother to a young adult is not significantly associated with a change in negative WHS, and this gender difference is significant at the 0.05 level. It seems that the decline in negative WHS for mothers occurs later in the life course, when children are well into their adult years ($\beta = -0.15, p < 0.05$).

However, once parent’s age is accounted for, these associations become insignificant, although the pattern of decline across the life course in the point estimates persists.

The pattern for negative HWS in Table 4 is slightly different from the pattern observed for negative WHS. Similar to negative WHS, we find that becoming a new parent is associated with a non-significant increase in negative HWS for both mothers and fathers. This is likely due to the small and selective nature of our new parent sample. However, we observe that mothers who start to parent school-aged children report a statistically significant increase in negative HWS ($\beta = 0.25, p < 0.05$). This coefficient remains significant with the inclusion of respondent age, and but becomes insignificant with the inclusion of other child characteristics, and change in work hours. However, the point estimates do not change drastically across models, with the final model’s $\beta = 0.25$.

As mentioned previously, due to our coding scheme, parents of school-aged children include two types – those who are parenting recently school-aged children (i.e. 5–8 year olds) and were childless at W1, as well as those who are parenting children in older school-ages (i.e. ages 9–12) and were already parents in W1. In analyses not shown, we find that parents in the former group drive much of this estimated increase in negative spillover. This makes intuitive sense for two reasons: first, we observe their change in spillover from being childless to parenting a school-aged child, which could be understood as undergoing two parenting transitions, and thus related to greater changes in spillover. Second, relative to parents with older school-aged children, parents with younger school-aged children are also those who have recently made the transition into parenting a school-aged child, which is also likely to be associated with higher levels of spillover. Parents who already had children in W1 were parenting older school-aged children (i.e. ages 10–12) and probably already had time to adjust to

Table 2B
Descriptive information by parenting stage, among women, MIDUS I and II (1996–2004) N = 583.

	Remain never parent	New Parent	School-aged child	Adolescent	Young Adult	Adult Child	Remain adult child
Age at baseline	38.29 (7.32)	31.09 (4.04)	31.28 (4.73)	33.67 (4.95)	38.09 (5.13)	44.37 (4.59)	52.80 (5.93)
Youngest child age	NA	2.82 (1.66)	5.54 (3.22)	10.55 (3.56)	17.08 (4.22)	24.31 (5.59)	32.47 (7.31)
Change in # of children							
No change	100%	0.00%	26.09%	73.91%	90.15%	89.12%	83.21%
Gain 1 child		72.73%	32.61%	15.94%	4.55%	2.72%	3.65%
Gain 2 children		27.27%	21.74%	8.70%	1.52%	1.36%	1.46%
Gain 3 + children		0.00%	19.57%	1.45%	0.76%	3.40%	5.84%
Lost child		0.00%	0.00%	0.00%	3.03%	3.40%	5.84%
Change in work hours	-1.49 (18.41)	-2.55 (13.82)	-3.54 (18.21)	1.62 (17.63)	0.57 (17.90)	-1.54 (16.97)	-9.47 (21.05)
N	41	11	46	69	132	147	137

Table 3
Coefficients and standard errors from change-score models of negative WHS, MIDUS I and II (1996–2004), N = 1319.

	M1: Bivariate			M1 + Age			M1 + Age + Other child vars			M1 + Age + Other Child Vars + Work hrs		
	Men	Women	Gender Diff	Men	Women	Gender diff	Men	Women	Gender diff	Men	Women	Gender diff
Parenting stage												
Remain never parent (ref)	0.00	0.00		0.00	0.00		0.00	0.00		0.00	0.00	
	–	–		–	–		–	–		–	–	
New Parent	0.11	–0.32		0.20	–0.28		0.00	–0.22		–0.01	–0.26	
	(0.16)	(0.24)		(0.17)	(0.25)		(0.20)	(0.29)		(0.19)	(0.27)	
Parenting school-aged child	0.00	0.11		0.09	0.14		–0.12	0.12		–0.12	0.09	
	(0.09)	(0.11)		(0.11)	(0.13)		(0.15)	(0.16)		(0.15)	(0.16)	
Parenting adolescent	–0.10	0.06		0.01	0.10		–0.14	0.10		–0.18	0.02	
	(0.08)	(0.09)		(0.11)	(0.12)		(0.12)	(0.14)		(0.12)	(0.14)	
Parenting young adult	–0.13**	0.03*		–0.01	0.08		–0.17	0.05		–0.19	–0.04	
	(0.05)	(0.06)		(0.10)	(0.10)		(0.12)	(0.14)		(0.12)	(0.14)	
Parenting adult child	–0.14**	–0.05		0.00	0.01		–0.23	–0.05		–0.25	–0.14	
	(0.04)	(0.07)		(0.11)	(0.12)		(0.16)	(0.19)		(0.16)	(0.18)	
Remain parent to adult child	–0.25***	–0.15*		–0.09	–0.09		–0.40	–0.16		–0.36	–0.21	
	(0.05)	(0.06)		(0.14)	(0.13)		(0.21)	(0.24)		(0.21)	(0.23)	
Age at Baseline				–0.003	–0.001		–0.003	–0.001		–0.003	0.000	
				(0.002)	(0.002)		(0.002)	(0.002)		(0.002)	(0.002)	
Change in # of children												
No change (ref)							0.00	0.00		0.00	0.00	
							–	–		–	–	
Gain 1 child							0.16	–0.05		0.15	–0.02	
							(0.11)	(0.14)		(0.10)	(0.14)	
Gain 2 children							0.12	–0.09		0.12	–0.08	
							(0.16)	(0.19)		(0.15)	(0.18)	
Gain 3 or more children							0.36**	0.28		0.36**	0.31	
							(0.14)	(0.18)		(0.14)	(0.19)	
Lost child							–0.08	–0.01		–0.13	–0.03	
							(0.13)	(0.21)		(0.13)	(0.19)	
Youngest child age							0.010	0.002		0.010*	0.005	
							(0.005)	(0.007)		(0.005)	(0.006)	
Change in work hours										0.01***	0.01***	
										(0.002)	(0.002)	
N	736	583		736	583		736	583		736	583	
r2	0.054	0.018		0.056	0.018		0.067	0.025		0.103	0.077	

