**Life's a Balancing Act:**
**How men and women experience the work-home interface across the life course**

by

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## ABSTRACT

As women, and particularly mothers, have increased their labor force participation in the last half-century, and as the expectation for men to spend more time in childcare and housework has increased, more men and women now must combine role responsibilities in the work and home domains than ever before. Using quantitative and qualitative data, this dissertation takes a sociological approach to understanding the variation in experiences at the work-home interface that have arisen in this time of substantial social change. In assessing how taking on work-home roles can influence individual outcomes, I show that it is important to consider both within- and between-gender differences at the work-home interface, and highlight the utility of applying a life course perspective to work-family research. The first empirical chapter uses two waves of a national sample of working adults to document how transitions in family roles are related to perceptions of work spilling over into home, and home spilling over into work, and how these associations differ by gender. This chapter provides evidence that taking on dual work-home role responsibilities can produce both role strain and role enhancement, laying the groundwork for future studies of how strain and enhancement might combine rather than compete. The second empirical chapter uses data from qualitative interviews with medical trainees to show how competing devotions to work, family, and personal lives shape the way important career decisions are made. The third empirical chapter uses nationally-representative and longitudinal data to document the association between working, parenting, and long-term health trajectories. Taken together, these studies suggest that social policy agendas should consider the ways in

which work and home domains are linked, as well as focus on important turning points across the life course. Policy efforts to mitigate gender inequality in the labor force would do well to continue to push for gender-neutral work-family policies, as it is clear that conflict at the work-home interface is not a solely female experience, and that both men and women navigate and seek solutions for complex work-home dilemmas across the life course.

# CHAPTER 1

# INTRODUCTION

Dilemmas at the work-home interface have recently generated not only popular interest in the media, but have also become a pressing concern for researchers, organizations and employees alike. Women, and particularly mothers, have drastically increased their labor force participation over the past half-century (Goldin, 2006), and social norms surrounding fatherhood are changing such that men are increasingly expected to be nurturing as well as breadwinning fathers (Kaufman, 2013). With these changes have arisen questions of how to organize time around various work and home responsibilities, how to negotiate potentially competing cultural frameworks of work and family devotion, and what roles institutions and workplaces should have in supporting workers navigating these conflicts. The strategies enacted in solving such social dilemmas have implications for gender equality, family well-being, and the future organization of workplaces and social institutions.

Engaging in responsibilities in paid labor, as well as simultaneously handling home-related duties, has both costs and benefits. Taking on work and home roles may be associated with role conflict and time burdens, known as "role strain", as competing responsibilities across domains may require individuals with limited time and energy to continuously make choices about which domain will get less attention or go unfulfilled, producing stress and anxiety (Goode

1970; Greenhaus and Beutell 1985). Indeed, popular media may have us believe that this is the dominant experience for those balancing work and home roles, as the difficulty of "having it all" is exacerbated by the lack of family-friendly policies and viable solutions for those with significant home and work responsibilities (Slaughter 2012). However, social science research has demonstrated that fulfilling multiple roles may be a positive experience, or be "role-enhancing", providing multiple sources of self-identity, access to a wider variety of social networks, and allowing the experience in one domain to enhance the experience in the other (Marks, S.R. 1977; Sieber 1974; Thoits 1983; House, Landis, and Umberson 1988). Given these competing characterizations of how navigating paid work and home responsibilities influences individuals, and the increasing prevalence of both men and women taking on these dual work-home roles, it is important to ask for who, and in what situations, does juggling work and home roles result in negative experiences, and for whom and when is it a beneficial experience?

These motivating questions lie at the heart of this dissertation. I bring a sociological perspective to the analysis of experiences at the intersection of work and home in order to better understand how individuals manage responsibilities in both domains, and the ramifications of their experiences in navigating this intersection for their individual outcomes. This dissertation is based on the fundamental premise that working for pay and having significant responsibilities in the home domain as a parent or spouse are *social roles*, or roles that prescribe a set of normative duties, expectations, and behaviors (Mead, 1934). Thus, fulfilling responsibilities in the work and home domains are not merely actions and behaviors based on individual nature, but rather are endeavors that are subject to socially normative expectations about what it means to be a worker, parent, or spouse (e.g. Greenhaus and Beutell 1985; Greenhaus and Powell 2006).

Moreover, rather than simply focusing on a collection of social roles, this dissertation

takes seriously the various ways in which combining work and home roles can matter. I draw on ecological systems theory (Bronfenbrenner, 1992; Grzywacz and Marks 2000; Voydanoff 2002), which notes that work and family/home are two "microsystems that consist of networks of relationships" (Voydanoff 2002, p. 138), and that linkages between these two microsystems are collectively known as the "work-home interface". Thus, the work-home interface consists of direct relationships between work and family characteristics, consequences of the interaction between work and family characteristics, and the mediating effects of work (home) on home (work) characteristics in shaping individual experiences (Voydanoff 2002). Put simply, this framework implies that while work and home roles are distinct social roles, there are numerous ways in which work-related and home-related factors can influence each other, as well as interact to shape individual outcomes. Thus, all three empirical chapters of this dissertation examine how work-related and home-related factors interact to shape consequences for individuals fulfilling dual work-home role responsibilities. The first substantive chapter focuses on how entering or leaving family roles (such as parent or spouse), while maintaining paid employment, can influence how one might perceive work influencing home, or home influencing work. The second substantive chapter addresses the ways in which cultural schemas about how to be devoted to work or home influence how men and women early in their careers as physicians make critical career decisions. The third chapter examines how combinations of working and parenting roles, levels of strain experienced as part of fulfilling these roles, and time spent doing so, can influence long-term trajectories of self-rated overall health. I use both quantitative and qualitative methods to investigate experiences at the work-home interface, and bring sociological theories to bear our understanding of how taking on socially normative roles in the work and home domains can influence individual outcomes.

Additionally, this dissertation considers how men and women may experience the work-home interface differently. While much of work-family literature has focused on women, as the rapid rise in women's labor force participation has meant that there is increased variation in how women experience combinations of paid labor and domestic responsibilities (Ahrens and Ryff 2006; Bianchi and Milkie 2010), recent research has shown that not only are norms surrounding men's responsibilities in the home changing, but that there has also been a slow and steady increase in employed men's hours spent in housework and childcare (Winslow 2005; Kaufman, 2013; Sayer 2005). However, while men might be expecting to, or aspiring to, become more involved in tasks of maintaining the family or the home, they are frequently subject to different social norms and constraints that may preclude them from having access to, or taking full advantage of, family-friendly policies (Williams 2010). These factors may combine to create particularly unique work-home situations for men relative to women. And even as evidence points to an increase in men's participation in parenting and prevalence of more gender egalitarian divisions of household labor, gendered norms suggesting that it is a woman's job to manage the home and the man's job to bring home the bread may remain firmly entrenched in social consciousness, and may continue to exert influence over how men and women experience the work-home interface (Sanchez and Thomson 1997). Thus is it crucial for work-family researchers to broaden their scope of analysis to incorporate both men's and women's experiences, to better understand the work-home interface as a whole, as well as to isolate important gender differences in the experiences. All three empirical chapters of this dissertation utilize samples of men and women to examine not only within-gender differences, but also between-gender differences, to fulfill this critical aim.

Finally, this dissertation brings a life course perspective to bear on work-family research.

The "life course" can be thought of as a series of "transitions and trajectories of roles and relationships over time" (Moen and Sweet 2004, p. 211). Thus applying a life course perspective to studying the work-home interface means understanding that when individuals take on particular work or home roles, these are not isolated events, but rather are experiences that occur in the larger context of their biographies. Experiences at work are part of a cumulative career trajectory that can span from early adulthood and one's first job, to late adulthood and eventual retirement. Experiences in the home also follow life course trajectories, where initial stages of family formation may mean taking on certain home roles, and later stages of the life course may involve "leaving" roles, or having the meaning of family roles change. The work-home interface lies at the intersections of these two broader life course patterns, and should be understood in the context of the complex interweaving of work and family pathways. Thus, I incorporate the life course perspective to an understanding of the work-home interface in two key ways. In the first two studies, I focus on specific transitions across the life course, to demonstrate how crucial turning points or transitions in life stages can shape experiences at the work-home interface. In the third study, I move from considering turning points to focusing on trajectories, and examine how experiences at the work-home interface can have long-reaching consequences for individuals combining such roles.

More specifically, chapter 2, "How Do Family Role Transitions across the Life Course Influence Perceived Spillover? A Test of Role Strain and Role Enhancement Perspectives", co-authored with Sarah Burgard, uses two waves of a national sample of working adults to examine the association between transitions in family roles, such as becoming a parent or exiting a marriage, and perceptions of positive and negative spillover between work and home domains. Perceived spillover between work and home domains is an important measure to consider as it

more directly taps into role strain and role enhancement mechanisms by assessing whether an individual perceives their work (home) roles to be positively or negatively influencing their home (work) roles. This study improves upon prior research examining the relationship between multiple work-home roles and perceived spillover by considering both positive and negative spillover, considering both men and women, examining multiple family transitions, and addressing unobserved variable bias by adjusting estimates for prior reports of spillover. We find that whether or not taking on or leaving an additional family role is associated with role strain or role enhancement depends on both gender and the transition under consideration. For example, becoming a parent is associated with negative spillover for both men and women, but getting married is only associated with negative spillover for men. Results are less conclusive for transitions out of family roles, indicating the importance of considering the life course context of such transitions.

In chapter 3, "Combining Competing Devotions: The Role of Work, Family, and Lifestyle Devotions in the Career Decisions of Medical Trainees", I conduct 61 semi-structured qualitative interviews with medical trainees and analyze how competing devotions to medicine, family, and lifestyle shape the way they make important career decisions. Prior work has demonstrated the powerful influence of cultural schemas in shaping the way work and home roles are understood (Blair-Loy 2003). However, much of this work has examined samples of only men or women (but have not compared men and women) precluding an assessment of how devotions to work and family may influence men and women differently. Furthermore, prior work has largely used retrospective accounts of decisions across the adult life course, which could be subject to post-hoc rationalization as individuals attempt to tell a cohesive tale about their lives. Thus, this study builds on prior work by sampling male and female medical trainees

at the point at which they make these crucial decisions, exposing the ways in which competing devotions can powerfully shape crucial career decisions. Importantly, I find that medical trainees employ what I call "linking mechanisms" to combine seemingly competing devotions in their rationales for decisions, highlighting how trainees are attempting to "have it all" with their decisions. Additionally, I also demonstrate how men and women face different constraints when making their decisions, and thus employ different linking mechanisms to create narratives about their decisions. How men and women attempt to combine these competing devotions has ramifications for the ways in which we understand gender inequality in the broader labor force.

Chapter 4, "Does it Hurt to Have it All? Documenting the Long-Term Consequences of Working and Parenting Using a National Prospective Study", broadens our understanding of the health consequences of taking on work and home roles. I move beyond the short-term experience of taking on working and home roles, to looking at the long-term ramifications of combining work and home responsibilities for physical health. Prior research has found that working and parenting is beneficial for health, and is related to better self-assessed physical and mental health in later life (Frech and Damaske 2012; Janzen and Muharjarine 2003; McMunn et al 2006), and lower odds of mortality (Sabbath et al 2015; Karas-Montez et al 2015; Tamakoshi et al 2012; Moen, Dempster-McClain, Williams 1989). However, prior research has largely documented this advantage in samples of women only, thus precluding a test of whether similar advantages exist for men who combine working and parenting roles. Additionally, prior work has largely demonstrated such health benefits are associated with working parent role fulfillment, but has not assessed whether health benefits may vary based on the quality of such roles. As existing research would imply that the experience of working and parenting can influence health across the life course, I examine whether or not such an influence can be seen in models of health that

explicitly estimate trajectories of health across the life course. I improve upon prior studies by including both men and women as well as measuring the working parent experience by incorporating qualitative measures of levels of strain and time spent in work and home domains.

Chapter 5 concludes the dissertation, offering a broader reflection on the lessons learned from the three empirical studies. Here I address emerging and remaining questions that are unanswered by the three studies, and comment on future directions for research in this arena. I also discuss how incorporating both men and women into our understanding of the work-home interface, as well as bringing a life course perspective to work-family research, can offer new and important avenues that policymakers should consider in order to better design policies to minimize conflict for workers, spouses and parents, and best allow the benefits of remaining fully engaged in work and home roles to accrue.

# CHAPTER 2

# HOW DO FAMILY ROLE TRANSITIONS ACROSS THE LIFE COURSE INFLUENCE PERCEIVED WORK-HOME SPILLOVER?: A TEST OF ROLE STRAIN AND ROLE ENHANCEMENT PERSPECTIVES[1]

## INTRODUCTION

The dramatic increase in women's, and particularly mother's, labor force participation during the 1950s, and subsequent stagnation in the 1990s, has been termed the "most significant demographic shift of the 21st century" (Bianchi & Milkie, 2010; Goldin, 2006). Along with the related increase of dual-earner households (Bianchi & Milkie, 2010), the diversification of workplaces and the rise of the 24/7 economy (Presser, 2003) and the steady but slow rise in hours spent doing childcare and housework by working men (Sayer, 2005), these trends indicate that men and women now juggle significant work and home responsibilities simultaneously (Bianchi & Milkie, 2010; Jacobs & Gerson, 2001). With so many holding both professional and domestic roles, researchers and practitioners alike have asked the question: What are the ramifications of dual work-home role engagement? What are the consequences of fulfilling responsibilities as an employee, and as a family member?

Role theories have emerged as a leading framework used to understand the experience of multiple work-home role engagement. The role strain perspective – where taking on conflicting

[1] This chapter is co-authored with Sarah Burgard

social roles can produce tension for an individual holding such dual roles – has guided much work-family research, but empirical support for this perspective has been limited and mixed (Ahrens & Ryff, 2006; Goode, 1960; Greenhaus & Beutell, 1985; Greenhaus & Powell, 2006). The role enhancement perspective proposes the opposite – that taking on multiple roles can serve to enhance or enrich well-being by providing multiple opportunities for resource accumulation and a stronger sense of identity (Marks, 1977; Sieber, 1974; Thoits, 1983). While role enhancement perspectives have garnered more robust empirical support, it has been noted that multiple role engagement is more beneficial when individuals hold voluntary roles – such as being a community volunteer – as compared to more obligatory roles – such as working for pay or being a parent (Thoits, 2012), and that the benefits of role accumulation only accrue when the quality of and satisfaction with the roles are high (Barnett & Hyde, 2001; Greenhaus & Powell, 2006). Moreover, much of the role enhancement literature is based on cross-sectional studies (Ahrens & Ryff, 2006; Kikuzawa, 2006; Kirchmeyer, 1992; Rozario, Morrow-Howell, & Hinterlong, 2004, see Janzen and Muharajine, 2003 as a notable exception). Cross sectional measurement cannot rule out the alternative hypothesis that non-random selection of those with specific health or psychological characteristics into holding multiple roles may be driving the association between multiple role engagement and well-being (Ahrens & Ryff, 2006; Frech & Damaske, 2012; Pavalko, Gong, & Long, 2007).

Much of the role theory literature considers role strain or role enhancement processes one at a time, or that the lack of one implies the existence of the other. Less considered is the possibility that both strain and enhancement processes can occur, each potentially contributing to the well-being of an individual who is combining work and home responsibilities. Investigating both role strain and role enhancement can highlight exactly when and where strain or

enhancement occurs, and thus provide avenues through which policies can better minimize work-family conflict and allow the benefits of maintaining multiple work and home roles to accrue. Moreover, most prior studies that support role enhancement relate role engagement to measures of physical and mental health and well-being, which can be considered more downstream consequences of holding work and home roles (Voydanoff, 2002). Thus, to update debates about role theories by examining both role strain and role enhancement processes, and to more directly measure the experience of these processes, we examine reports of perceived spillover between work and home - a measure of the extent to which an individual perceives their work (home) life influencing their home (work) life (Grzywacz & Marks, 2000).