Gender differences calculated from a fully-interacted model. All hypothesis tests are two-tailed. ***p < 0.001, **p < 0.01, *p < 0.05.

the transition, so we observe a smaller increase in negative spillover. Group differences notwithstanding, this suggests that as women begin parenting school-aged children, they face an increase in friction between their work and home lives, leading to an increase in perceived negative spillover from home to work. The magnitude of the coefficient in model 2 represents a change of about two-fifths a standard deviation in change in negative HWS (0.25/0.62). Moreover, some of the association could be due to the likelihood of mothers with school-aged children having more children in the household or making adjustments to work schedules. Examining Table 2B, we see that mothers of school-aged children are more likely than other women to gain children in the household over this observation period. Interestingly, though we observe a statistical significance in our women-only models, and no association for men-only models, this gender difference is not statistically significant. This suggests that the more significant difference in changes in spillover is between mothers of different aged children (vs. women who remain childless), rather than between mothers and fathers of similarly aged children, with regards to negative HWS. To investigate whether spillover change associated with different parenting transitions differed from each other (rather than from those of childless adults) we predicted spillover change from each model, holding other variables at their mean levels. Examining predicted change in spillover, we find that parenting a school-aged child (M2: $\beta = 0.31$) is not only different from remaining childless at the $p < 0.01$ level, but is also different from the subsequent parenting transition, parenting an adolescent (M2: $\beta = 0.06$), at the $p < 0.05$ level even when adjusting estimates for parent’s own age. This

difference is reduced to insignificance with the inclusion of changes in other child characteristics and work hours. We also find that parenting a school-aged child (M4: $\beta = 0.25$) is also statistically different from parenting an adult child (M4: $\beta = -0.07$), holding age, other child characteristics and changes in work hours at their mean levels. This demonstrates how parenting a school-aged child is associated with a unique increase in negative HWS that likely declines when children enter adolescence and adulthood. Moving ahead in the life course, we find a similar pattern in decline in negative HWS as we did for negative WHS – that parenting older children, particularly as children age into adulthood, is associated with a decline in negative spillover. However, much of this association is reduced to insignificance when accounting for parent’s own age, also similar to patterns found for negative WHS. In the unadjusted model for fathers, the decline in negative HWS starts when children become young adults. Mothers of similarly aged children do not experience a decline, and this gender difference is significant at the $p < 0.05$ level. Both mothers and fathers of adult children experience declines in negative HWS ($\beta = -0.09$, $p < 0.05$ for fathers and $\beta = -0.15$, $p < 0.01$ for mothers who start parenting an adult child). These coefficients are reduced to insignificance with the inclusion of age, which suggests that these patterns may be due to more developmental, or aging-related, processes rather than transitions in parenting stage. In comparison to the estimated change for mothers of school-aged children, later parenting stages are associated with about half the magnitude of change. This demonstrates that while negative spillover does decline later in the life course, the magnitude of the decline can be

Table 4
Coefficients and standard errors from change-score models of negative HWS MIDUS I and II (1996–2004), N = 1319.

	M1: Bivariate			M1 + Age			M1 + Age + Other child vars			M1 + Age + Other Child Vars + Work hrs		
	Men	Women	Gender diff	Men	Women	Gender diff	Men	Women	Gender diff	Men	Women	Gender diff
Parenting stage												
Remain never parent (ref)	0.00	0.00		0.00	0.00		0.00	0.00		0.00	0.00	
	–	–		–	–		–	–		–	–	
New Parent	0.17 (0.20)	0.41 (0.27)		0.28 (0.21)	0.46 (0.28)		0.17 (0.23)	0.48 (0.29)		0.17 (0.23)	0.47 (0.29)	
Parenting school-aged child	0.06 (0.10)	0.25* (0.10)		0.16 (0.12)	0.31** (0.12)		0.03 (0.15)	0.26 (0.15)		0.03 (0.15)	0.25 (0.15)	
Parenting adolescent	–0.04 (0.06)	0.00 (0.07)		0.08 (0.10)	0.06 (0.10)		–0.01 (0.12)	0.07 (0.12)		–0.02 (0.12)	0.04 (0.12)	
Parenting young adult	–0.16*** (0.04)	0.02 (0.06)	*	–0.03 (0.10)	0.08 (0.10)		–0.13 (0.11)	0.11 (0.13)		–0.13 (0.11)	0.08 (0.13)	
Parenting adult child	–0.09* (0.04)	–0.15** (0.05)		0.07 (0.11)	–0.07 (0.11)		–0.07 (0.14)	–0.03 (0.15)		–0.07 (0.14)	–0.07 (0.15)	
Remain parent to adult child	–0.11** (0.04)	–0.18*** (0.05)		0.08 (0.13)	–0.09 (0.12)		–0.11 (0.19)	–0.04 (0.19)		–0.11 (0.19)	–0.06 (0.19)	
Age at Baseline				–0.003 (0.002)	–0.002 (0.002)		–0.004 (0.002)	–0.001 (0.002)		–0.004 (0.002)	–0.001 (0.002)	
Change in # of children												
No change (ref)							0.00	0.00		0.00	0.00	
							–	–		–	–	
Gain 1 child							0.15 (0.08)	–0.07 (0.12)		0.15 (0.08)	–0.06 (0.12)	
Gain 2 children							0.07 (0.12)	0.09 (0.17)		0.07 (0.12)	0.09 (0.17)	
Gain 3 or more children							0.07 (0.17)	0.23 (0.12)		0.08 (0.17)	0.24* (0.12)	
Lost child							–0.02 (0.09)	–0.35* (0.14)		–0.02 (0.09)	–0.36** (0.14)	*
Youngest child age							0.006 (0.004)	–0.002 (0.005)		0.006 (0.004)	–0.001 (0.005)	
Change in work hours										0.001 (0.001)	0.003* (0.002)	
N	736	583		736	583		736	583		736	583	
r2	0.036	0.056		0.040	0.057		0.045	0.074		0.045	0.084	

Gender differences calculated from a fully-interacted model. All hypothesis tests are two-tailed. ***p < 0.001, **p < 0.01, *p < 0.05.

overshadowed by the increase earlier in the life course as children are entering school-ages.

Moving from negative to positive spillover, Table 5 presents coefficients from models predicting change in positive WHS. Starting with the leftmost column, we find that becoming a new father is associated with an increase in positive WHS ($\beta = 0.28, p < 0.05$) becoming a new mother is associated with a non-significant decline in positive WHS, and this gender difference is significant at the $p < 0.05$ level. Moreover, we find that this association persists across models that adjust for age, other child variables, and change in work hours. In fact, the magnitude of the association between new fatherhood and positive WHS increases from $\beta = 0.28$ in the first model, to $\beta = 0.38$ in the final model, suggesting that differences in age, other child variables, and changes in work hours slightly suppress this association. This represents an increase of almost two-thirds a standard deviation of change in positive WHS (0.38/0.67). The gender difference between new mothers and new fathers remains significant with the inclusion of age, but is reduced to insignificance with the inclusion of changes in other child characteristics and work hours. This suggests that gender differences in family structure and paid labor partially explain the gender difference in the relationship between parenting transitions and positive spillover. While our sample of new parents are certainly atypical, the consistency in results across models provides support for the “breadwinner” hypothesis (H2a), where men feel like their work roles positively spill over into their home roles, possibly because remaining employed while becoming a father allows them to adhere to the breadwinner norm and provide for their growing families. We find no other significant

association between parenting transitions in later stages of the life course, or other covariates, and changes in positive WHS.

Finally, we turn to results for positive HWS in Table 6. Starting with the bivariate results, we find that new mothers experience a decline in positive HWS ($\beta = -0.48, p < 0.05$). This decline is equivalent to two-thirds a standard deviation of change in positive HWS (0.48/0.72), and is one of the largest magnitudes of change in spillover that we observe in our analyses. After adjusting for age, the magnitude of the coefficient for new mothers increases to $\beta = -0.56$, which is over three-quarters of a standard deviation of change in positive HWS. The magnitude of decline for new fathers also increases after adjusting for age ($\beta = -0.06$ to $\beta = -0.22$) but is not statistically significant. We do not observe a significant gender difference between new fathers and new mothers in both the first and second models. The association between becoming a new mother and decline in positive HWS is reduced to insignificance with the inclusion of other child characteristics, but becomes significant again after the model adjusts for changes in work hours. This suggests that some of the association between becoming a new mother and decreases in positive HWS is due to having more children, and that changes in work hours slightly suppress this association. Again, we acknowledge the selectivity of our new-parent sample, but the consistency of the results across model specifications provides empirical support for H2b, where new mothers experience a decline in positive HWS.

Moreover, in examining predicted spillover change, we find that the changes in spillover associated with becoming a new mother is not only statistically different from those who remain childless, but is also

Table 5
Coefficients and standard errors from change-score models of positive WHS MIDUS I and II (1996–2004), N = 1319.