Moreover, some have argued that work-family research needs to incorporate a life course perspective, or the understanding that individual work-home role configurations are the result of continuity and change in people's experiences as they move in and out of various life course stages (Bianchi & Milkie, 2010; Martinengo, Jacob, & Hill, 2010; Moen & Sweet, 2004). Applying a life course perspective to the study of the work-home interface necessitates a sharper focus on transitions in roles and relationships across various life stages. Motivated by such a need, we build on prior work-family role literature, which has largely assessed work-home role involvement with a count of work and home roles at a point in time, by assessing the relationship between transitions into and out of family roles across the life course and subsequent perceived work-home spillover. We assess not only the relationship between taking on additional family roles and perceived work-home spillover, but also the relationship between leaving certain family roles and perceived spillover, to capture the full range of transitions across the adult life course. We look at transitions in two key family roles – being a parent to a young child, and being a spouse – and hold the work role constant, to capture the variety of family roles that

individuals may hold while they maintain paid employment. We also use two waves of a nationally representative sample of American adults to evaluate the outcomes of transitions in family roles, allowing us to adjust our estimates for pre-transition reports of spillover and thus mitigate some of the bias in the estimates that could occur from selection into specific family roles on the basis of unobservable characteristics.

Finally, much of the work-family literature has focused on the experience of women holding dual work-home roles, concerned about the effect of dual work-home engagement on both mother's and children's well-being (Ahrens & Ryff, 2006; Bianchi & Milkie, 2010). Less considered are the experiences of men who hold dual work and home roles, as well as the moderating influence of gender on the relationship between work-home role engagement and perceived work-home spillover. Recent research has shown that men's experience of the work-home interface is important to consider, especially in light of new social norms for men to not only be breadwinning but also nurturing fathers (Winslow, 2005; Kaufman, 2013). Men might not only want to hold both work and home roles simultaneously, but might also face a more limited ability to utilize family friendly policies to adjust their work schedules for their home demands (Williams, 2010). Thus, we contribute to the work-family literature by incorporating men into our understanding of the relationship between transitions in family roles and perceived spillover. We also test gender moderation by examining whether men and women who transition into similar family roles report differences in subsequent perceived work-home spillover.

Thus, we use a national sample of working adults in the United States to examine the relationship between transitions into and out of family roles and reports of perceived work-home spillover. Our basic research questions are: Which transitions into and out of family roles are associated with role strain? Which are associated with role enhancement? Are there transitions in

family roles that can yield outcomes related to both role strain and role enhancement? And to what extent do men and women experience these transitions differently, with respect to subsequent perceptions of work-home spillover? We first outline our theoretical framework, reviewing prior literature on role strain, role enhancement, and perceived spillover. Then we propose several hypotheses generated from prior research. We then describe the data and methods with which we will test our hypotheses. After describing our results, we conclude with a discussion of the implications of this work for work-family research and policy.

## THEORETICAL FRAMEWORK

### *Using perceived spillover to test role strain and role enhancement theories*

Role theories have played a key part in the work-family literature. A role conflict perspective arises from a "scarcity" hypothesis that suggests individuals have fixed time and energy. Thus, taking on multiple roles is likely to produce strain or tension between roles, as the demands of different roles, by definition, will not overlap entirely, and will compete for an individuals' limited time and energy (Goode, 1960). This idea finds particular applicability in work-family research, as the modern institutions of work and family each can be seen as "greedy institutions" that make "total claims" on individuals, demanding full loyalty and undivided attention (Coser, 1974; Greenhaus, Collins, & Shaw, 2003)

However, while role strain perspectives have guided much of work-family research, the empirical support for a negative relationship between taking on multiple roles and well-being is mixed, with some studies demonstrating a weak relationship between multiple roles and poor well-being, whereas other studies documenting no relationship (Ahrens & Ryff, 2006; Barnett & Hyde, 2001; Greenhaus & Powell, 2006; Voydanoff, 2002). More robust empirical support has

been found for the opposite association, proposed by theories of role enhancement. A role enhancement perspective notes that rather than depleting individuals of scarce or fixed resources, participation in one role may serve to enhance participation in another role by providing resources in the form of material wealth or social networks to be used to enhance performance of the other role (Sieber, 1974). Role enhancement may generate positive energy that can enhance the performance of each role (Marks, 1977), or could provide meaning and guidance through role identities that can buffer against social isolation and depression (Thoits, 1983). Studies that support role enhancement show that compared to those with fewer roles, those with greater role accumulation report better levels of mental and physical health (Frech & Damaske, 2012; Janzen & Muhajarine, 2003; Kikuzawa, 2006; Moen, Dempster-McClain, & Williams, 1989, 1992).

Given the debate between role strain and role enhancement perspectives, especially with respect to the specific experience of engaging in work and family roles, a more careful consideration of the variety of ways in which work and home roles can interact is needed. In particular, one way to interpret mixed findings is to ask, to what extent might both role strain and role enhancement processes result from engaging in work and family roles? To answer such a research question, we need to compare the consequences of dual work-home engagement across outcome measures that can assess both experiences of role strain and role enhancement. Rather than assessing health and well-being outcomes, which may be more downstream outcomes of these processes, we need to examine a more proximate measure that directly assesses role strain and role enhancement processes.

One measure that we can use to test the extent to which role strain and role enhancement processes are occurring is a measure of perceived spillover between work and home domains. Perceived spillover is a measure of the extent to which one perceives aspects of the work (home)

domain positively or negatively influencing the home (work) domain. Prior work on these measures has shown that spillover can be bi-directional – that is, neither the role of "worker" or "family member" is by definition an individual's primary role, such that it is possible for aspects of the work experience to spill over into the home domain, termed work-home spillover (WHS) and vice versa, termed home-work spillover (HWS) (Greenhaus & Powell, 2006; Grzywacz & Marks, 2000; Rothbard, 2001). Spillover can also be positive or negative, such that one can perceive one domain to be either enhancing or conflicting with the other. Moreover, prior work has also demonstrated low correlation between positive and negative spillover, demonstrating that the experience of positive spillover is not simply the absence of negative spillover (Greenhaus & Powell, 2006; Grzywacz & Marks, 2000). Occasionally termed the "fourfold taxonomy" of work-family balance (Frone, 2003), this results in four theoretically and empirically distinct constructs that assess the extent of perceived spillover between work and home domains: positive and negative work to home spillover (WHS) and positive and negative home to work spillover (HWS).

How is perceived spillover related to work and home roles and individual outcomes? We draw on Voydanoff's (2002) theoretical framework to link perceived work-home spillover with work and home characteristics, and individual outcomes (Figure 2.1). In this framework, perceived spillover between work and home domains is a partial mediator of the relationship between work and home characteristics and eventual individual outcomes. We note that much of the role enhancement literature tests the relationship between occupying work and home roles and individual outcomes such as health, well-being, and job/life satisfaction (Arrow A). Thus, while certainly research in this vein supports role enhancement hypotheses, this does not preclude there being both role strain and role enhancement mechanisms operating through more

indirect pathways (Arrows B and C). We also note that much of the role strain literature has examined links between work and home characteristics and the experience of work-home conflict, or negative WHS and HWS (Arrow B). While this work forms the foundation of our understanding of role strain, evidence in support of role enhancement means that there could also be positive WHS and HWS resulting from combining work and home responsibilities (Arrow C). Thus, Voydanoff's (2002) framework helps us better situate the current state of evidence on the consequences of fulfilling multiple responsibilities in the work and home domains. We contribute to existing work on the work-home interface by examining perceived spillover, an important link between taking on multiple work and home roles and eventual well-being, developing a more nuanced depiction of how multiple role engagement can have multifaceted consequences.

[FIGURE 2.1 ABOUT HERE]

Furthermore, much of the prior empirical work on perceived spillover has examined the relationship between spillover and characteristics of roles, rather than number of roles. For instance, there is a wealth of literature on the antecedents and correlates of negative spillover, or work-family conflict, that demonstrates that greater job demands, lower levels of supervisor support and job flexibility, and lower levels of family support are related to higher levels of negative WHS and HWS (Byron, 2005; Michel, Kotrba, Mitchelson, Clark, & Baltes, 2011). Higher levels of perceived negative spillover are related to poor job-related outcomes such as high levels of job burnout, low levels of satisfaction with and commitment to work (Allen, Herst, Bruck, & Sutton, 2000), worse health behaviors (Grzywacz & Bass, 2003), and worse physical and mental health (Bellavia & Frone, 2005). Research on positive spillover is burgeoning, but relatively new (Greenhaus & Powell, 2006). Most research finds that positive experiences in

either the work or home domains, such as increased job involvement, supportive supervisors and colleagues, greater job flexibility, high levels of decision latitude, greater spousal support, and having available childcare are related to higher levels of positive spillover (Aryee, Srinivas, & Tan, 2005; Carlson, Grzywacz, & Zivnuska, 2009; Grzywacz & Marks, 2000; Hill, 2005; Lu, Siu, Spector, & Shi, 2009), whereas a high level of job demand is associated with lower levels of positive WHS (Butler, Grzywacz, Bass, & Linney, 2005). In a review of the literature, McNall et al. (2010) show that higher levels of positive spillover are related to higher levels of job and life satisfaction, as well as better physical and mental health.

Thus, research on perceived spillover between work and home domains has not specifically focused on the question of whether multiple role engagement is linked to reports of spillover. This is partially due to the choice of analytic samples, as many of the analytic samples used in studies of perceived spillover are limited to samples of employed, married parents. This prior work assesses the variation in reports of spillover among those who are engaged in a similar number of roles – working, and being a spouse or a parent - thus precluding an examination of the association between number of roles and perceived spillover. A notable exception is Grzywacz and Marks (2000), who use a cross-sectional national sample of employed respondents and demonstrate that those who have additional family roles report different levels of perceived spillover. More specifically, they find that parents of young children report higher levels of negative home to work spillover compared to non-parents, and that married respondents report higher levels of positive spillover from home to work than unmarried adults. We build on this existing work by examining how multiple role engagement is associated with perceived work-home spillover using two waves of data.

### *Life course perspective and transitions in family roles*

Applying a life course perspective is particularly important for understanding the consequences of taking on work and home roles, as individuals' current work-home role configurations are the result of changes in roles and relationships over time as their lives unfold across the adult life course. Recent work also suggests that perceived work-home spillover follows distinct trajectories as workers age and mature (Rantanen, Kinnunen, Pulkkinen, & Kokko, 2012). However, few studies have examined how work-family role transitions are linked with changes in perceived spillover, as most studies measure multiple role engagement only as a contemporaneous count of roles. Thus, we examine how transitions in different family roles across the life course – leading to changing counts of roles over time – are related to perceived spillover. More specifically, we examine how four different family role transitions across the life course – becoming a new parent and getting married (adding roles), and having a child age out of minor status and getting divorced/widowed (leaving roles) – while maintaining paid employment, are related to perceptions of spillover between the work and home domain.

Focusing on transitions in family roles also allows us to use within-person changes to partially mitigate bias resulting from non-random selection on unobservable characteristics into family roles. Prior cross-sectional work cannot disentangle whether associations between role combinations and outcomes are the result of actual processes of role strain or role enhancement, or whether they result from social selection. Thus, we use two waves of data to improve upon prior work, and adjust estimates for spillover reports prior to the transition in family roles, to help account for unobservable traits that could select individuals into specific roles.

*Incorporating men and the moderating influence of gender*

Much of work-family literature, and role enhancement literature specifically, has focused on the experience of working mothers (Ahrens & Ryff, 2006; Bianchi & Milkie, 2010). With the

drastic increase in the labor force participation of women since the 1970s, and especially married mothers with young children, there came increasing concern with how such demographic trends might influence mothers' well-being, family stability, and child development (Bianchi and Milkie, 2010). Important early research on the consequences of holding multiple work-home roles noted that, contrary to public concern and role strain hypotheses, women did not suffer when they combined work and home responsibilities. For example, Moen et al (1989, 1992) show that in a sample of women, involvement in multiple roles, and particularly involvement in community or voluntary roles, is positively associated with better health and longevity. Buehler et al. (2014) shows that involvement in paid labor enhances the mothering experience for women. Mothers who were employed either part- or full-time report higher levels of sensitivity towards their children, and provide more learning opportunities for their children, compared to mothers who were not employed (Buehler et al., 2014). Frech and Damaske (2012) demonstrate that mothers who are consistently employed after the birth of their first child report better physical and mental health, net of health characteristics prior to birth, when compared to mothers who are intermittently employed or exit the labor force.

Thus while role enhancement may be the more dominant mechanism for women, especially when it comes to being a mother and a worker, we do not know if the same is true for men. Studies have documented shifts in men's attitudes towards more gender-egalitarian views and an increased desire to be not only breadwinner fathers, but also nurturing and involved fathers (Winslow, 2005; Kaufman, 2013). However, men are subject to different constraints in the workplace and may have fewer resources and support to shift their work lives to accommodate changes in their home lives (Nomaguchi & Johnson, 2014; Shows & Gerstel, 2009). Men frequently want to spend more time at home with family but face different social and

cultural norms and constraints in the workplace that reduce their likelihood of taking advantage of family leave or other family-friendly policies (Kaufman, 2013; Williams, 2010). Such research suggests the importance of including men in studies of the work-home interface, particularly as they may face qualitatively different role responsibilities and constraints.

While the moderating influence of gender has been considered in a few studies of perceived spillover, the findings are mixed, and some argue that gender has not featured prominently in the study of the work-home interface (Ahrens & Ryff, 2006; Greenhaus & Powell, 2006; Hill, 2005; Voydanoff, 2002). For example, while a number of studies have shown that working mothers and fathers experience similar levels of perceived work to home negative spillover (Nomaguchi, 2009; Schoon, Hansson, & Salmela-Aro, 2005; Simon, 1997; Winslow, 2005), other studies find that mothers report higher levels of conflict between work and home, compared to fathers (Aryee et al., 2005; Grzywacz & Marks, 2000; Hill, 2005). Evidence is also mixed for role enhancement. Rothbard (2001) finds that men are more likely to experience positive spillover from work to family, but that women are more likely to experience positive spillover from family to work. Other studies find no significant gender differences (Butler et al., 2005; Hill, 2005). Thus we build on existing work-family literature by including men in our analyses, as well as testing the moderating influence of gender on the relationship between family role transitions and perceived spillover between work and home domains.

## HYPOTHESES

### *Adding family roles*

Based on role strain/enhancement perspectives as well as prior empirical findings surrounding transitions in family roles, we generate several hypotheses to test regarding the

association between transitions in family roles and perceived work-home spillover. First, we develop several hypotheses based on role strain/enhancement perspectives about the direction of the relationship between gaining and leaving roles and perceived positive and negative work-home spillover. If role strain processes were operating, gaining an additional role should be related to higher levels of negative spillover (WHS and HWS), and lower levels of enhancement between work and home, resulting in lower levels of positive spillover.

**H1a:** Gaining a role is related to higher levels of negative work-home and home-work spillover. (Role strain)

**H1b:** Gaining a role is related to lower levels of positive work-home and home-work spillover. (Role strain)

If role enhancement processes were occurring, then we might expect to see the opposite associations, such that gaining a role is related to lower levels of negative work-home spillover, or higher levels of positive work-home spillover.

**H2a:** Gaining a role is related to lower levels of negative work-home and home-work spillover. (Role enhancement)

**H2b:** Gaining a role is related to higher levels of positive work-home and home-work spillover. (Role enhancement)

*Leaving family roles*

Are role enhancement and role strain processes symmetric? In other words, if gaining roles is associated with changes in spillover, is leaving roles, or transitioning out of certain family role responsibilities, associated with an equal, but opposite change? If so, the relationships hypothesized for gaining a role (H1-H2) would be reversed for leaving roles:

**H3a:** Leaving a role is related to lower levels of negative work-home and home-work

spillover. (Role strain)

**H3b:** Leaving a role is related to higher levels of positive work-home and home-work spillover. (Role strain)

**H4a:** Leaving a role is related to higher levels of negative work-home and home-work spillover. (Role enhancement)

**H4b:** Leaving a role is related to lower levels of positive work-home and home-work spillover. (Role enhancement)

To test hypotheses about gaining roles (H1 and H2) we examine the transition of becoming a new parent and the transition of getting married. To test hypotheses about leaving roles (H3 and H4) we examine having a child age into adult status (thus leaving the status of being a parent to a minor child) and losing a household partner (through either divorce or widowhood).

Prior research on the antecedents of perceived negative spillover has found evidence for domain specificity: 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). As the transitions that we are examining all occur in the home domain, we hypothesize that transitioning in family roles is likely to influence perceived HWS more so than WHS.

**H5:** Transitions in family role status will influence perceived HWS more than WHS. (Domain specificity)

*The role of gender in life course transitions*

Prior research suggests that men and women encounter changes in the home domain in different ways. As there is little to no prior research on how transitions in family roles are related

to perceived work-home spillover, we generate gender moderation hypotheses based on the wealth of research that has examined the influence of life course transitions on other outcomes, and how these transitions influence men and women differently.

There is a rich set of literature on the transition to parenthood that shows that men and women approach becoming mothers and fathers in different ways. Time use literature notes that women's hours spent in housework increase after the birth of their first child, whereas men's housework hours either don't change or may even decline after a similar transition (Baxter, Hewitt, & Haynes, 2008; Sanchez & Thomson, 1997). Thus, overall increase in productive hours spent in both work and home domains may lead to overload for women, and thus higher levels of perceived negative spillover[2]. Moreover, increased productive time spent in the home domain, while maintaining employment, could decrease time spent in leisure and sleep (Burgard & Ailshire, 2013), which could in turn diminish the feeling that the home domain is enhancing or enriching the work domain. This could result not only in higher levels of negative spillover, but also lower levels of positive spillover.

**H6:** Women who become new mothers will report higher levels of negative spillover, or lower levels of positive spillover, compared to new fathers.

Gender differences may also arise when men and women leave the role of being a parent to a minor child. As children age out of adolescence, their relationships with their parents change; not only does parent-child time decrease as children start to spend less time with parents while they move towards building their own independent adult lives (Lam, McHale, & Crouter, 2012; Roberts, Block, & Block, 1984), but the quality of the parent-child relationship generally

[2] There has been limited evidence demonstrating an increase in men's paid labor hours after the birth of a child (Astone et al 2010; Killewald 2013), and more evidence to demonstrate that there is considerable heterogeneity by social category in the relationship between transition to fatherhood and work hours. Thus, a transition to parenthood is likely to yield great differences in total productive time between mothers and fathers.

improves as conflict between parents and children diminishes after adolescence (Laursen, Coy, & Collins, 1998). While the age at which this transition begins for families varies, child development experts generally use the cutoff of 18 years of age to denote this transition (Lam et al., 2012). Thus, these findings would suggest that having a child age into adult status could signal the "leaving" of a parenting role, and a shift of the parent-child relationship into a more equitable, adult relationship.

However, as research suggests that mothers and fathers assume different roles when parenting a child, this difference could persist even after the child ages into adult status. For example, mothers are more likely to spend time providing care to children and fathers are more likely to spend time in leisure activities with their children (Collins & Russell, 1991). Mothers are also more likely to talk about a wider variety of topics with their children, including talking about abstract topics like emotions, as compared to fathers, whose conversations are often limited to more tangible topics (Collins & Russell, 1991). Consequently, research shows that children's relationships with their mothers tend to improve into young adulthood, whereas the relationship quality for fathers is more variable (Thornton, Orbuch, & Axinn, 1995). Thus, as children age into adult status, and potentially leave the household, we might expect mothers to still assume a greater burden of responsibility for the child as compared to fathers who might experience a lightening of responsibilities as children age into adulthood. This could mean that mothers may experience greater role strain or less role enhancement as compared to fathers with this particular family transition. Indeed the one study that compares parents and non-parents on measures of perceived spillover finds that fathers of children over the age of 5 report higher levels of positive HWS compared to mothers of similarly aged children (Grzywacz & Marks, 2000). This leads to our next hypothesis:

**H7:** Women whose children age out of minor status, will report lower levels of positive spillover or higher levels of negative spillover, compared to men who undergo a similar transition.

Studies have also demonstrated that men and women respond to changes in partnership status in different ways. Studies show that men decrease their hours in housework after entering a marriage, or marriage-like relationships, and increase their housework hours after leaving a marriage, whereas women see an increase in housework hours and then a decrease after exiting a marriage (Baxter et al., 2008; Gupta, 1999). Other studies show that men are more likely to benefit from marriage, in terms of health and well-being, compared to women (Ross, Mirowsky, & Goldsteen, 1990). Despite changes in gender roles in the household, both time use and marital transitions literature suggest that differences in what men and women do after getting married may lead to differences in perceived work-home spillover. Specifically, if men are more likely to reap the benefits of marriage, then men may experience more role enhancement than role strain processes after the transition into marriage, compared to women.

**H8**: Men who get married will report higher levels of positive spillover and lower levels of negative spillover, compared to women who get married.

**H9:** Men who leave a marriage (through divorce or widowhood) will report lower levels of positive spillover and higher levels of negative spillover, compared to women who lose a household partner.

## DATA

To test these hypotheses, 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 (Wave 1 response rate 70%, Wave 2 response rate 71%) and then a mailed self-administered questionnaire (Wave 1 response rate 89%, Wave 2 response rate 81%). The first wave collected data from 7,108 Americans aged 25 to 74 years, and includes a sample based on 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. Thus, while national in scope, the MIDUS is not strictly nationally representative because weights have not been designed to accommodate the various sub-samples. To account for non-random sampling of twins and siblings, we adjust all standard errors in multivariate analyses to account for clustering at the family level. We address limitations of the data and generalizability of findings below. Of the original 7,108 MIDUS participants, 4,963 were successfully re-contacted and completed the MIDUS II survey ten years later. Further information about the study design can be found elsewhere (Brim, Ryff, & Kessler, 2004; Radler & Ryff, 2010).

Our sample consists of those who responded to both waves of the self-administered questionnaire (where the dependent measure was assessed) (N=3,929), who were working for pay in both waves, and thus answered questions about spillover at both waves (N=2,148), and worked more than 10 hours a week in both waves, indicating a reasonable level of labor force attachment (N=1,993), and provided responses on all key measures (N=1,921).

To our knowledge, MIDUS is the only available data source that includes spillover measures at two time points from a large, national sample of adults in the United States, as well as an individual's work and family information at each time point. Thus, the MIDUS data are well-suited for studying how changes in family roles and responsibilities influence men's and

women's perceptions of spillover between work and home domains. The MIDUS data have similarly been used in other studies to examine within-person change in various health and psychosocial measures (Greenfield and Marks, 2009; Gerstorf, Rocke, and Lachman, 2010; Pudrovska, 2010; Snowden, Dhingra, Keyes, and Anderson, 2010).

## MEASURES

### *Negative and positive work-home spillover*

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 had experienced a series of ways in which the work domain or the home domain could influence or spill over into the other domain. Negative WHS (W1 alpha=0.82) was assessed using the following items:

*1) Your job reduces the effort you can give activities at home.*

*2) Stress at works 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 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) 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) was assessed with the following items:

*1) Talking with someone at home helps you deal with problems at work.*

*2) Providing for 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 for each item were coded 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 those had spillover measures calculated from three items. Note that these are measures of work-*home* spillover, as opposed to explicitly *family*, and thus it is possible for those who are not parents or do not have a household partner to still perceive spillover between domains

Similar to Grzywacz and Marks (2000), who also use the MIDUS data to examine negative and positive work-home spillover, we find that these four measures of work-home spillover are indeed four separate dimensions of the work-home interface. A correlation matrix of the four measures of spillover shows that the highest correlation between the measures is between negative WHS and HWS with a correlation coefficient of r=0.49. Importantly, the

correlations between measures of positive and negative spillover are close to zero, demonstrating that a lack of strain or conflict between work and home domains does not equate with a feeling that work and home domains are mutually enhancing or enriching.

*Changes in home role responsibilities*

As we are interested in the influence of certain key family transitions on perceptions of spillover between work and home, our key independent variables are indicators of whether or not an individual underwent a key family transition within the last three years before they answered the survey at wave 2. For instance, parenting transitions are assessed using reports of child age at waves 1 and 2. Recent new parents are defined as those who report having a child between the ages of 0 and 3 at wave 2 who did not report a child under the age of 18 in the household at Wave 1. A respondent whose child ages out of minor status are those who report having a child between the ages of 18 and 21 at wave 2, who also reported having a child under the age of 18 at Wave 1. Those who are recently partnered are those who report getting married at most three years prior to Wave 2, who were not married at Wave 1, and those who have recently lost a household partner are those who report being widowed or divorced at most three years prior to Wave 2 who did report being married at Wave 1. In order to compare those who experienced a recent family transition to the most appropriate reference group in the multivariate models, all multivariate analyses use stratified analytic samples. For example, in the model estimating the association between recently becoming a parent and spillover, the analytic sample consists of all respondents who reported no children under the age of 18 at wave 1 (who are either never parents or are parents of adult children). Thus, significant differences are calculated for those who recently became parents as compared to those who either remained non-parents or those whose children were significantly older than 18 years of age. For the model estimating the

association between having a child age out of minor status and spillover, the analytic sample consists of all those who reported having a child under the age of 18 at wave 1. Thus significant differences are calculated with reference to those who remain parenting younger children, or those whose children aged out of minor status earlier than the three-year window. The marriage models are estimated on a sample of those who report no household partners at wave 1, while the models for leaving marriage are estimated for a sample of those who did report having a household partner at wave 1. Thus significant differences are calculated for those who are newly partnered as compared to those who remain un-partnered (though a small fraction of the sample reported getting married then lost their household partner within the 10 year period between waves 1 and 2), and then for those who lost their household partner as compared to those who remained partnered.

*Demographic controls*

In the multivariate analyses, estimates for the association between changes in family roles and levels of spillover are adjusted for potential confounding by age, education (college educated =1), race (Non-Hispanic Black=1), and log household income at wave 2. As we are interested in estimating the average association between changes in family roles and work-home spillover, it is important to account for the great amount of heterogeneity in respondents' work situations. Thus, we also control for occupation (professional/managerial occupation =1), whether or not the respondent was working part-time at Wave 2[3], and level of job demand. Level of job demand was assessed with items drawn from the Karasek Job Strain model (Karasek & Theorell, 1990),

[3] As a possible work-life balance strategy, it has been documented that many women might opt out of work or opt for part-time work after becoming a new parent. To investigate such collinearity in our sample, we looked to see if new parents were more likely to take on part-time work than non-new parents. Among men, those who become new parents are significantly less likely to be part-time workers at W2 (8% vs. 24%, p=0.01). Among women, there is no difference between those who are new parents and those who remain non-parents in likelihood of doing part-time work (31% vs. 32%, p=0.9264). Additionally, prior work has shown that new mothers are highly likely to return to work within 3 years of having a child (Han et al., 2008), thus our measurement strategy of having a new child within the last 3 years before MIDUS II allows time for women to re-enter the workforce, and thus enter our sample.

using the mean response to five items (W1 alpha=0.73): "1) How often do you have to work very intensively -- that is, you are very busy trying to get things done? 2) How often do different people or groups at work demand things from you that you think are hard to combine? 3) How often do you have too many demands made on you? 4) How often do you have enough time to get everything done? 5) How often do you have a lot of interruption?" Responses were coded such that a higher score indicated a higher level of job demand.

## METHODS

First, we examine the bivariate associations between changes in family roles and levels of negative spillover by calculating the means of spillover scores for each transition, separately for men and women. We use a t-test for means to examine whether those who experience a change in a family role report significantly different mean levels of spillover compared to those who do not undergo such a change. Then, we estimate a series of gender-stratified ordinary least squares regression models predicting levels of perceived spillover with family role transitions, adjusting the estimates for prior reports of spillover and for demographic controls and work characteristics. Accounting for prior reports of spillover, especially prior to the family role transition, is a key component of our analytic strategy. As perceptions of spillover can depend on individual-level unobserved characteristics, such as reporting behavior and personality traits (Allen et al 2012), adjusting our estimates for a prior report of spillover can mitigate some of the omitted variable bias in the association between family role transition and perceived spillover.

We estimate one model per family role transition and measure of spillover, resulting in sixteen models (four family role transitions, four dependent measures). We estimate models for men and women separately to assess within-gender comparisons. After examining differences

within gender, we test for between gender differences in the influence of changes in family roles on spillover by estimating a fully-interacted pooled model, and examining the gender interaction terms.

## RESULTS

Table 2.1 presents descriptive information about the various analytic samples used in the multivariate analyses. For those who do not report having a minor child at wave 1, the average age is about 45 years old, and this is not significantly different between men and women. Men report significantly higher household incomes compared to women, and are also more likely to be college-educated. About 2-3% of the sample is Non-Hispanic Black and nearly half the sample works in a professional or managerial occupation. Men are significantly less likely than women to be working part-time jobs. Sample characteristics and gender differences therein are similar for those who do report having a minor child at wave 1, with a few exceptions. Among those who do report having a minor child at wave 1 there is a significant difference in age between men and women, with men being slightly older than women. There are also slightly more Non-Hispanic Black women as compared to men among those who report having a minor child in the household at wave 1. It is interesting to note that the gender difference in part-time work status is much starker among those who report having a minor child, with less than 7% (compared to 30% of women) of men reporting part-time work status. The samples used for the household partner models are similar to the other analytic samples in that men are more likely to be college educated, report higher household incomes, and are less likely to be working part-time. Both men and women are equally likely to be in professional or managerial occupations. There are significant age differences in these samples - women are slightly older among those who

report no household partner at wave 1 whereas women are slightly younger among those who do report having a household partner at wave 1.

[TABLE 2.1 ABOUT HERE]

Table 2.2 presents the percentage of each gender-specific analytic sample that undergoes each of the key family role transitions. There are no significant gender differences in the likelihood of transitions; within each of these samples, men are just as likely as women to become a new parent, start parenting a young adult, gain a household partner, or lose a household partner. About 5-6% of those who report no minor children in the house gained a child in the 3 years prior to wave 2, whereas about 40% of those who did have minor children in the house had their child age into minor status in the last three years before data collection. This is not surprising given the age distribution of MIDUS at Wave 1, as the majority of respondents became parents prior to wave 1. About 7% of those who did not have a household partner at wave 1 reported gaining a household partner in the three years prior to wave 2, and about 4% of the sample who had a household partner at wave 1 no longer had one by wave 2. Thus, Table 2 demonstrates that while the number of transitions is small, there are enough respondents undergoing each family role transition for the purposes of multivariate analyses.

[TABLE 2.2 ABOUT HERE]

Table 2.3 displays the means of each of the spillover measures, and compares the means between those who do undergo a family role transition and those who do not undergo a similar transition. Here we can see that both men and women who become parents report significantly higher levels of both work to home and home to work negative spillover. While men who become fathers do not report significantly different levels of positive spillover as compared to men who do not become parents, women who become mothers report significantly lower levels

of positive home to work spillover as compared to women who are not recent mothers (3.2 vs. 3.6, $p<0.05$). Contrary to what was hypothesized, however, starting to parent a young adult does not seem to have a bivariate association with levels of positive or negative work-home spillover.

Gaining a household partner, among men, is associated with greater negative work to home spillover (2.9 vs. 2.6, $p<0.05$). While women who gain a household partner also report on average higher levels of negative work to home spillover compared to women who do not gain a household partner, this difference in means is not statistically significant (2.8 vs. 2.6). Both men and women who experience a recent gain in household partner report significantly higher levels of positive home to work spillover, compared to those who do not (3.6 vs. 3.2 for men, 3.8 vs. 3.3 for women). While losing a household partner is not associated with significantly different levels of spillover for women, it is associated with slightly lower levels of negative work to home spillover for men (2.3 vs. 2.6, $p<0.05$).

[TABLE 2.3 ABOUT HERE]

Examining the differences in mean levels of work-home spillover allows an examination of how certain family role transitions can influence perceptions of spillover between work and home domains. However, important differences by age, education, income, race, and work characteristics can confound this association in bivariate analyses. Individual level unobserved characteristics may also bias these results. Thus, we estimate multivariate models adjusting for previous levels of spillover, as well as controlling for demographic and work factors, to examine whether the bivariate results hold up in the multivariate framework, and whether differences by individual factors are confounding important differences in the association between family role transitions and work-home spillover.

Table 2.4 presents the key coefficients and standard errors from a series of gender-

stratified models estimating the association between recent family role transitions and work-home spillover, net of demographic controls, work characteristics, and spillover measures collected at W1. The right-most column of each panel reports the p-value of the gender interaction from the pooled models (pooled models not shown). Given the small analytic sample for each transition, I report significant results at the $p<0.1$ level.

The top left panel of the table shows the results for becoming a new parent. Both men and women who start parenting a young child in the last three years report higher levels of work to home and home to work negative spillover, net of controls. The association is slightly stronger for negative HWS ($B=0.287$, $p<0.05$ for men, $B=0.336$, $p<0.05$ for women). Moreover, men and women do not report higher levels of negative spillover differently, as the interaction term in the pooled models (not shown) between gender and becoming a parent is not significant for either negative WHS or HWS. However, becoming a new parent is associated with marginally higher levels of work to home positive spillover for men, but not for women ($B=0.213$, $p<0.1$). Conversely, while men may experience some positive spillover after becoming fathers, women report marginally lower levels of home to work positive spillover after becoming mothers ($B=-0.302$, $p<0.1$). Moreover, this difference is significant between genders, as the p-value on the interaction term is 0.055. Thus, while becoming a new father is associated with both positive and negative spillover for men, becoming mothers is associated with not only higher levels of negative spillover but also lower levels of positive spillover from home to work.