	M1: Bivariate			M1 + Age			M1 + Age + Other child vars			M1 + Age + Other Child Vars + Work hrs		
	Men	Women	Gender diff	Men	Women	Gender diff	Men	Women	Gender diff	Men	Women	Gender diff
Parenting stage												
Remain never parent (ref)	0.00	0.00		0.00	0.00		0.00	0.00		0.00	0.00	
	–	–		–	–		–	–		–	–	
New Parent	0.28 [*]	–0.09 [*]		0.39 [*]	–0.11 ^{**}		0.38 [*]	–0.08		0.38 [*]	–0.09	
	(0.14)	(0.07)		(0.15)	(0.09)		(0.19)	(0.16)		(0.19)	(0.16)	
Parenting school-aged child	–0.04	0.06		0.07	0.03		0.07	0.09		0.07	0.08	
	(0.10)	(0.11)		(0.12)	(0.13)		(0.15)	(0.16)		(0.15)	(0.16)	
Parenting adolescent	0.03	0.03		0.15	0.01		0.16	0.03		0.15	0.01	
	(0.07)	(0.10)		(0.11)	(0.12)		(0.12)	(0.14)		(0.12)	(0.14)	
Parenting young adult	0.06	–0.04		0.20	–0.07		0.23	–0.05		0.22	–0.07	
	(0.05)	(0.07)		(0.10)	(0.11)		(0.13)	(0.14)		(0.13)	(0.14)	
Parenting adult child	0.06	0.00		0.22	–0.03		0.26	0.01		0.26	–0.02	
	(0.05)	(0.05)		(0.12)	(0.11)		(0.17)	(0.18)		(0.17)	(0.18)	
Remain parent to adult child	0.02	0.05		0.22	0.01		0.28	0.06		0.29	0.05	
	(0.05)	(0.07)		(0.14)	(0.13)		(0.21)	(0.24)		(0.21)	(0.24)	
Age at Baseline				–0.003	0.001		–0.003	0.001		–0.003	0.001	
				(0.002)	(0.002)		(0.002)	(0.002)		(0.002)	(0.002)	
Change in # of children												
No change (ref)							0.00	0.00		0.00	0.00	
							–	–		–	–	
Gain 1 child							0.02	–0.04		0.02	–0.03	
							(0.10)	(0.14)		(0.10)	(0.14)	
Gain 2 children							–0.02	0.00		–0.02	0.00	
							(0.13)	(0.15)		(0.13)	(0.15)	
Gain 3 or more children							0.01	–0.16		0.01	–0.15	
							(0.15)	(0.22)		(0.15)	(0.22)	
Lost child							–0.29	–0.13		–0.30	–0.14	
							(0.21)	(0.18)		(0.21)	(0.18)	
Youngest child age							–0.002	–0.001		–0.002	0.000	
							(0.005)	(0.007)		(0.005)	(0.007)	
Change in work hours										0.001	0.002	
										(0.001)	(0.002)	
N	736	583		736	583		736	583		736	583	
r ²	0.009	0.003		0.012	0.003		0.017	0.005		0.017	0.009	

Gender differences calculated from a fully-interacted model. All hypothesis tests are two-tailed. ***p < 0.001, **p < 0.01, *p < 0.05.

statistically different from becoming a mother to an adolescent, young adult, and adult child. These differences persist even with controls for own age, other child characteristics, and changes in work hours. This suggests that later parenting stages are associated with smaller declines in positive HWS for mothers (relative to becoming a mother), lending suggestive empirical support to H6, which hypothesized that mothers may be able to reap some benefits as their children age into adulthood. Although we do not observe increases in positive HWS, the smaller declines associated with being a mother to older children speaks to the idea that relative to earlier stages of parenthood, later stages could hold more rewards for mothers, with regards to positive spillover.

9. Discussion

In this study, we demonstrate the utility provided by a life course perspective in deepening our understanding of the compatibility or incompatibility between work and family roles. Our study uses two waves of data to describe within-person changes in work-home spillover that occur when men and women transition to different parenting stages. Our findings support the idea that work-home spillover experiences do ebb and flow over the life course. In particular, these findings suggest that parenting is a life-long responsibility that individuals strive to balance with their paid labor responsibilities. Spillover is not merely a situation that demands attention during the early childhood years. We also build on prior work-family research that primarily focused on the negative spillover experiences of parents of young children by considering how becoming a parent can also shape positive spillover. Our

findings thus provide novel empirical evidence of life course patterns in all four dimensions of work-home spillover,

This study thus innovates on prior research in two ways. First, we find that even among our small, select new parent sample, becoming a new parent has ramifications for experiences of positive spillover. New fathers report increases in positive WHS (H2a, “breadwinner hypothesis”) and new mothers report decreases in positive HWS (H2b). This suggests that prior work, which primarily examined new parenthood and negative spillover, may have missed important influences of parenthood on positive spillover. These results thus highlight the importance of considering both positive and negative spillover experiences. It is possible that we do not observe associations with negative WHS (H1a and H1b) due to the nature of the new parent sample. If our sample of new parents are those who have delayed childbearing for earlier career gains, then it is possible that our findings diverge from prior literature as this is a group of working parents who have postponed parenthood to avoid conflict with their working lives. While this could have ameliorated perceptions of conflict, it does not preclude detecting changes in perceptions of work-home harmony. Indeed, it is also thus possible that we observe such a breadwinner pattern because men who have delayed fatherhood for earlier career gains may be in a better position to perceive work to home enrichment. As such, our findings speak to the need for further research on the relationship between the transition to parenthood and positive spillover, rather than an exclusive focus on negative spillover.