The bottom left panel displays the results for what can be considered the opposite transition to becoming a new parent – that of having a child age out of minor status. This panel of results shows that this transition has little influence on respondents' perceptions of spillover between work and home domain – that is, in contrast to taking on the role of being a new parent,

having a child age out of minor status does not result in a symmetric decrease in tension between work and home domains, or a symmetric increase in positive spillover between work and home domains. For women, we see the only significant result in this panel – that women who start parenting a young adult actually report slightly higher levels of work to home negative spillover (B=0.1, p<0.1).

The top right panel of Table 2.4 displays the results for gaining a new household partner. Men who gained a new household partner, compared to men who report no household partner, report marginally significantly higher levels of negative work to home spillover, net of controls (B=0.193, p=0.070). For positive spillover, both men and women report significantly higher levels of positive home to work spillover after getting married, as compared to men and women who remain unmarried (B=0.352, p<0.1 for men, B=0.487, p<0.001 for women).

Finally, the bottom right hand panel of Table 2.4 shows the results for leaving marriage. For both men and women, leaving a marriage is associated with lower levels of negative work to home spillover, an association that does not significantly differ by gender (B=-0.282, p<0.05 for men, B=-0.179, p<0.05 for women). In terms of positive spillover, men who lose a household partner report also higher levels of positive work to home spillover (B=0.23, p<0.1).

[TABLE 2.4 ABOUT HERE]

In terms of the relationship between perceived spillover and prior reports of spillover, demographic controls, and work characteristics, results from full models (not shown) suggest that prior reports of spillover are strongly predictive current reports of spillover. Negative spillover follows an age-graded trajectory, increasing during mid-adulthood and steadily decreasing in late adulthood. Men and women have slightly different age-graded trajectories, with respect to negative spillover, with women's levels of negative spillover declining later than

men's. In contrast, positive spillover tends to increase across adulthood, and in particular, positive home to work spillover tends to increase as respondents age. Non-Hispanic Blacks tend to report lower levels of both positive and negative spillover. Household income and having a college education are not related with levels of work-home spillover. Professional women report higher levels of negative work to home spillover than non-professional women. Higher levels of job demand are positively associated with levels of negative work to home and home to work spillover. Part-time work status is associated with lower levels of negative work to home spillover and higher levels of work to home positive spillover.

## DISCUSSION

We use two waves of national data to estimate the association between transitions in family roles and perceived work-home spillover to improve our understanding of how the work-home interface changes across the life course and how this may differ between men and women. Our findings demonstrate the importance of considering role strain and role enhancement as dual processes for men and women who move in and out of various family roles across the life course. Examining measures of perceived spillover reveals the multifaceted ways in which taking on dual work-home roles can influence individuals' experiences at the work-home interface. A single family role transition can serve to not only increase the feelings of strain felt between work and home, but may also simultaneously contribute to feelings of enhancement between the two domains. For example, becoming a new father is associated with higher levels of negative as well as positive spillover. We also demonstrate the importance of looking at multiple transitions in family roles, highlighting the importance of applying a life course perspective to the study of the work-home interface. Whether or not individuals experience role conflict or enhancement

depends on the role into or out of which they are transitioning. Moreover, while we find notable similarities between men and women who move through transitions in parenthood and marital status, there remain key differences between men's and women's experience of the work-home interface that highlight the importance of considering the work-home experiences of both men and women at the same time.

First, we find moderate support that role strain processes occur when individuals take on an additional family role (H1a). Both men and women report significantly higher levels of negative WHS and HWS, controlling for prior reports of negative spillover, after becoming new parents. Men also report significantly higher levels of negative WHS after gaining a household partner, compared to men who do not gain a household partner. Conversely, this means hypothesis 2a is not supported, as becoming a parent or gaining a household partner is not related to lower levels of negative spillover.

Looking at the associations between gaining a role and positive spillover we can see that while becoming a parent or gaining a household partner is associated with increases in negative spillover, it is not also associated with decreases in positive spillover. Thus we find little support for hypothesis 1b – that gaining a role is associated with lower levels of positive spillover. This is further evidence to support the claim that negative and positive spillover are orthogonal constructs and that a shift in one does not imply an equal and opposite shift in the other. The only relationship in support of H1b is that women report lower levels of positive HWS after becoming new mothers. Thus, women not only report greater levels of negative WHS and HWS, but they also experience lower levels of positive HWS. Most role enhancement literature documents positive outcomes for mothers who stay working, compared to mothers who do not work. But a comparison of working women who become mothers with working women who do not become

mothers indicates that taking on this dual work-home role responsibility may be somewhat disadvantageous for women, with both increased negative spillover and decreased positive spillover. While our findings do not contradict prior findings on women and multiple role engagement, they do indicate that efforts at documenting the benefits of multiple role engagement need to pay attention to the appropriate reference groups.

In contrast, men report significantly higher levels of positive WHS after becoming fathers, compared to men who do not become fathers, supporting hypothesis 2b – that gaining a role is associated with higher levels of positive spillover. Thus, for men becoming fathers, it is interesting to note that while they may experience increased levels of strain between their work and home roles, they might also feel that their work roles make them better able to be good fathers. This is evidence to support a more breadwinner model of fatherhood – having a job and a fulfilling work life may enhance a man's ability to feel they are being good parents. Finally, in contrast to some marital transitions literature, and also in support of hypothesis 2b, we find that gaining a household partner is associated with positive HWS for both men and women. Getting married is associated with significant increases in positive home to work spillover.

We find weak evidence to support that role accumulation is a symmetric process with respect to perceived spillover between work and home domains (H3-H4). For example, for the loss of a household partner, both men and women report significant decreases in negative WHS. Other coefficients for leaving roles are also negative for negative spillover, but do not reach significance. A key exception is for women who become parents to a young adult, as they report slightly increased levels of negative WHS. This might appear to be evidence in support of hypothesis 4a – that leaving a role is related to higher levels of negative spillover, and is suggestive of role enhancement processes. However, an alternative explanation is that mothers of

young adults might experience increased role strain when they attempt to combine employment with parenting a young adult, as they may still feel responsible for caring for their older children who are becoming adults themselves and thus changing the mother-child relationship. Finally, in terms of positive spillover, we find almost no support for hypotheses H3b and H4b. That is, leaving family roles is not strongly associated with positive WHS and HWS. The only exception is that men report higher levels of positive WHS after the loss of a household partner, supporting hypothesis 3b, and suggesting again that role strain processes are symmetric.

Our results do not support the concept of domain specificity with respect to transitions in family roles. Of the significant associations estimated from the multivariate models, eight of the statistically significant associations between family role transitions and perceived spillover were with WHS as compared to six associations with HWS. Changes in the home domain, with respect to transitions in family roles, are just as likely influence work to home spillover as compared to home to work spillover. Prior work examining domain specificity has documented that workplace characteristics such as job demand and supervisor support are more strongly related to levels of WHS, whereas home characteristics such as spouse support and ease of getting childcare are related to HWS. Our findings suggest that transitions in social roles, such as becoming a parent or becoming a spouse, do not operate in a similar, domain specific way. It is possible that the meaning people ascribe to specific work and home roles influences the direction towards which spillover is felt. Some might feel stronger devotion towards work, whereas others may feel stronger devotion towards home, which can influence how taking on an additional family role contributes to perceived spillover between work and home domains (Blair-Loy, 2003).

With regards to the gender moderation hypotheses (H6-H9), our results demonstrate that

while it is important to include men in the analyses of experiences at the work-home interface for within-gender comparisons, for the most part, there are few between-gender differences in the relationship between transitions in family roles and perceived spillover. We do find one statistically significant gender difference – women who become mothers report statistically significantly lower levels of positive HWS as compared to men who become fathers, providing evidence in support of hypothesis 6. While, broadly speaking, this supports the notion that men and women encounter transitions in family roles in similar ways, at least with respect to reports of perceived spillover, our findings should be interpreted with a slight caveat: While our analytic approach means that we estimate coefficients with the appropriate reference group (those at risk of a transition, but who do not undergo it), it also means that detecting significant gender differences could be difficult given the small number of gender-specific transitions observed in the data. Future work should utilize larger samples of men and women in order to better test gender moderation hypotheses at the work-home interface.

Additionally, we limit our sample to those who are report working for pay for at least 10 hours per week because perceived work-home spillover is only assessed among MIDUS respondents who work for pay. This means that we exclude women (and men) who leave the workforce when they encounter or anticipate encountering significant changes in their family lives, including transitions in parent and partner status. While this means we assess between-gender differences among similar groups of men and women (i.e., men and women who manage to take on multiple work-home roles) this does not account for major gender differences in employment decisions that are associated with family transitions. While many women now work with young children, or return to work within one year of childbirth (Han, Ruhm, Waldfogel and Washbrook 2008), it is still common for women to decrease their labor force participation, or

exit the labor force entirely, when they become mothers (Sanchez and Thomson 1997). In analyses not shown, we found that women who report high levels of perceived negative spillover at wave I, and gain a young child between waves I and II, are three times more likely than their male counterparts to leave the labor force, and thus leave our sample. Thus, our results demonstrate that among those who do combine work and home roles, men and women may not experience significantly different perceptions of work-home spillover. However, this does not mean that men and women have necessarily equitable experiences overall when attempting to combine work and home roles.

Our findings should be interpreted with a few limitations in mind. First, sampling and attrition due to non-response to MIDUS II could limit the generalizability of our findings to the general US population. Those who responded to the second wave of the MIDUS study were disproportionately white, female, married, have higher levels of educational attainment, and report significantly higher levels of negative spillover (Radler & Ryff, 2010). In order to gain the largest multi-wave analytic sample, we included all three sub-samples of the MIDUS in our analyses: the RDD sample, the sample of twins and siblings, and the oversample of the five metropolitan areas. Such a sampling design precludes the ability to calculate appropriate sampling weights, limiting generalizability. Additionally, the second wave of MIDUS collected information on age of all children, including children both in and out of the household, but did not collect information on whether children were co-resident or not. Thus we are able to gain a complete picture of the ages of respondents' children, but we cannot determine if they live in the house with the respondent or not. Parenting a co-resident adult child is a significantly different experience than parenting a child who lives away from home. If women experience role strain as their children age into adulthood, this experience could differ drastically for women who have

adult children in the home compared to mothers of children who live outside the household. We must therefore interpret our findings for parenting a young adult child conservatively, as role strain processes could be exacerbated for mothers parenting a non co-resident adult child. Finally, we limit our measurement of family role transitions to those that happen within 3 years of the MIDUS II data collection in order to ensure that reports of spillover can be related to recent family changes. However, with nearly 10 years of follow up between MIDUS I and II, it is certain that other respondents experienced transitions in the earlier part of the period between survey waves and are not captured in our estimates. Future studies of the relationship between family role changes and perceived spillover should use longitudinal data with shorter time intervals between waves in order to capture more transitions in family responsibilities.

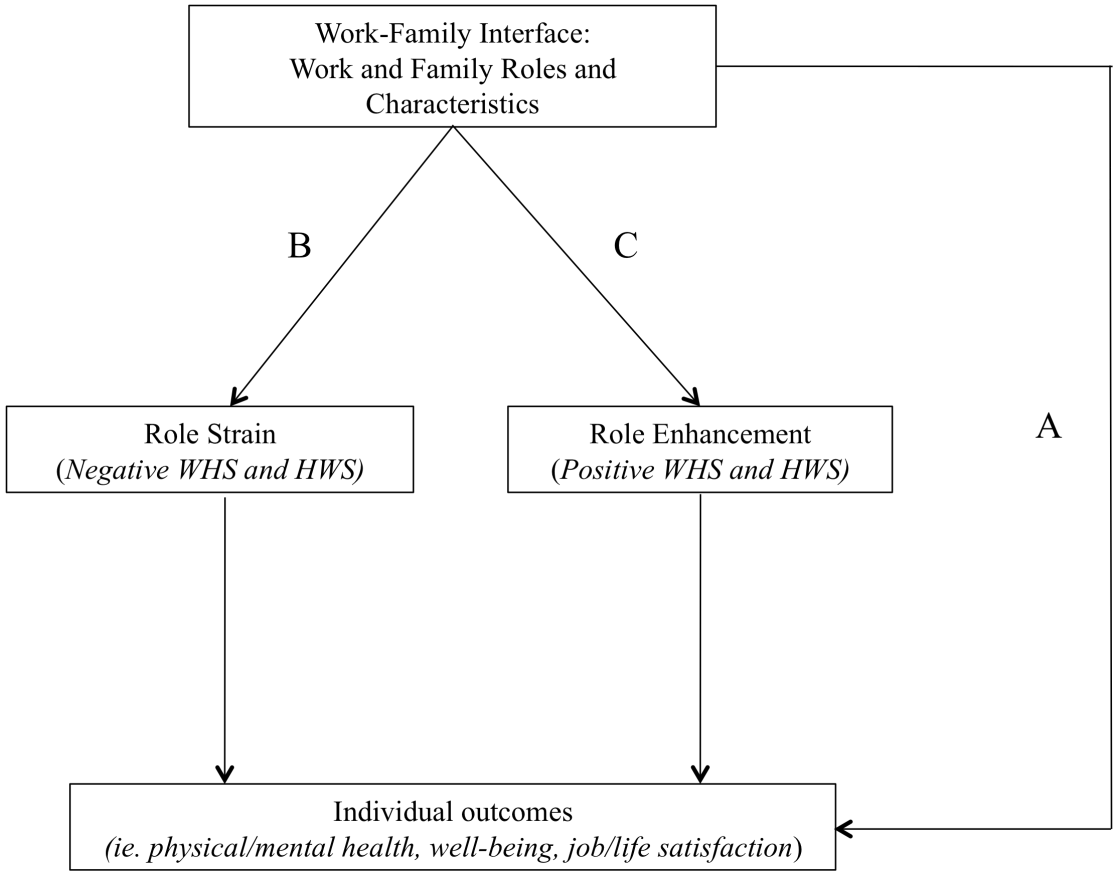
## CONCLUSION

Despite limitations, our study is, to our knowledge, the only study that relates transitions in family roles among working respondents to all four measures of perceived work-home spillover, providing novel evidence for both work-family and role theory literature. Based on our findings, we conclude that it is possible for both role strain and role enhancement to result as men and women encounter changes in their family role responsibilities across the life course. Prior work has found that combinations of role enhancement and role strain can lead to differences in reports on well-being. For example, one study shows that high levels of positive spillover may buffer the negative effects of negative spillover on depression and anxiety (Grzywacz & Bass, 2003). Thus, if a transition in family roles leads to both an increase in positive and negative spillover, such as becoming a new father, this may serve to mitigate the negative health consequences of multiple role engagement and allow individuals to reap the

benefits of role enhancement mechanisms. Other studies have developed a typology of positive and negative spillover, demonstrating that those who report high negative spillover and high positive spillover do not report significantly worse levels of psychological distress than those with low levels of negative spillover and high levels of positive spillover (Grzywacz, Butler, & Almeida, 2008; Tiedje et al., 1990). These studies demonstrate that perceptions of both positive and negative spillover can contribute independently to the well-being of individuals who take on work and home roles simultaneously, and should both be examined when studying the link between multiple work-home role engagement and well-being. Our findings would support more future work in this arena, documenting how role enhancement and role strain processes might interact to produce individual health and well-being outcomes.

Given the rising need for families to maintain dual incomes as well as care for their youngest and oldest members, men and women are likely to continue taking on roles in both work and home domains (Bianchi & Milkie, 2010). Our research demonstrates that it is important to consider both positive and negative consequences of such dual-role engagement to gain a better picture of the experience of combining paid employment with family responsibilities. It is also important to consider for whom – new mothers, new fathers, husbands/wives, and divorcees/widows – role strain and role enhancement might be important pathways to health and well-being. Developing such an understanding can help further our efforts to aid our paid employees, parents, and partners in decreasing strain between role responsibilities, and thus allowing the benefits of active engagement in work and home domains to accrue.