Second, we observe significant changes in negative and positive spillover across the life course, even after the initial transition to

Table 6
Coefficients and standard errors from change-score models of positive HWS MIDUS I and II (1996–2004), N = 1319.

	M1: Bivariate			M1 + Age			M1 + Age + Other child vars			M1 + Age + Other Child Vars + Work hrs		
	Men	Women	Gender diff	Men	Women	Gender diff	Men	Women	Gender diff	Men	Women	Gender diff
Parenting stage												
Remain never parent (ref)	0.00	0.00		0.00	0.00		0.00	0.00		0.00	0.00	
	–	–		–	–		–	–		–	–	
New Parent	–0.06	–0.48*		–0.22	–0.56*		–0.26	–0.55		–0.26	–0.57*	
	(0.12)	(0.21)		(0.14)	(0.24)		(0.18)	(0.28)		(0.18)	(0.28)	
Parenting school-aged child	–0.08	–0.09		–0.23	–0.17		–0.25	–0.15		–0.25	–0.17	
	(0.10)	(0.10)		(0.12)	(0.15)		(0.16)	(0.19)		(0.16)	(0.19)	
Parenting adolescent	–0.03	0.03		–0.20	–0.06		–0.19	0.00		–0.18	–0.05	
	(0.08)	(0.08)		(0.12)	(0.14)		(0.14)	(0.16)		(0.14)	(0.16)	
Parenting young adult	0.04	0.07		–0.16	–0.03		–0.11	0.06		–0.10	0.01	
	(0.05)	(0.06)		(0.10)	(0.15)		(0.13)	(0.17)		(0.13)	(0.17)	
Parenting adult child	0.06	–0.03		–0.17	–0.14		–0.07	–0.01		–0.07	–0.06	
	(0.05)	(0.06)		(0.11)	(0.16)		(0.17)	(0.22)		(0.17)	(0.22)	
Remain parent to adult child	0.02	0.07		–0.26	–0.06		–0.12	0.13		–0.12	0.09	
	(0.06)	(0.06)		(0.14)	(0.19)		(0.22)	(0.27)		(0.22)	(0.27)	
Age at Baseline				0.005 [†]	0.003		0.006 [†]	0.003		0.006 [†]	0.004	
				(0.002)	(0.003)		(0.002)	(0.004)		(0.002)	(0.004)	
Change in # of children												
No change (ref)							0.00	0.00		0.00	0.00	
							–	–		–	–	
Gain 1 child							0.01	–0.03		0.01	–0.01	
							(0.11)	(0.14)		(0.11)	(0.14)	
Gain 2 children							0.07	0.02		0.07	0.03	
							(0.12)	(0.19)		(0.12)	(0.18)	
Gain 3 or more children							–0.01	0.01		–0.01	0.03	
							(0.16)	(0.20)		(0.16)	(0.21)	
Lost child							–0.49 ^{***}	0.06 *		–0.49 ^{***}	0.04 *	
							(0.14)	(0.20)		(0.14)	(0.20)	
Youngest child age							–0.005	–0.007		–0.005	–0.005	
							(0.006)	(0.007)		(0.006)	(0.007)	
Change in work hours										–0.001	0.006 ^{**}	**
										(0.002)	(0.002)	
N	736	583		736	583		736	583		736	583	
r ²	0.004	0.014		0.009	0.016		0.023	0.018		0.024	0.039	

Gender differences calculated from a fully-interacted model. All hypothesis tests are two-tailed. ***p < 0.001, **p < 0.01, *p < 0.05.

parenthood. Becoming a mother to a school-aged child is associated with an increase in negative HWS (H3), and this association remains robust after controlling for parent’s own age, and is partially mediated by other child characteristics and changes in work hours. We also find a life course pattern in changes in negative WHS and HWS at later parenting stages (H5), where negative spillover starts to decline for parents of young adult children. This decline seems to occur earlier for fathers, relative to mothers. However, much of the variation by children’s age in change in negative spillover is explained by parent’s own age, and thus could potentially be attributed to developmental patterns in negative spillover (Rantanen et al., 2012). Finally we find suggestive evidence for H6, with declines in positive HWS becoming less severe as mothers transition to parenting adolescent and adult children.