**Figure 2.1 Theoretical Framework based on Voydanoff (2002)**



## Table 2.1 Analytic sample characteristics, MIDUS I and II (N=1921)

*Those who do not have a minor child at W1*

| | Men | Women | Sig. Diff? |
|---|---|---|---|
| Age | 45.5 | 45.0 | |
| | (11.4) | (10.5) | |
| Log Income at W2 | 11.3 | 10.7 | *** |
| | (1.6) | (2.2) | |
| College-educated | 50.1% | 39.2% | *** |
| Non-hispanic Black | 2.1% | 3.1% | |
| Professional/Managerial occupation at W2 | 48.4% | 44.4% | |
| Part-time work at W2 | 22.7% | 30.9% | ** |
| N | 481 | 482 | |

*Those who do have a minor child at W1*

| | Men | Women | Sig. Diff? |
|---|---|---|---|
| Age | 40.1 | 38.9 | ** |
| | (6.6) | (6.7) | |
| Log Income at W2 | 11.4 | 11.1 | ** |
| | (1.2) | (2.1) | |
| College-educated | 47.2% | 34.2% | *** |
| Non-hispanic Black | 1.9% | 4.3% | * |
| Professional/Managerial occupation at W2 | 49.3% | 48.1% | |
| Part-time work at W2 | 6.6% | 27.8% | *** |
| N | 519 | 439 | |

*Those who do not have a HH partner at W1*

| | Men | Women | Sig. Diff? |
|---|---|---|---|
| Age | 40.5 | 42.7 | * |
| | (10.1) | (10.4) | |
| Log Income at W2 | 11.0 | 10.4 | ** |
| | (1.4) | (2.4) | |
| College-educated | 54.9% | 38.7% | *** |
| Non-hispanic Black | 3.1% | 4.8% | |
| Professional/Managerial occupation at W2 | 48.7% | 45.0% | |
| Part-time work at W2 | 17.1% | 24.9% | * |
| N | 193 | 269 | |

*Those who do have a HH partner at W1*

| | Men | Women | Sig. Diff? |
|---|---|---|---|
| Age | 43.2 | 41.9 | ** |
| | (9.4) | (8.9) | |
| Log Income at W2 | 11.4 | 11.1 | ** |
| | (1.4) | (2.1) | |
| College-educated | 47.1% | 36.0% | *** |
| Non-hispanic Black | 1.7% | 3.2% | + |
| Professional/Managerial occupation at W2 | 48.9% | 46.6% | |
| Part-time work at W2 | 13.6% | 31.3% | *** |
| N | 807 | 652 | |

*** p < 0.001, ** p<0.01, * p<0.05, + p<0.1

**Table 2.2 Percent of analytic sample experiencing family transitions, MIDUS I and II**

| | Men | Women |
|---|---|---|
| Become a new parent | 6.9% | 5.4% |
| Become a parent to a young adult | 42.2% | 39.0% |
| Gain a HH partner | 7.8% | 6.3% |
| Lose a HH partner | 3.6% | 4.6% |

**Table 2.3 Bivariate analyses of perceived spillover by family role transitions, by gender, MIDUS I and II**

**Among Men**

| | WFC | | FWC | | WFF | FWF | |
|---|---|---|---|---|---|---|---|
| Become a parent | 2.9 | *** | 2.5 | *** | 2.7 | 3.5 | |
| vs. Stay a non-parent (or parent a child 18+) | 2.5 | | 1.9 | | 2.7 | 3.5 | |
| Start parenting a young adult | 2.6 | | 2.1 | | 2.7 | 3.5 | |
| vs. Parent an adolescent, or children are 21+ | 2.6 | | 2.1 | | 2.7 | 3.5 | |
| Gain a HH partner | 2.9 | * | 2.2 | | 2.6 | 3.6 | * |
| vs. No HH Partner | 2.6 | | 2.0 | | 2.6 | 3.2 | |
| Lose a HH partner | 2.3 | * | 2.0 | | 2.9 | 3.5 | |
| vs. Have a HH partner | 2.6 | | 2.0 | | 2.7 | 3.6 | |

**Among Women**

| | WFC | | FWC | | WFF | FWF | |
|---|---|---|---|---|---|---|---|
| Become a parent | 2.9 | ** | 2.5 | *** | 2.8 | 3.2 | * |
| vs. Stay a non-parent (or parent a child 18+) | 2.5 | | 1.9 | | 2.7 | 3.6 | |
| Start parenting a young adult | 2.7 | | 2.2 | | 2.6 | 3.4 | |
| vs. Parent an adolescent, or children are 21+ | 2.6 | | 2.2 | | 2.7 | 3.4 | |
| Gain a HH partner | 2.8 | | 2.2 | | 2.8 | 3.8 | * |
| vs. No HH Partner | 2.6 | | 2.0 | | 2.6 | 3.3 | |
| Lose a HH partner | 2.4 | | 2.0 | | 2.8 | 3.4 | |
| vs. Have a HH partner | 2.6 | | 2.1 | | 2.7 | 3.5 | |

*** $p < 0.001$, ** $p<0.01$, * $p<0.05$, + $p<0.1$

**Table 2.4 OLS Regression results of perceived work-home and home-work spillover on family role transitions, MIDUS I and II**

New Parent

| | Men | | Women | | p-value for difference |
|---|---|---|---|---|---|
| Negative WHS | 0.168 | + | 0.216 | + | 0.571 |
| | 0.073 | | 0.087 | | |
| Negative HWS | 0.287 | * | 0.336 | * | 0.726 |
| | 0.029 | | 0.012 | | |
| Positive WHS | 0.213 | + | -0.054 | | 0.173 |
| | 0.086 | | 0.715 | | |
| Positive HWS | 0.123 | | -0.302 | + | 0.055 |
| | 0.349 | | 0.09 | | |
| N | 481 | | 482 | | |

New HH Partner

| | Men | | Women | | p-value for difference |
|---|---|---|---|---|---|
| Negative WHS | 0.193 | + | 0.035 | | 0.402 |
| | 0.07 | | 0.707 | | |
| Negative HWS | 0.057 | | 0.087 | | 0.874 |
| | 0.723 | | 0.355 | | |
| Positive WHS | -0.072 | | 0.119 | | 0.506 |
| | 0.735 | | 0.468 | | |
| Positive HWS | 0.352 | + | 0.487 | *** | 0.548 |
| | 0.054 | | 0 | | |
| N | 193 | | 269 | | |

Having a child age out of minor status

| | Men | | Women | | p-value for difference |
|---|---|---|---|---|---|
| Negative WHS | -0.016 | | 0.1 | + | 0.246 |
| | 0.724 | | 0.069 | | |
| Negative HWS | -0.045 | | -0.067 | | 0.596 |
| | 0.292 | | 0.21 | | |
| Positive WHS | 0.019 | | -0.025 | | 0.619 |
| | 0.764 | | 0.715 | | |
| Positive HWS | -0.004 | | 0.058 | | 0.477 |
| | 0.95 | | 0.391 | | |
| N | 519 | | 439 | | |

Loss of HH partner

| | Men | | Women | | p-value for difference |
|---|---|---|---|---|---|
| Negative WHS | -0.282 | * | -0.179 | * | 0.578 |
| | 0.011 | | 0.026 | | |
| Negative HWS | -0.085 | | -0.06 | | 0.964 |
| | 0.35 | | 0.426 | | |
| Positive WHS | 0.23 | + | 0.054 | | 0.478 |
| | 0.097 | | 0.675 | | |
| Positive HWS | -0.055 | | -0.067 | | 0.966 |
| | 0.714 | | 0.505 | | |
| N | 807 | | 652 | | |

*** p < 0.001, ** p<0.01, * p<0.05, + p<0.1

# CHAPTER 3

# COMBINING COMPETING DEVOTIONS: THE ROLE OF WORK, FAMILY, AND LIFESTYLE DEVOTIONS IN THE CAREER DECISIONS OF MEDICAL TRAINEES

## BACKGROUND AND MOTIVATION

Despite major advances by women into the paid labor force, differences between men's and women's labor market outcomes persist. Even though women have drastically increased their labor force participation compared to fifty years ago (Goldin 2006), particularly among married mothers, full-time working women earn only 80% of men's median weekly earnings, work fewer hours than men (36 compared to 40 hours per week), and comprise only a minor fraction of executive leadership (the esteemed "C-suite" – **C**hief Executive Officer (CEO), **C**hief Operating Officer (COO), etc.) in large business organizations, despite occupying more than 40% of all managerial positions in the United States (Bureau of Labor Statistics, 2014, Eagly and Carli 2007).

Continued gender disparities in occupational attainment underscore the need to understand the mechanisms underlying such inequities. A life course perspective suggests that such aggregate inequalities are the product of a series of turning points and decisions made across the life course that move men and women into and out of different work trajectories. In other words, gender segregation in the labor force occurs as the result of a cumulative process, whereby individual intentions and behavior at one point in time are not only contingent on prior

experiences leading up to that point, but also are made with an eye to expectations for future experiences (Moen and Sweet 2004). The life course perspective thus implies that developing a better understanding of the mechanisms underlying gender segregation in the workforce requires a sharper focus on key turning points, decisions, and transitions, throughout the formation of a career.

Not only is a focus on key turning points needed, but also, a better understanding of whether men and women approach such turning points in different ways is required. Most previous attempts to address this question use quantitative data and focus on the question of whether there are gender differences in preferences for certain job characteristics. For instance, some argue that differences in men's and women's earnings, hours worked for pay, and occupational choices are a result of women's preferences for different work-family role combinations (Hakim 2000; 2002). Others hypothesize that women tend to focus on more intrinsic motivations for jobs, such as autonomy or security, whereas men tend to focus on extrinsic rewards, such as pay and prestige (Johnson 2001). However, conceptualizing decisions as based exclusively on preferences ignores not only the way individual preferences are socially structured, but also the complex ways in which individual preferences may interact with social constraints over the life course to produce individual outcomes (e.g. Correll, Benard, and Paik 2007). Moreover, stark gender differences in job preferences lack strong empirical support, with the majority of studies finding few, if any, significant gender differences in job preferences (Johnson 2001; Tolbert and Moen 1998; Kilminster et al 2007; Ku 2011).

Importantly, a focus on potentially gendered preferences for work-related characteristics also ignores a complex interaction between work and family that individuals working for pay now constantly have to juggle. A singular focus on job preferences ignores the role that family-

related factors play in shaping how job choices or decisions are made. Moreover, even a simple division into "work" related factors or "family" related factors can be an inadequate model to explain the complex ways in which men and women now think about work and home responsibilities, and the calculus required to combine both roles in the work and home domains successfully (Blair-Loy 2003). The increase in women's labor force participation, coupled with the rise in dual-earner households, means that more men and women than before now juggle responsibilities as a worker, spouse, and parent. This raises the important question that is the focus of this study: How does the complex web of work and family roles, responsibilities, and desires shape the way men and women now make decisions about their careers? How are tradeoffs between work and home framed, and how might this influence men's and women's career trajectories differently?

While quantitative data are well-suited to documenting the magnitude of differences in women's and men's labor market outcomes at the aggregate level, qualitative data are better suited to untangling the various ways in which men and women understand and navigate their work decisions. Rich narrative data that tap into the intricacies of how men and women think about key decisions can better highlight how tradeoffs between work and home inherent in a decision are understood, exposing the salient factors and motivations behind a decision.

Important qualitative work has documented how schemas of devotion to work and family shape the way individuals make and understand important decisions (Blair-Loy 2003; Damaske 2011; Kaufman 2013). However, such work has largely examined samples of men or women, but not both, precluding the ability to compare the ways in which men and women might differently approach similar work decisions. Furthermore, past research is largely retrospective, collecting life histories from respondents to trace a narrative through decisions they have made in the past.

While such data are useful in understanding how respondents make sense of the decisions they have made, memory and retrospective reframing may obscure how exactly respondents were thinking about decisions *at the time they were made*, thus potentially missing important factors that influence such decisions. While such studies have provided a foundational understanding for how men and women understand and make decisions, a better approach to untangling motivations at key turning points is to sample respondents as they face these turning points.

Thus, to better understand how men and women make work decisions at key turning points in the career formation process, I interview a sample of medical students and residents at a time they were making important decisions about their future medical careers. I sample those medical students who are choosing their specialties and residency programs for further training. I also sample those medical residents who are applying for further fellowship training opportunities or to their first job. I sample equal numbers of men and women in order to make inferences about gender differences. To preview my findings, in examining these decisions and turning points, I find that medical trainees' decision-making processes, and how they understand their decisions, are strongly shaped by several cultural schemas. Here, I draw on recent research by work-family and gender scholars that examine schemas of devotion, such as devotion to work or to family, as culturally-constructed frameworks that organize one's social world, assign value and meaning to behavior, and imbue certain actions with a sense of morality (Blair-Loy 2003). I show that work decisions are not simply made with a consideration for work-specific preferences, but rather involve a complex calculus of both work and home factors. I show that the ability to fulfill or not fulfill several competing devotions plays a central role in how medical trainees make and understand their career decisions. Ultimately, these schemas help us better understand how work and home domains combine to shape workplace decisions, providing a window to a

key mechanism that produces gender inequalities in the broader labor market.

In the remainder of the paper, I first outline my rationale for the choice of medicine as a case to study decision-making across the career. Next, I describe the methods of data collection and analysis. Then, I develop the various cultural schemas evident in the medical trainees' narratives about their decisions, and the trainees' attempts to successfully or unsuccessfully combine devotions to competing cultural mandates. In this section I also pay particular attention to gender differences in both attributes of the devotion schemas, as well as strategies to combine them. I conclude by discussing the implications of these findings for furthering our understanding of how individuals experience and strategize the work-home nexus.

## THE CASE OF MEDICINE

As members of a highly specialized and elite profession, physicians comprise an ideal case study to examine questions about how men and women make major career decisions across stages of career formation. It has been argued that human agency is most visible to the social analyst when two criteria are fulfilled: that the agent is well-resourced, but also faces considerable social and cultural constraints (Sewell 1992, Blair-Loy 1999, 2003). Moreover, when such criteria are fulfilled, the interplay between structure and agency is also exposed for analysis (Giddens 1976; Sewell 1992). Medicine is an example of such an extreme case since medical trainees are highly resourced in terms of education and future income (and for some, family background), but face major constraints in their decisions surrounding work and family. Medical trainees are highly resourced as the result of their long training process, frequently having an abundance of career opportunities, are well-networked into a community of similarly educated peers, and can look forward to stable, well-earning employment. However, such

resources are the result of a highly structured training process, in which trainees must make decisions about work and family within the parameters of the medical environment.

As with all professions, becoming a doctor is the result of a highly specialized and long training process. During the premedical years, a student must cultivate a set of impressive extracurricular activities, succeed in the required premedical courses, as well as score well on the Medical College Admissions Test (MCAT). This is generally followed by four years of training in medical school where students take a combination of coursework as well as gain hands on clinical experience by rotating through different specialty clinics. Near the end of their medical school careers, they must choose a specialization – for example, those interested in surgery may opt for general surgery or choose a more specialized surgical specialty such as neurosurgery or orthopedic surgery. Those interested in primary care may opt for family medicine, pediatrics, or internal medicine, though each of these specialties also have further sub-specialization options. Choosing a specialty is not necessarily the final stop in training. For example, students choosing internal medicine then have the option to pursue cardiology or gastroenterology fellowships. Students choosing general surgery may opt for a fellowship in pediatric surgery or thoracic surgery. Even more primary-care based specialties have developed fellowship training programs. For example, family medicine residents can choose a fellowship in women's health, or pediatricians can choose to sub-specialize in pediatric cardiology, critical care, endocrinology, etc.

This timeline is well-known to all who want to enter the profession. All those who want to practice medicine know when they must choose a specialty, when they must interview for residencies, and how many years each specialty's residency training requires. It is within this structure that they must make not only important career decisions about the kind of medicine

they want to practice, but also personal decisions about how they might want to spend their time outside of work and whether or not they want to start families of their own. Thus, medical training presents a rare opportunity to study how highly resourced men and women make decisions about their work and home lives in a tightly structured environment.

The case of medical training also provides a unique methodological opportunity. If we are interested in variation in how people make decisions, we would want to sample a large number of the same type of decisions in order to understand how different people may approach the same decision in different ways. In a sense, this sampling strategy "controls for" or accounts for variation in types of decisions, in order to uncover other kinds of variation, such as by gender and life course stage, in how decisions are made. Medical training affords this methodological advantage since there are several key turning points at which medical trainees all make the same decisions. In particular, there are two specific moments at which physicians-in-training make two key career decisions: 1) at the end of their medical school careers, where they must choose their specialty and where they will complete residency training, and 2) at the end of their residency programs, where they must choose to apply for their first jobs or further sub-specialization and fellowship training. The choice of specialty and where they will train as residents represents the first crucial step in what kind of doctors they will become. Choosing a specialty not only means committing to an interest in a certain physiology, pathology, or patient population, but also may mean committing to a certain work environment (operating room vs. clinic, working in a team vs. working individually, working long uncontrollable hours vs. working in short shifts) as well as commitment to varying lengths of training. Thus, this decision will have long-term career *and* domestic life ramifications for students. The choice of applying for jobs or obtaining fellowship training represents the first decision physicians-in-training make as autonomous professional

workers. While residents are practicing physicians during their residency period, this first step outside of a training program represents their first decision as a fully licensed, autonomous practitioner. At this point, they choose the kinds of organizations in which they will practice (academic, community, private), the size of the healthcare organization or group practice in which they will work, and the costs and benefits of obtaining further training in a sub-specialty (length of training versus increase in income). This decision is thus the first decision that will shape the rest of the residents' professional lives. Thus, I use the case of medical training to uncover how men and women understand and evaluate their options at crucial turning points in the development of a career, providing a rare window into the mechanisms that can generate aggregate patterns of gender inequality in the labor market.

## METHODS AND RESEARCH DESIGN

To better understand how physicians-to-be make important career decisions during their training years, I conducted face-to-face, semi-structured interviews with 31 medical residents in their final year of training and 30 students in their final year of medical school (total N=61). I sampled broadly across specialties to cover a wide range of types of medicine that are practiced, as well evenly between men and women in order to uncover gender differences in the factors that matter for each decision. The distribution of my sample by gender and specialty can be seen in Table 3.1.[4] Data collection took place during between 2013-2014. Interviewees were recruited via an email sent to all students and residents in the final year of their stage of training, at a large

[4] As you can see from Table 3.1, the gender distribution of my sample is similar to the gender distribution by specialty in the larger resident and fellow workforce. I was more likely to sample close to national distributions of men and women for those specialties that had more women. I compare the distributions to the number of residency positions in the 2013 match, as well as the proportion of residents and fellows nationwide in 2010, as opposed to the greater physician workforce, to tap into current gender distributions among specialties. Due to the rapid entry of women into the medical workforce, the percentage of women in the entire physician workforce is particularly low in older cohorts of physicians, who entered the profession during a time when it was largely male-dominated.

medical school and affiliated hospital in the Midwest that I call Central University. I also posted flyers at the hospital's cafeteria with contact information for the study. The majority of my sample was recruited via email. Interviews on average lasted between one and two hours, with the longest interview lasting two hours and forty-eight minutes and the shortest interview lasting fifty minutes. Respondents were paid $50 for their time. Ethical approval was obtained from the Institutional Review Board at the author's institution.

[Table 3.1 about here]

The interview guide included questions concerning the interviewees' reasons for choosing medicine as a profession, for choosing their specific specialty, for the ranking of their residency programs, and for their decision to obtain further fellowship training or to apply for jobs. It aimed at unpacking all the facets of the decision-making process – who were the key people involved, what mattered most to an interviewee and what did not matter, what were surprising elements in the decision-making process, why they eventually made a particular decision, and how confident or certain they felt about their decision. The interview also asked about the respondent's training experience – whether and to what extent they experienced burnout, how many hours they worked, and their current work-home situation. The interview guide is attached in the Appendix. Interviewees also filled out a brief demographic survey which ascertained the respondent's age, race, partnership status, marriage/cohabitation length, and age of children (if any). Demographic and specialty characteristics of the interview sample can be seen in Table 3.2.

[Table 3.2 about here]

I aimed to collect narratives about these decisions during a period in which interviewees had given a lot of thought to what they might want for their futures, but before they knew the

outcomes of their decisions. Given the way medical training is structured, students and residents are constantly thinking about and planning for these two key decisions. The decision to sub-specialize in pediatric cardiology, for example, requires advanced planning since trainees need to complete rotations in cardiology units and ask for letters of recommendation from cardiology attending physicians. Thus the decision-making process could be drawn out over several years and culminates in highly intense application processes. As a result, the timing of the interviews was important – I wanted to talk to students and residents who were at the end of their decision-making process and who had given considerable thought to the kinds of careers they might desire, but before they knew the outcomes of efforts, so as to minimize post-hoc reconstructions of their decision making. For the medical student stage of training, I interviewed students who had submitted their rank order lists (ROL) of residency programs, but before they knew their match results. The National Residency Matching Process (NRMP) is a contractual process, which means that programs rank applicants and applicants rank programs, and a computer algorithm then takes both lists and matches applicants to programs. Once a match is made, an applicant is contractually obligated to that program, and the program is obligated to accept the student. As a result, students take great care in ranking their programs since the ordering of their list is their only opportunity to exercise any control over where they might go to further their training. It is thus an ideal time to get a sense of what factors are the most important to an applicant and what they are willing to sacrifice to achieve their desired goals.

I was able to sample medical students who had all ranked their residency programs, but had not found out where they were matched. There was more heterogeneity among residents in terms of where respondents were in their application processes. Job and fellowship program application timelines differ greatly by specialty – for example, many surgical sub-specialties

required applications from residents two years prior to the end of their residency training, while internal medicine fellowships were due only during the final year of training. Thus, while most of the residents in the sample were in the middle of their application process, I did interview a few residents who had already accepted or matched to their job or fellowship of choice.

All interviews were audio-recorded and then transcribed verbatim. Interviews were then coded using HyperResearch v.3.0.2. Throughout each interview I took handwritten notes about the interviewee's stories, and later transcribed and fleshed out these notes into two to three page memos about each respondent. These notes included observations about the respondent's mood, mannerisms, as well as any conversations we had after the tape recorder had been turned off. I also began to write thematic memos during the interview period. Given the short window of time that I had to conduct the interviews (due to the time sensitive nature of the match and application processes), coding and data analyses began after each interview period.

While my research design suggests a few hypotheses how decision-making may differ by gender and training stage, I approached the data with few theoretical preconceptions and allowed the data to naturally form thematic categories, borrowing elements of analysis motivated by grounded theory principles. While I did not set out to find devotion schemas (Blair-Loy 2003), these are what emerged when I began analyzing the data. Analyses began with a close reading of the transcripts, looking for patterns and trends in the data. At this stage, I utilized an open coding strategy, generating broad codes for basic categories and themes, such as "reasons for going into medicine", "reason for specialty choice", etc. I then proceeded to selective coding, going back and rereading passages that described the respondents' reasons for making certain decisions, to look for specific patterns in interviewee's explanations of the series of decisions they have made. It is at this stage I started to find various schemas respondents used to frame their decisions, and

began coding such passages as examples of "medical devotion schema", "family devotion schema", and "lifestyle". Finally I applied theoretical coding and pieced together the various codes regarding the schemas trainees were utilizing to describe their decisions. It was during this final process that the concept of "linking mechanisms" emerged as a way of describing how interviewees attempted to combine competing devotions with their decisions.

## CULTURAL SCHEMAS IN MEDICAL TRAINING

Similar to Blair-Loy's (2003) sample of women in finance, I find that medical trainees rely on several cultural schemas when making decisions about their choice of specialty, how to construct their rank order lists, and about which jobs or fellowship programs to pursue. For example, surgical training is well known to have the longest training period among all the specialties. For some, this is a necessary sacrifice in order to achieve the type of profession and career calling that they want, whereas for others, length of training alone is enough to rule out an entire class of surgically-related specialties. Whether or not length of training is perceived to be too long or too short is shaped by cultural schemas that attach value to how individuals should be spending their time and energy. Moreover, cultural schemas not only shape perceptions of job qualities that might be desirable, but also imbue these qualities with a sense of identity and an overarching meaning to life (Blair-Loy 2003). In the above example about length of training, in addition to assigning a value to certain lengths of training, cultural schemas allow medical trainees to see themselves as the "type of person" who enjoys challenges and long hours, or can persevere through adversity to get what they want. Thus, cultural schemas serve not only as frames to adjudicate between multiple outcomes of a decision, but are also employed to reinforce a sense of self.

Three different cultural schemas shape how medical students and residents make decisions. In a similar vein to Blair-Loy (2003), I call these schemas "devotions" because of the strong moral and emotional hold these ideas have over the people who deploy them. Rather than simply serving as "cognitive maps" or a "shared cultural model" that serve to organize the world, these ideas powerfully shape the way medical trainees place *value* in their work and how they spend their time, evoking strong emotional responses and a devotion to a specific way of living their lives (Sewell 1992; Blair-Loy 2003). I call these cultural schemas "medical devotion", "family devotion", and "lifestyle devotion". Medical devotion is a modified version of Blair-Loy's (2003) work devotion made applicable to the medical setting. I build on Blair-Loy's notion of family devotion by exploring whether men and women adhere to similar versions of such devotion. I also find a new cultural schema, a devotion to "lifestyle", or personal time spent in leisure or hobbies, which also shapes medical trainees' decisions.

### *Devotion to medicine*

When most medical students and residents talk about their reasons for choosing medicine as a profession, what emerges is a strong devotion to the ethos of being a professional healthcare provider - a strong devotion to the calling of medicine. While similar to work devotion in the sense that such an idea assigns a premium to unfettered commitment to paid labor (Blair-Loy 2003), for medical trainees this is not simply a case of working hard for the sake of working hard, and aiming to succeed in a competitive and hierarchical work environment. Rather, medical devotion codes extreme work commitment as a devotion to the impact medicine can have on patients in need. Thus, more than relishing long hours or the adrenaline of being at work and closing high-stakes deals, medical trainees speak with gusto about the privilege of being someone's doctor and being able to touch people's lives in an almost irreproducible way, as the

following OB/GYN resident describes:

> *I think what appeals to me the most is probably working with people and helping them in a tangible way. You know, going home at the end of the day and being able to say, I delivered five babies today, or, you know, you like actually actively change people's lives on a daily basis…Which is a pretty amazing thing that most careers don't offer. (Janet, resident, partnered, OB/GYN)*[5]

As Janet describes, as an obstetrician/gynecologist you "get" the chance to "deliver five babies" in a day, which few other professions allow you to experience, and this the aspect of medicine that drives many medical trainees to continue their training, even if arduous.

In fact, the difficulty of the job is a characteristic that is relished by the medically devoted, as taking care of sick patients is never an easy task. In fact, the medical devotion schema frames this tradeoff as a necessary evil, where physicians will almost always be tired as the result of doing all that they can for their patients, as the following internist notes:

> *The personal satisfaction that comes from going home, being tired and just like, you know, exhausted, but then saying, oh yeah, I did this for this person today, or you know, somebody left the hospital like way better than when they came in, way better shape, so definitely the personalized feeling that you get of knowing that you helped someone on a very individual and very personal level. (Peter, resident, partnered, internal medicine)*

Being exhausted from long hours and emotionally stressful situations is frequently mentioned in the same breath as being able to make an impact on those around you, signaling that a devotion to medicine codes stressful working experiences as a necessary part of being a successful doctor.

The medical devotion schema also frames the world of medicine as an environment that provides constant intellectual challenge. Opting for a career in medicine means that one will be asked to solve an endless number of puzzles, whether it be deducing from a series of symptoms the correct diagnosis and treatment, integrating new medical research into treatment regimes, or

[5] I use pseudonyms for all respondent quotations to protect respondent confidentiality. After each quotation, I list the respondent's current stage of medical training, their specialty, and their relationship status. A relationship status of "partnered" indicates that the respondent indicated they were in a relationship with someone at the time of the interview.

skillfully working with one's hands in a complicated operation. Therefore, a career in medicine is not a career in which one works routinely hard on rote tasks, but rather a career that promises constant challenge and continuous learning, as Craig, a medical student who is looking to match into internal medicine, says:

> *It's also incredibly important to me that it's very…mentally demanding, um, the complex decision making, um, the assessment, the kind of puzzle solving aspect of it. Um, and I do like that I'm going to have to work hard for my whole career, I do enjoy that (laughs). I usually get pretty bored when things are easy… (Craig, student, partnered, internal medicine)*

For this student, working hard does not simply mean putting in the hours, but it means being constantly challenged at work with mental puzzles that demand all of his time and energy. Notably, medical devotion spanned specialties – that is, while the above quote is taken from a medical student matching into internal medicine, a specialty known for attracting those who are interested in solving "puzzles", I found that even those going into the so-called "lifestyle specialties", specialties that not only have controllable schedules and shorter work hours, but also high incomes, such as anesthesia, dermatology, and radiology, expressed a desire to keep intellectual challenge in their work lives. Thus, medical devotion is a specific case of work devotion, where work commitment implies that the patient comes first, and that the mental and physical challenge and exhaustion are worth it in order to be a good physician.

It should be noted that almost all interviewees expressed some form of devotion to medicine. That is, men and women did not differ in their propensity to desire these aspects of medicine, and its tenets of hard and exhausting work and intellectual challenge. Both men and women seek a career in medicine due to a desire to help people with scientific and medical knowledge, and expect to have a hard, but rewarding career. This corroborates prior research that demonstrates minor gender differences in the reasons for choosing medicine as a profession (Ku

2011; Kilminster et al. 2007), and that overall, men's and women's preferences for a job (at least those who choose the medical profession as an occupation) exhibit only minor differences (Tolbert and Moen 1998). This is also further evidence that individual preferences are not a satisfactory explanation for persistent gender differences in labor market outcomes in the medical profession.

*Devotion to family: Traditional gender roles vs. Super dads*

Similar to what Blair-Loy (2003) finds among her sample of executive women, I also find evidence of a schema of family devotion in medical trainees' narratives. In contrast to medical devotion, which prioritizes patients first, family devotion prioritizes spending time with one's family and in particular, one's children and spouse. This does not necessarily imply that patients' well-being and safety are sacrificed for the sake of family. Rather, if given the choice, this schema mandates that individuals *modify* their work environments or choose specialties that allow them to devote more time and energy to their families. Efforts to achieve what one believes is an ideal family life shape how work decisions are made. For example, Ashley talks about her desire to emulate her parents' ability to take her and her brothers to athletic events when explaining her decision to go into pediatrics:

> *I think in my mind, I would like to have a family (laughs). One day. And not a family that is, you know, kind of having an absent mother. So I would like to have the schedule that allows me to like have random days off or get off early and be at soccer, you know, all of my brothers and I were big athletes and like my parents were always at our swim meets and our soccer games and their schedules afforded that…So in order to be a doctor and have a schedule that allows things like that…kind of like what I was used to growing up is kind of, in my mind, what like I wanted from a profession. (Ashley, student, partnered, pediatrics)*

One of the qualities of a profession that Ashley desires is flexibility in work schedules in order to be able to attend family events. This is not to say that Ashley wants to practice medicine in a haphazard manner, but rather that it is a priority for her to find a way to practice medicine in a

manner that allows her to be the kind of mother she wants to be.

A key aspect of the family devotion schema as described by Blair-Loy (2003) is a gendered division of labor where the woman is the primary caregiver of the family and the man is the primary breadwinner. That is, as a cultural schema, a devotion to family implies a certain gendered organization of the household where the woman is responsible (and best-suited) to taking care of children and keeping house, whereas the man's responsibility lies in financially supporting his family. In contrast, in my sample, I find that what it means to prioritize "family" above medical or work concerns takes two distinct forms, with regards to a gendered organization of labor.