Interestingly, we do not find a similar age-graded pattern for positive WHS and HWS. This suggests that while negative spillover follows a developmental pattern, declining as people age and mature, positive spillover may be influenced more by distinct events in the work and home domains. For instance, we do not find support for H4, as we do not observe a significant association between beginning to parent a school-aged child and changes in positive spillover. We find little evidence of significant change in positive spillover across even later parenting stages. It is possible that perceiving positive spillover, or the idea that work or home are positively shaping the other domain, is more a function of specific aspects in the work and home domains (type of job, relationship with coworkers, family dynamics) than specific developmental processes or changes in parenting stage as defined in this study. This speaks to the need for future research to focus more on positive

spillover, and specifically consider what other life course factors can drive changes in this important dimension of the work-home interface.

We observe only a small number of gender differences in the changes in spillover associated with parenting transitions, many of which are associated more with developmental processes rather than gender differences in parenting transitions. In line with some prior research, it appears that the main gender difference in spillover experiences occurs in the domain specificity of the experience. Men appear to be more susceptible to change in the work-to-home direction, whereas women appear more sensitive to the home-to-work direction. Rather than detecting significant gender differences, our findings reveal the importance of considering men’s fatherhood experiences over the life course (Kaufman, 2013; Williams, 2010). In particular, our results are consistent with the idea that a breadwinning norm could allow fathers to perceive harmony between their work and family roles across the life course. In contrast, gendered caregiving expectations for mothers may decrease compatibility between work and family roles for mothers across the life course.

Our findings should be interpreted with a few limitations in mind. First, sampling and attrition due to non-response could limit the generalizability of our findings. Those who responded to MIDUS II were disproportionately white, female, married, and college-educated (Radler & Ryff, 2010). Fixed effect models that difference out stable traits, such as education and race, as well as consideration of within-person changes, remove some of the potential bias in our estimates, but caution should be exercised when generalizing to the greater US population. In addition, in order to gain the largest multi-wave analytic

sample, we included all three MIDUS sub-samples in our analyses, precluding the use of sampling weights, and limiting generalizability to the general U.S. population.

Moreover, while MIDUS is the only data source that collects spillover measures at two points in time, the ten-year lapse in measurement shapes our results in several ways. For one, respondents differ in the range of time between when they encountered their parenting transition (i.e., when their child aged into the specific age group), and when measurement of spillover occurred in W2. If we think parenting transitions are discrete moments in time, then respondents who more recently encountered the parenting transition will have their spillover measures more accurately reflect their parenting transition. This is why we consider categories of child development, rather than continuous child age, in order to estimate the average spillover experiences within specific parenting stages, as opposed to at a specific child's age. The ten-year difference between W1 and W2 also influences our ability to observe spillover associated with the transition to parenting a school-aged child. Ideally, we would want to evaluate the change in spillover from parenting a newborn to parenting a school-aged child (ages 5–6). However, such a transition requires an observation window of five years, rather than the ten years that the MIDUS data provide. Our analytic solution to this issue was to combine parents of 5–6 year olds with parents of older school-aged, preadolescent children, who were observed while parenting pre-school-aged children. Future research should utilize longitudinal data collected more frequently in order to more accurately assess the spillover consequences of parenting school-aged children.

Moreover, the length of time elapsed between waves means that parents might have had some time since their parenting transition to adjust their work and family situations in response to their children aging. In particular, respondents could have undergone several other working and family transitions between waves that could also shape work-home spillover. As such, our estimates of the degree to which change in spillover is associated with changes in parenting stage should be considered conservative estimates. This is another reason why future studies should collect spillover data from parents at more frequent time points to be able to assess more precisely how parenting stages can shape work-home spillover.

Additionally, our estimates of gender differences should be interpreted with caution. While we include all working parents, regardless of number of work hours, it is possible that mothers who perceive increased conflict between working and parenting, or decreased positive spillover, may select out of the labor force, and thus out of our analytic sample. For instance, while many mothers of young children do work for pay, it is still common for women to decrease their labor force participation, or exit the labor force entirely, when they become mothers (Sanchez & Thomson, 1997). This may extend past the transition into parenting for mothers, as mothers may leave the labor force while their children are school-aged, or adolescents, and perhaps not re-enter until their children are adults. Thus, we may have found few gender differences due to the similarity between men and women who remained in our analytic sample as they were able to maintain paid employment and while undergoing parenting transitions. Our estimates do not account for potential gender differences in employment decisions that are associated with family transitions.

Finally, given demographic changes, and subsequent social and political awareness of work-family issues in the United States over the last half-century, there are certain to be generational differences in work-family experiences (Blair-Loy, 2003). Given only two waves of data, it is possible for the parenting transitions we measured to overlap with period differences in parenting experiences (i.e., those parenting younger children could experience a different work-family environment than what those who are parenting adult children were exposed to when their children were younger). While we control for age, and focus on within-person changes rather than cross-sectional differences between groups with different parental statuses, our estimates could still

be subject to period effects. Future research should aim to collect spillover measures more frequently and over a longer period of follow up in order to disentangle period and cohort effects at the work-home interface.