In the first version, how men and women should spend their time with family is seen through the traditional gendered norms lens that Blair-Loy's family devotion schema prescribes. With this version of the devotion schema, men frequently mention financial responsibility in the same breath as family desires, whereas women mention the crucial role of mothers in the task of preserving the health and wellbeing of their children. Women thus adhere to the family devotion schema that Blair-Loy describes among her executive women, whereas the men fulfill the gendered counterpart – that being a family man means being able to provide for one's family. For example, when asked about whether or not they wanted kids, some men responded with a consideration about their financial position and when they might be financially ready to have children, as Michael notes:

> *Um, you know, it's only a factor in terms of Manhattan, where Manhattan is so goddamn expensive. And we'd love to live there, but it's so expensive and it's just like, it's like almost a deal breaker if you have kids. So that's the only place where it's like actually a major consideration. (Michael, resident, married, radiation oncology)*

When asked whether or not his desire for a family had any influence on where he worked, Michael notes that Manhattan is out of the picture due to its high cost of living, though both he

and his wife are originally being from New York City. In another case, Scott notes that while he and his wife want to have children, they are postponing having children at the moment because of a desire to not have student debt when they start a family:

> *I think that we would like to have kids at some point but what we would really like is for us to not be living on borrowed money during medical school – And extremely fixed income during residency – Um, and actually have a little bit of expendable income. (Scott, resident, married, emergency medicine)*

In contrast to male respondents, most women focused on when they might have the time to have children, thus adhering to the idea that becoming a mother requires a large amount of time, rather than financial stability. For instance, Adrienne cites a desire to have a family as one of the reasons she avoided specialties with particularly demanding training regimens and work hours, such as surgery, despite her bachelor's degree in physics and interest in orthopedics:

> *Surgery is also a big problem in that it's very difficult to work part-time because you need to be doing surgeries continuously to keep up your skill set. So I think that actually in the end ended up being the biggest problem with going into surgery, because I knew that I wanted the potential to work part-time if had children. (Adrienne, resident, female married with young children, pediatrics)*

Here we can see that Adrienne is adhering to a traditional version of family devotion in which the woman is responsible for childcare, and thus she knows that she cannot choose surgery as her specialty due to its long hours and inability to work part-time.

Another aspect of the family devotion schema is a belief in children's inherent attachment to and need for their mothers (Blair-Loy 2003). As Samantha notes:

> *And our daughter who's like two will be like…oh yeah, daddy's gone, he's at work. But like when I'm on my way to work, she's like it's a lot more, um, she's a lot more emotional when I come and go. Like he could be gone for days and she's like oh yeah, cool, daddy's back, you know, whereas like when I come back, she's like oh my god, where were you? And I don't know if it has to do with the fact that he was around more when she was younger, because my hours were the bad hours, or if it's just something about kids always attach more to their mom…I don't know. But she's like yeah, daddy work, cool, whatever (laughs) … mommy doesn't have quite that much of an out (laughs). (Samantha, resident, married with children, family medicine)*

For Samantha, it may be the case that her daughter does indeed have greater emotional attachment to her mother than her father. However, what is more interesting is that such an anecdote surfaced when the resident was explaining her desire to work part-time in order to spend more time with her children. The fact that she observed her daughter tending to be more emotional when she leaves the home for work, compared to when her husband leaves for work, and citing that maybe "it's just something about kids always attach more to their mom", demonstrates a belief that mothers are inherently closer to their children than fathers.

However, while there were certainly vestiges of adherence to a traditional gendered outlook on family responsibilities that are dictated by the family devotion schema, I found more instances of family devotion expressed by men and women in non-traditional ways. That is, both men and women spoke of family as being a priority for them, especially in contrast to the competing devotion to medicine, but did so in ways that did not emphasize as strongly a traditional gendered division of labor. This was more strongly driven by men who did not subscribe to the traditional notion of a breadwinning-only father. I found that some men talked about moving their work schedules and their work aspirations in order to make time for their families. That is, being a father and a husband required spending time and energy with one's family, as opposed to devoting all one's time to work and being the breadwinner. This is akin to the notion of a "superdad", or "fathers who significantly adjust their work in order to have more time with their families" (Kaufman 2013, p. 3). Kaufman notes that there can be significant variation in how men approach and solve work-family dilemmas. While more "neotraditional" men may simply accept their situation, framing the problem as something they cannot change, other men who may try to be "superdads" may adjust their jobs or work hours to attempt to spend more time with their families. Ravi is an example of a father attempting to live up to

superdad standards:

> *I think having a kid changed it, to be honest with you. It's like I can't – I've got to like be there for the kid, like I can't be spending like seven days out of a week like at work, or like – or even if I'm at home, if I'm like mentally always thinking about like research things, like I can't do that, like he needs – you know what I mean? Like I just – I think having the kid just like completely rearranged my priorities. Now I'm like I want to be really good at my job, but like I don't want my job to be the only thing, like it can't – I can't do that…I think maybe now I'm more like you know what, I don't even care like who I am, like I could just be a complete dud, I just want to like have time with my family and like whatever. (Ravi, resident, married with children, radiologist)*

Here, Ravi states that he "doesn't even care" about his job anymore (although it is clear throughout the interview that this remains an internal struggle), as long as he can spend time with his family, and in other parts of the interview, stated that he had accepted various job opportunities because they allowed him the time and the lifestyle to spend time with his wife and child more, as opposed to accepting more time-consuming and competitive positions. Such a quotation demonstrates that aspects of family devotion previously argued to be predominantly the responsibility of women are becoming more gender neutral as men actively reshape the meaning of being a good father.

Despite this evidence of change in gender norms, gender differences remain. As the above interviewee notes, many men seem to attribute this more gender-neutral attitude to a change of heart occurring after the birth of their first child. Men tend to express this "superdad" version of family devotion after they have a family, whereas women tend to express traditional family devotion across all life stages. However this framing did not always apply only to later work decisions (i.e., choice of workplace or sub-specialization): for men who had families while in medical school, this vision of family life influenced their choice of specialty, as Daryl, who went into physical medicine and rehabilitation, explains his choice in "giving up" neurosurgical training:

> *So, the neurosurgery wasn't hard to leave because I think at some point, I did realize that I was doing that to make a salary, but I was never going to be able to be with my kids…I looked at it and I go wait a minute, I've met a lot of people whose parents were surgeons and they don't want to have anything to do with it. I've got family members who are never with their kids or their parents were never around and they've chosen not to do it. Maybe letting go of this isn't that big a deal, and … I enjoyed my life, I mean, I enjoyed my kids, I'd had a second child during med school and I, so it wasn't as big a deal to let it go. Because I figured what was happening is I was evolving in my values. (Daryl, resident, married with children, physical medicine and rehabilitation)*

For Daryl, an evolution in his values towards work and towards family occurred when he was in medical school and had a second child. It led to him re-evaluate the perks of being in neurosurgery. He had originally considered this specialty both because his father had died of complications following a neurosurgery operation and because neurosurgery is an extremely prestigious and lucrative specialty. After having his second child in medical school, the resident re-evaluated a career in neurosurgery because of the potential damage to his relationship with his children, which he was not willing to risk. Thus, these two passages demonstrate that the family devotion schema no longer only implies a gendered division of labor, but that both men and women now seek meaning and fulfillment from spending time with family.

Similar to men recreating the family devotion schema to incorporate less traditionally-gendered approaches to family life, I also find that women were also relating to family devotion in less traditionally-gendered ways. Women who saw themselves as the primary breadwinners in their household utilized similar narratives to male breadwinners in discussing their decisions. For example, Lynn explains her reason for choosing medicine as a profession:

> *I knew kind of as I was making decisions in undergrad that I needed something that would support my husband and I because…I knew I would be most likely the primary income earner, um, so that factored into medicine. (Lynn, resident, married, anesthesiology)*

Like the men who spoke of financial security for their families, Lynn recognizes her earnings potential is much higher than her husband's, who is not a US citizen, did not have a college

degree, and whose job prospects were relatively limited. She later talks about how she really wanted to move back to home to be closer to her family and to be around her mother when she has children, but needed to postpone such a move in order to put herself in a better position to obtain a job in her hometown. Female breadwinners were a minority in the sample, and not all of them expressed family devotion in similar ways to this resident. However, the above quote does show that the meaning of being a breadwinner or a caregiver is slowly becoming decoupled from that of being a man and a woman, opening up the possibility of new avenues for change in the gendered organization of labor in the home. Thus, I find evidence that men and women are both actively trying to reshape the meaning of roles within the family and are thus developing cultural schemas of motherhood and fatherhood that can better adhere to these new ideas about what it means to be "family-devoted".

*Devotion to lifestyle*

In contrast to devotion to work and family, a third cultural schema shapes the way medical trainees think about their decisions – that of a devotion to "lifestyle". Rather than holding commitment to the medical world in the highest, unquestionable regard, or placing a premium on family roles and commitments, a devotion to having a "balanced lifestyle" means valuing the right mix of work time and personal time so as to allow for pursuing interests outside of the work domain. Similar to medical and family devotions, lifestyle devotion not only provides a framework through which medical trainees can evaluate the outcomes of their decisions, but it is intimately tied with trainees' sense of self, how they value spending their time, and ultimately their sense of self-identity. Lifestyle devotion calls into question the requirement of long hours and exhaustion necessary to practice good medicine inherent in the medical devotion schema. Instead of seeing long hours at the hospital as something that cannot be

compromised, a devotion to lifestyle regards being a physician as "just another job" which should not preclude the ability to find self-fulfillment in other personal or leisure activities. For example, Yen-ling explains why she chose dermatology:

> *I guess it goes back to lifestyles. Like, you know, can I see myself being in the OR at 10:00 at night and really, really enjoy this? And like, I don't think I like it that much. Um, and then, you know, like for OB it's like, you know, there are still attendings who are in their 50s who stay the night in the hospital. And I'm like, well, that stinks. (laughs) (Yen-ling, resident, partnered, dermatology)*

In contrast to medical devotion, which frames long hours and exhaustion as a necessary component of being a good doctor, Yen-ling does not place the same value and priority on spending long hours in the hospital. As she later notes:

> *Like, you know, I really enjoy traveling, and, you know (sighs) just -- you know, my fiancé and I, we really enjoy like being outdoors, and like taking trips, and just like hanging out at home, going out on weekends, like hanging out with our dog and stuff. You know, I -- I like medicine a lot. But I don't think that -- You know, there are some people who just make it like their whole lives. I'm not one of those people. I'm like, yeah, you know, I -- I really like being in the clinic, when I'm in the clinic. When I'm done, I want to not have to think about a lot of things, and I want to be able to have, you know, weekends to myself to kind of do my other hobbies.*

Similar to how others used the lifestyle devotion schema, Yen-ling values her time in the clinic and her job as a physician, but places higher priority on being able to come home and participate in activities that she and her fiancé personally enjoy doing.

More than just simply a preference for free time, the lifestyle devotion schema is understood as an inseparable part of one's personality and of one's self-identity. As Ravi notes:

> *My personality type would not fit with that because I would just be too bummed out that like I was not seeing my wife every single day – you know what I mean? Like I wasn't thinking of – she wasn't my wife at the time and I didn't have a kid at the time, but even then, I was like I still like to play music… there's like 50 other trillion things in life that I still want to (do). (Ravi, resident, married with children, radiologist)*

Ravi notes that his "personality type" was ill-suited for the long hours required by some more intense specialties such as internal medicine or any surgical sub-specialties in explaining his

choice to go into radiology[6]. Similar to the Yen-ling saying that she was just "not one of those people" who were willing to make medicine "their whole lives", Ravi also understands prioritizing lifestyle as an inherent personality or a key component to one's sense of self. It should be noted that while both quotes used in this section reflect the thoughts of a radiologist and a dermatologist – two "lifestyle" specialties – desire to have a more of a personal life, and to maintain interests outside of medicine, were laced through medical trainees' narratives who had chosen other specialties as well.

## HAVING IT ALL:
## HOW MEDICAL TRAINEES ATTEMPT TO FULFILL MULTIPLE SCHEMAS

Not only do medical trainees adhere to cultural schemas of medical, family, and lifestyle devotion to understand what is worthy of their time and energy, but when constructing narratives surrounding reasons for their decisions, trainees also frequently attempt to "have it all" – that is they attempt to combine seemingly competing devotions into one narrative explaining why they made certain decisions. As mentioned, medical training occurs in a highly structured training environment, in which trainees rarely have the opportunity to exercise complete agency. These specific decisions points, the choice of specialty and location of residency training, and the choice of sub-specialization or getting a first job, are important moments in which medical students and residents are given some form of control over their current and future work and home lives. Given such a rare opportunity, it is not hard to imagine why many attempt to make a

[6] Radiology is one of the so-called "lifestyle" specialties – specialties that offer more schedule control, but also highly lucrative salaries that can finance a better lifestyle. When asked about income and income growth, many respondents admitted to income being a "consideration" but certainly not a driving factor behind the decision to go into medicine, citing that the profession of medicine moving forward can no longer expect to earn the salaries of physicians in the past. Many medical trainees expect to be well-compensated for their work, but highly lucrative salaries are no longer the driving force behind their decisions, given the long training periods and sacrifices that need to be made along the way.

decision that could simultaneously allow them to adhere to multiple devotions. The modern narrative of "having it all" is so pervasive among this generation of workers that many students and residents sought to construct narratives that would satisfy multiple cultural schemas.

These schemas are, by definition, conflicting, or competing devotions. The medical devotion schema de-prioritizes home life, and prioritizes the profession of medicine, whereas both the family and lifestyle devotion schemas prioritize family and personal lives over a profession that could easily consume all of one's time and energy. Thus, in order to satisfactorily "combine" these devotions, medical trainees use what I call "linking mechanisms" to explain how their decisions fulfill multiple devotions. What I mean by "linking mechanisms" is that medical trainees rely on a third "rationale" that effectively ties or links two seemingly competing devotions within the same narrative, framing the respondent as fulfilling multiple devotions. I group these mechanisms into two broad categories: In the first, medical trainees describe their decisions as successful attempts to integrate two different devotions. Some saw the decisions that they made to be fulfilling both a work and family devotion, whereas others combined a medical devotion with a desire to have a more manageable lifestyle. These narratives can be seen as relative success stories – medical trainees feel that they have made decisions that fulfill tenets of two competing devotions, seeing themselves as either successful physicians who are also able to fulfill their desire to be a committed family member, or as successful physicians who manage to maintain a "healthy and balanced" lifestyle.

I also find a second set of mechanisms that are decidedly less optimistic. In this category, medical trainees who attempt to fulfill multiple devotions find that the options presented before them do not allow them to do so. Some then develop a narrative of "sacrifice" – allowing one type of devotion to guide their decision, despite their desire to also incorporate the other. I

consider this a linking mechanism, even though the decision is made in favor of only one devotion, because characterizing such a decision as a "sacrifice" is a way for individuals to reconcile the existence of both devotions, and acknowledge that both devotions are important to them, while still being able to make a decision and move forward.

The final linking mechanism is characterizing decisions as being made for "logistical" reasons. These are situations in which the respondent is unable to satisfactorily fulfill any of the devotions (medical, family, or lifestyle), and has to resort to constructing explanations that rely on logistical reasons, such as timing or what "makes sense", to resolve the inability to obtain an acceptable, or ideal outcome. Both framing the decision as a "sacrifice" or as something that is "logistical" are strategies through which respondents can make sense of the fact that they are deciding on a course of action that brings them no nearer to the work or home life to which they had originally aspired. These narratives are emotionally fraught, laced with confusion or angst at the inability to adhere to a devotion schema, speaking to the powerful hold that these schemas have over the medical trainees' moral and emotional worldviews.

*Having it all – combining work and family devotions*

The first kind of linking mechanism combines both work and family devotions. For example, Adam, who is entering a one-year fellowship in abdominal MRI radiology, notes that he chose the fellowship at the institution at which he did his residency, rather than move to another institution, because it was *both* a sound career choice *as well as* a sound family choice. His narrative of his work decisions illustrates the extent to which his devotions to work and family were tightly interwoven:

> *You know, I like -- I like MRI. And then I chose to stay here, A, because it's actually a very good program. It's one of the best in the country, and then B, to go to a place just for a year, and then move again potentially to find another academic job, it just seemed pointless with a family. (Adam, resident, married with children, radiology)*

The two reasons why Adam made such a decision was that the fellowship program was one of the "best in the country", and it allowed his family some stability. He goes on to note how he actually would have preferred going to a different institution for fellowship training were he single, as doing so could allow him to build work networks and gain additional experience at a different hospital. However, having to sell his house, and move his young children as well as his wife, who was also in the midst of her own career decisions, just seemed "pointless". Instead he arrived at the solution of taking an internal fellowship, and framed it as a way to fulfill both his work devotion as well as his family devotion.