Limitations aside, our study is among the first to demonstrate how parenting across the life course can shape within-person changes in the perceptions of conflict or enhancement between work and home domains. Our findings suggest that whether social roles are conflicting or enriching depend on the life course context within which these social roles are being performed. Moreover, prior research has found that positive and negative spillover can each contribute independently to well-being, as well as moderating the other, making it important that we focus research efforts on multiple dimensions of spillover (Gareis, Barnett, Ertel, & Berkman, 2009). As we continue to grapple with issues surrounding paid labor, family formation, and gender equality in the United States, it is important to realize that life course transitions like entering parenthood exert a continuous influence on men's and women's outcomes across their adult lives. This means that work-family policy ought to embrace a longer-term perspective. As opposed to focusing primarily on childbirth and pregnancy, policies that recognize that family formation involves a fundamental re-orientation of individuals' lives can serve to better maintain the health and well-being of our workers. Recognition of the long-reaching consequences of these transitions can be informative for developing work and family policies that can support our workers and family members as they move through life course stages and achieve better lifelong work-family fit (Moen & Sweet, 2004).

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References

- Allen, T. D., & Armstrong, J. (2005). Further examination of the link between work-family conflict and physical health: The role of health-related behaviors. *American Behavioral Scientist*, *49*(9), 1204–1221.
- Allison, P. D. (1990). Change-scores as dependent variables in regression analysis. *Sociological Methodology*, *20*.
- Aryee, S., Srinivas, E. S., & Tan, H. H. (2005). Rhythms of life: Antecedents and outcomes of work-family balance in employed parents. *Journal of Applied Psychology*, *90*(1), 132–146.
- Bianchi, S. M., & Milkie, M. A. (2010). Work and family research in the first decade of the 21st century. *Journal of Marriage and Family*, *72*, 705–725.
- Blair-Loy, M. (2003). *Competing devotions*. Cambridge, MA: Harvard University Press.
- Byron, K. (2005). A meta-analytic review of work-family conflict and its antecedents. *Journal of Vocational Behavior*, *67*(2), 169–198.
- Collins, W. A., & Russell, G. (1991). Mother-child and father-child relationships in middle childhood and adolescence: A developmental analysis. *Developmental Review*, *11*(2), 99–136.
- Coser, L. A. (1974). *Greedy institutions: Patterns of undivided commitment*. New York: Free Press.
- Crain, T. L., & Hammer, L. B. (2013). *Work-family enrichment: A systematic review of antecedents, outcomes, and mechanisms*. *Advances in positive organizational psychology*, Vol. 1, Emerald Group Publishing 303–328.
- Demerouti, E., Peeters, M. C. W., & van der Heijden, B. I. J. M. (2012). Work-family interface from a life and career stage perspective: The role of demands and resources. *International Journal of Psychology*, *47*(4), 241–258.
- Elder, G. H., Jr, Johnson, M. K., & Crosnoe, R. (2003). *The emergence and development of*

- life course theory. *Handbook of the life course*. New York: Kluwer Academic Publishers 3–22.
- Erickson, J. J., Martinengo, G., & Hill, E. J. (2010). Putting work and family experiences in context: Differences by family life stage. *Human Relations*, 63(7), 955–979.
- Frone, M. R., Russell, M., & Barnes, G. M. (1996). Work-family conflict, gender, and health-related outcomes: A study of employed parents in two community samples. *Journal of Occupational Health Psychology*, 1(1), 57–69.
- Galinsky, E. (1987). *The six stages of parenthood*. Da Capo Press.
- Gareis, K. C., Barnett, R. C., Ertel, K. A., & Berkman, L. F. (2009). Work-family enrichment and conflict: Additive effects, buffering, or balance? *Journal of Marriage and Family*, 71(3), 696–707.
- Gerstorff, D., Röcke, C., & Lachman, M. E. (2010). Antecedent-consequent relations of perceived control to health and social support: Longitudinal evidence for between-domain associations across adulthood. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 66B(1), 61–71.
- Goldin, C. (2006). The quiet revolution that transformed women's employment, education, and family. *American Economic Review*, 96(2), 1–21.
- Goode, W. J. (1960). A theory of role strain. *American Sociological Review*, 25(4), 483–496.
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *The Academy of Management Review*, 10(1), 76–88.
- Greenhaus, J. H., & Powell, G. N. (2006). When work and family are allies: A theory of work-family enrichment. *The Academy of Management Review*, 31(1), 72–92.
- Grzywacz, J. G., & Bass, B. L. (2003). Work, family, and mental health: Testing different models of work-family fit. *Journal of Marriage and Family*, 65(1), 248–261.
- Grzywacz, J. G., & Marks, N. F. (2000). Reconceptualizing the work-family interface: An ecological perspective on the correlates of positive and negative spillover between work and family. *Journal of Occupational Health Psychology*, 5(1), 111–126.
- Grzywacz, J. G., Almeida, D. M., & McDonald, D. A. (2002). Work-family spillover and daily reports of work and family stress in the adult labor force. *Family Relations*, 51(1), 28–36.
- Hawkins, D. N., Amato, P. R., & King, V. (2006). Parent-adolescent involvement: The relative influence of parent gender and residence. *Journal of Marriage and Family*, 68(1), 125–136.
- Hill, E. J. (2005). Work-family facilitation and conflict, working fathers and mothers, work-family stressors and support. *Journal of Family Issues*, 26(6), 793–819.
- Hochschild, A. (2012). *The second shift: Working families and the revolution at home*. New York, NY: Penguin Books.
- Innstrand, S. T., Langballe, E. M., Espnes, G. A., Aasland, O. G., & Falkum, E. (2010). Work-home conflict and facilitation across four different family structures in Norway. *Community, Work & Family*, 13(2), 231–249.
- Johnson, D. (2005). Two-wave panel analysis: Comparing statistical methods for studying the effects of transitions. *Journal of Marriage and Family*, 67.
- Kaufman, G. (2013). *Superdads: How fathers balance work and family in the 21st century*. New York: New York University Press.
- Kelloway, E. K., Gottlieb, B. H., & Barham, L. (1999). The source, nature, and direction of work and family conflict: A longitudinal investigation. *Journal of Occupational Health Psychology*, 4(4), 337–346.
- Lam, C. B., McHale, S. M., & Crouter, A. C. (2012). Parent-child shared time from middle childhood to late adolescence: Developmental course and adjustment correlates. *Child Development*, 83(6), 2089–2103.
- Lu, J.-F., Siu, O.-L., Spector, P. E., & Shi, K. (2009). Antecedents and outcomes of a fourfold taxonomy of work-family balance in Chinese employed parents. *Journal of Occupational Health Psychology*, 14(2), 182–192.
- Marks, S. R. (1977). Multiple roles and role strain: Some notes on human energy, time and commitment. *American Sociological Review*, 42(6), 921.
- Martinengo, G., Jacob, J. L., & Hill, E. J. (2010). Gender and the work-family interface: Exploring differences across the family life course. *Journal of Family Issues*, 31(10), 1363–1390.
- Michel, J. S., Kotrba, L. M., Mitchelson, J. K., Clark, M. A., & Baltes, B. B. (2011). Antecedents of work-family conflict: A meta-analytic review. *Journal of Organizational Behavior*, 32(5), 689–725.
- Moen, P., & Sweet, S. (2004). From work-family to flexible careers: A life course re-framing. *Community, Work, and Family*, 7(2), 209–226.
- Musick, K., Meier, A., & Flood, S. (2016). How parents fare mothers' and fathers' subjective well-being in time with children. *American Sociological Review*, 81(5), 1069–1095.
- Nomaguchi, K. M., & Fetto, M. N. (2017). *Why do mothers experience more work-family conflict when their children are younger? Working paper presented at the Population Association of America Annual Meeting 2017*.
- Nomaguchi, K. M. (2009). Change in work-family conflict among employed parents between 1977 and 1997. *Journal of Marriage and Family*, 71(1), 15–32.
- Nomaguchi, K. M. (2012). Parenthood and psychological well-being: Clarifying the role of child age and parent-child relationship quality. *Social Science Research*, 41(2), 489–498.
- Pudrovska, T. (2010). What makes you stronger: Age and cohort differences in personal growth after cancer. *Journal of Health and Social Behavior*, 51(3), 260–273.
- Radler, B. T., & Ryff, C. D. (2010). Who participates? Accounting for longitudinal retention in the MIDUS national study of health and well-being. *Journal of Aging and Health*, 22(3), 307–331.
- Rantanen, J., Kinnunen, U., Pulkkinen, L., & Kokko, K. (2012). Developmental trajectories of work-family conflict for Finnish workers in midlife. *Journal of Occupational Health Psychology*, 17(3), 290–303.
- Sanchez, L., & Thomson, E. (1997). Becoming mothers and fathers: Parenthood, gender, and the division of labor. *Gender and Society*, 11(6), 747–772.
- Sayer, L. C. (2005). Gender, time, and inequality: Trends in women's and men's paid work, unpaid work, and free time. *Social Forces*, 84(1), 285–303.
- Siebert, S. D. (1974). Toward a theory of role accumulation. *American Sociological Review*, 39(4), 567–578.
- Thornton, A., Orbuch, T. L., & Axinn, W. G. (1995). Parent-child relationships during the transition to adulthood. *Journal of Family Issues*, 16(5), 538–564.
- Voydanoff, P. (2002). Linkages between the work-family interface and work, family, and individual outcomes: An integrative model. *Journal of Family Issues*, 23(1), 138–164.
- Warren, E., & Tyagi, A. W. (2004). *The two income trap: Why middle-class parents are going broke*. Basic Books.
- Wayne, J. H., Musisca, N., & Fleenor, W. (2004). Considering the role of personality in the work-family experience: Relationships of the big five to work-family conflict and facilitation. *Journal of Vocational Behavior*, 64(1), 108–130.
- Williams, J. C. (2010). *Reshaping the work-family debate: Why men and class matter*. Cambridge, MA: Harvard University Press.
- Winslow, S. (2005). Work-family conflict, gender, and parenthood, 1977–1997. *Journal of Family Issues*, 26(6), 727–755.
- Zimmerman, K. L., & Hammer, L. B. (2010). Work-family positive spillover. In J. Houdmont, & S. Leka (Vol. Eds.), *Contemporary occupational health psychology: Global perspectives on research and practice: Vol. 1*, (pp. 272–295). Wiley-Blackwell.