In another example, Ashley, who is looking to match into pediatrics, also makes a similar link between work devotion and family devotion when she explains the role her boyfriend played in her choice of residency program:

> *It's hard not to like, have something play a role. So I think Central U automatically got a bonus point …But, that's all it was, you know? It also got a bonus point for me really liking the residents and it got a bonus point for having a beautiful hospital …And it got a bonus point for having a lot of like really cool attendings. And all these other programs got certain number of bonus points as well but Central's added up and Central beat all these other programs by more than just one point. So I knew it wasn't just him. (Ashley, student, partnered, pediatrics)*

Here, Ashley describes the fact that her boyfriend, who recently found a job near Central University, contributed a "bonus point" towards the pediatric training program at her medical school institution, but only one bonus point, whereas other aspects of the program she had previously described, such as a dedicated children's hospital with state-of-the-art facilities, also contributed points to the institution's overall "score". This framing allowed her to say that her choice in ranking Central University first for residency satisfied not only her desire to be in a competitive and top-notch training facility, but also her desire to remain close to her serious boyfriend and maintain that aspect of her personal life. Note that both Ashley and Adam use a

kind of "list" language to attribute equal footing to the work and family factors that shaped each decision, with the radiologist saying "A" and "B", and the pediatrician using a "point system" to give such factors equal weighting. This further shows how medical trainees attempted to combine devotions in these decisions, noting how different work and home factors contributed equally to the decision, equally satisfying both devotions.

*Combining lifestyle with medical/family*

Another way in which medical trainees combined devotions was through combining either medical or family devotion schemas with the lifestyle devotion schema. For example, Josh, who is hoping to match into general surgery, describes how he reached his decision to rank one program over another:

> *So I had to talk to a few faculty members before I was convinced that they're sort of on equal footing… And I met with the chair of the surgery department here and he told me he thought they were, you know, basically on equal footing. Um, and the residents at [the other program] said the same thing. They thought they're as good as anywhere else in the country, they just don't, the reputation doesn't exist for whatever reason….and I think I decided that that doesn't matter. I don't really care…about the reputation as long as I can get good training and get whatever fellowship I want afterwards...but I decided that that wasn't a determining factor between the two…I'd rather live in Wisconsin*[7]*. (Josh, student, surgery, single)*

Josh describes going out of his way to make sure that both programs were on "equal footing" in terms of the quality of surgical training, meeting with the chair of his surgery department as well as making special effort to ask residents in one of the programs their opinions. He is particularly concerned with establishing for himself that the programs were of equal caliber, so as to remain devoted to the idea that medical training requires a commitment to being in a top-notch, competitive, and well-regarded program. However, his desire to also have a better lifestyle and to live in a town similar to the place that he went to for medical school also guided his decision-

[7] While the interviewee originally stated the program names in the original quote, I've changed the programs to the states in which they were located in order to protect respondent confidentiality.

making. Thus, he links the two devotions together, saying that on the one hand, he made sure that they were on par, but on the other hand, he "didn't really care" about the reputation, and it no longer was a "determining factor" between the two options, leading him to rank the program in Wisconsin over the other program he was considering.

Similar to single devotion schemas, linking two different schemas together can be inseparable from aspects of trainees' personalities and senses of self. As Alice, who is hoping to match into otolaryngology, remarks when describing her decision to rank a newer program with a riskier reputation over a program with a more well-established reputation:

> *This really surprised me because I think I've been kind of, you know, with undergrad, I think I have been reputation-driven a little bit with the reputation of school and I kind of like this about myself, that these (points to other highly ranked programs on a piece of paper in front of her) aren't the five on the very top….Because I think it showed that I was actually evaluating the school for how…you know, how I thought it was and how happy I thought I would be there. And like I said, I mean, yes, this isn't a top, top program but…I still feel like I would have every option open to me at the end of residency. (Alice, student, engaged, otolaryngology (ENT))*

Alice notes that she has always seen herself as someone who was "reputation driven" but was pleased with this new aspect of herself that became evident in the way she ranked her residency programs. She notes that her rank order list is evidence that she is now prioritizing how "happy" she thought she would be in a program. Notably, she concludes that despite recognizing a desire to have a good lifestyle, an important factor was still having "every option open" to her at the end of residency, demonstrating an adherence to medical devotion, while also fulfilling a devotion to lifestyle.

While the majority of this kind of linking mechanism combined a devotion to medicine in with a devotion to lifestyle, I did find limited evidence that some trainees are attempting to combine lifestyle and family devotions. For example, the following quote is taken from a longer explanation of how Samantha would handle shortened work hours at her clinic with reference to

picking up her children from daycare:

> *I think the perfect mix is to work some and to see your kids. I think it's good for them to go to daycare, um, and so if there's a day that I was supposed to be assigned to some clinic or whatever and I go there and it's cancelled, I'll pick our kids up earlier, but I don't go straight to the daycare. I'll go home, get some emailing and like some stuff done, and then I'll go get them…Like I value the independent adult time that I have when they're at daycare and like I don't have a clinical responsibility, but, I still will go there early. (Samantha, resident, married with child, family medicine)*

Here, Samantha emphasizes that she still would rather pick her children up early from daycare if she had the chance (in contrast, she later notes that her husband would probably stay the entire time at work, finding other work commitments to fulfill before picking up their kids), but that she would only do so after she had the opportunity to use the newly freed time for her own personal use – catching up on email or getting other things done. This represents an effort to utilize the lifestyle devotion schema to place limits on the family devotion schema, as she notes that she "values independent adult time" despite in other parts of the interview stating that she felt like children need their mothers around, a key component of the family devotion schema.

*Sacrificing devotions*

While some trainees were able to either combine or modify devotion schemas to fit together with a single decision, others were not so lucky. For example, Adrienne describes her decision to delay or possibly forego fellowship training, and to instead take a part-time position as a pediatrician on night shift in the neo-natal intensive care unit (NICU) a few weekends a month in order to care for her young children as well as wait for her husband, who was seeking a neurology fellowship, to find out where he matched:

> *The hardest part's knowing that there's a job out there that I really love and I like as much as I like being at home and not pursuing it and going to something that I like less in order to get the better hours and be able to stay home with my family…It's easier the longer that I'm away from the neonatal ICU. Because, I guess the memory of how much you like it fades with time, you know, and I just (laughs) sit and listen to my family and be content with what I have. And I really do, like I really enjoy being at home too.*

*But it's definitely hard. (Adrienne, resident, married with children, pediatrician)*

While her future job involved her working in the NICU, Adrienne's new position would be at a much more reduced level than what she could have gotten if she had pursued fellowship training as a critical care pediatrician. Laced throughout Adrienne's account of her recent decision-making process was a constant movement back and forth between her aspirations to be a fellowship-trained pediatrician specializing in the care of premature babies in the NICU and her perceived obligations to her children and to prioritize her husband's career. It was clear that this resident highly valued being medically devoted as well as being family devoted. She characterized her early foray into medicine as wanting to be challenged with intellectual material (hence a choice of physics as an undergraduate major) and spoke fondly of an initial interest in orthopedic surgery. However, she also noted that she would always put family first, before her job. Her marriage to another doctor, and one in a more competitive specialty than hers, means that there were few options that could adequately fulfill both her devotion to medicine and to her family. Thus, the story that she now tells is one of sacrifice – sacrificing her initial medical devotion in favor of fulfilling her devotion to her family.

Sacrificing aspects of one's professional career in favor of one's family was not a decision made exclusively by women. There were a few men (though a minority) who also put themselves in professionally precarious situations in order to fulfill a devotion to their families. For example, Ben, a pediatrician who wanted to become a pediatric cardiologist – an incredibly competitive sub-specialty that also utilizes a match process to match residents into programs - describes how he initially ranked seven pediatric cardiology programs, and then at the last minute, changed it to two programs for the sake of his family:

> *Actually the last second, I ended up changing my rank list from seven places to two, literally like five minutes before it was due….that was my decision and my fiancée didn't*

> *tell me to do that, but I just realized that it would not be a healthy relationship for three or four years living that far away. Because she's busy – Because she would have to be here with her child – She couldn't move, so we'd live in two households for four years and that would just have been awful….I just decided there's no way. There's no way I'm going to move that far away. (Ben, resident, engaged with a child, pediatrician)*

Ben was engaged to a woman who had a child from a previous marriage, and child custody laws stated that his fiancé and future stepchild could not leave the state in which they were residing. Initially he considered programs within a three to four hour driving distance radius. However, at the last possible moment, he changed his list from seven to the two programs that were located within the state in order to be with his family, exposing his professional career to serious risk since cardiology positions are extremely difficult to obtain. However, he was willing to make such a sacrifice since he decided that there was just "no way" he could move that far away from the most important people in his personal life.

*The power of logistical reasoning*

The last linking mechanism that medical trainees used was a rationale that relied on "logistics" – such as choosing to do something because it presented favorable timing, or it just simply "made more sense". In these situations, students and residents had few options available to achieve an ideal solution that would allow them to fulfill the roles and responsibilities that were most important to them. Students and residents used the rationale of logistics in order to mask the limited options they had to move forward. There seemed to be a sense that if one recognized one's inability to fulfill competing devotions, one could no longer think of oneself as being medically, family, or lifestyle devoted. Thus, in order to avoid such a recognition, the notion of making logistical sense was employed to reason through one's limited options. For example, Katelyn first describes her thoughts about the kind of physician she envisions herself to be, as well as the kind of mother and wife she wants to be:

> *When I'm in the hospital, I want to be kind of an old grey hair. I just get really enthused about folks that are about to put their patients together in complex ways and really devote themselves to patient care. And then when I'm out of the hospital, I feel a little torn because I have a lot of hobbies that I enjoy, I have an amazing marriage that I'm trying to, you know, nurture, and then I have a new baby, um, which is incredible and life changing. And so I think I definitely feel pulled in a lot of different directions. (Katelyn, resident, married with young child, medicine/pediatrics)*

Both the medical and family devotion schemas are apparent in this passage, as Katelyn describes wanting to be an "old grey hair" while in the hospital, referencing a stereotype of older male physicians who were trained and practiced during a time when medicine was dominated by men who could commit their entire lives to the profession. But outside the hospital she describes a desire to nurture her relationship with her husband and her newborn child. Later in the interview, she explains her decision to apply for hospitalist positions in a hospital close to her family:

> *I'm applying for a job. So I probably would have applied for fellowship if I hadn't had my son…I was thinking about pulmonary and critical care medicine, which is an adult sub-specialty and it's an additional three years. And they're kind of hard three years, it's not like a cushy sub-specialty…a large part of the training is in the ICU setting, so it's really being an intensivist, someone that's dealing with patients that are very critically ill, mechanically ventilated…Um, so my husband is in medical school. He'll be applying for residency this year as well, and so the thought of him being an intern and me being a first-year fellow, which is when you have the bulk of your clinical responsibilities in fellowship, and having a young child – just seemed ridiculous.*

Her decision here is framed as a logistical decision that prevents something completely "ridiculous" such as her and her husband simultaneously coping with intense professional responsibilities in the hospital while having a young child in the house. To be clear, a first year intern and first year fellow household with a young child is objectively a tough and perhaps even "ridiculous" work-family situation. My point is not to argue that such a situation should have been considered more strongly, but rather to suggest that the respondent applied the rationale of avoiding such a situation to explain her decision. She used this linking mechanism of logistical reasoning, rather than saying that she was ready to give up her aspirations to be an "old grey hair"

in the hospital (being medically-devoted), or stating that she believed being available for her husband and her young child were more important than her training (being family-devoted).

Obtaining the right timing for certain work and life events is another way respondents applied the logistic linking mechanism. For example, Melissa describes her reason for taking a one-year medical education fellowship in the same hospital in which she trained as a resident:

> *I think at this point, it really is a holding pattern. Like any way you look at it, I'm in a holding pattern right now, and I can't actually really start my career for another two years, which is frustrating, because I like -- I fast forwarded through undergrad so that I'd have more time and a career, but then -- and then I got married to a guy who was two years behind me. So I should have thought about that when I said yes. (laughs) (Melissa, resident, married, family medicine)*

What she is describing as a "holding pattern" is her decision to stay and wait for her husband to complete internal medicine residency at a nearby hospital despite her strong desire to leave the state for training opportunities elsewhere. She also notes that she can't start a family yet given that her husband is still in residency and the two of them have not been able to live in the same city for the entirety of their training, and she'd like for them to enjoy married life together for a few years before starting a family. (Elsewhere she notes that she's ready to start a family and plans on working part-time when she has children). Thus, she's not able to fulfill either her devotion to medicine or her devotion to family and has constructed a "holding pattern" as she waits for her husband to align timelines. Seeing her decision as a holding pattern, a logistical decision in order to align timelines, allows this respondent to still adhere to the medical and family devotions, but also understand that her current circumstances means that she cannot find an ideal solution to her situation.

## LIMITATIONS

As is the case with qualitative studies, the tradeoff between rich data on a specific case

study is limited generalizability to the overall population. First, my findings result from analyses of a very specialized and highly privileged profession. Thus, the exact constraints on decision-making may look different in lower-skilled or lower-paying occupations. It is possible that similar cultural schemas exist in different occupations, but the salience of conflict between work and home may be more diluted (Blair-Loy 2003). Alternatively, work devotion in less prestigious occupations may assume different forms, and work may serve as more a haven when family lives are less manageable (Hochschild 1997; Damaske et al. 2014a; Gerstel and Clawson 2015). Moreover, since this was a small sample of 61 students and residents at a single institution, it may not even be representative of the medical trainee population as a whole. For example, while I made a concerted effort to recruit female general surgeons, there were only a handful that were eligible for the study, and even a special email to all of them elicited no response. It is more than likely that the pressures of being a woman in surgery limited their time available to participate in the study. Those who were able to participate in my study were students and trainees with admittedly "more free time" on their hands. Efforts to minimize such selection into the sample included a generous interview incentive as well as endorsement from the training institution.

It is possible that my sample may have included participants who were especially keen on discussing a particularly conflicted decision, and that the conflict between work and home was more salient in my interviewees than in the general medical population. Efforts to minimize this kind of selection included wording on the recruitment documents that broadly elicited interest in "Decision-making" rather than specifically work and home situations. Finally it is important to recognize that the study was conducted at one specific training institution, and that institution-specific characteristics may influence the experiences of the medical trainees. Central University

is a highly selective and prestigious medical school and its affiliated hospitals house a number of competitive residency programs. Thus, the medical trainees in this sample are not only some of the most competitive and potentially ambitious medical trainees, but they are also given access to a wealth of resources that students and residents in other programs may not have access to. Future work should attempt to collect data from multiple organizations to assess the influence of organizational or institutional policies on how medical trainees make decisions.

## DISCUSSION AND CONCLUSIONS

Medical trainees' narratives surrounding key work decisions throughout the course of preparing for a career in medicine provide an important window into how men and women make work decisions. My findings make several contributions to our understanding of gender differences at different turning points in the process of career formation. First, I find that solely focusing on differences in job preferences to explain gender differences in labor market outcomes does not capture the complexity of work and home factors that shape decisions at the work-home interface. As other observers have noted, (e.g., Blair-Loy), cultural schemas of devotion that dictate what is worthy of one's time and organize key components of a person's identity, influence the ways in which men and women understand and assign meaning to the tradeoffs inherent in their decisions. Competing devotions to work and home shape what is important to the trainees, as well as what are deemed worthy or unworthy tradeoffs.

Building on Blair-Loy's (2003) work, another contribution I make is developing the notion of "lifestyle devotion", a cultural schema of devotion that interacts with schemas of medical and family devotion. Thus, decisions made across the medical career are not shaped by a simple duality between work and family, but rather are also influenced by a desire to have a

better, and more manageable lifestyle. Prior research in medical education has also noted that a preference for certain lifestyles associated with specific specialties (such as the R.O.A.D specialties (radiology, ophthalmology, anesthesia, and dermatology)) has influenced how medical students are making decisions about which specialty to choose (DeZee et al, 2013; Dorsey et al., 2003). I build on this literature by demonstrating that many students, and not just the students who are considering specific specialties, are taking lifestyle into consideration. I also demonstrate that such a decision is not merely an individual-level preference, but rather is a cultural schema that assigns value and a sense of identity to specific actions and behaviors for medical trainees.

There are two reasons why this devotion schema may have been more apparent in my data than prior studies. It is possible that because my sample is considerably younger than Blair-Loy's sample (average of 28 years old versus 36-60 years old in Blair-Loy (2003)), and involved more respondents who were single or were not yet married, I was able to observe more instances of the lifestyle devotion schema being used to explain certain decisions. It is possible that prior to getting married or having children, a consideration of a manageable lifestyle plays a larger role, compared to after such important family transitions. In other words, this could represent an "age effect". This speaks to the importance of studying different life course stages when analyzing the relevant motivations for key work-home decisions. Alternatively, what I observe could also be a "cohort" effect. Rather than a desire for a better lifestyle being something related to a normative life course stage, it is possible that such devotion is emerging due to changes in the preferences among recent generations of workers who no longer want to be completely work-devoted. Recent research in organizational psychology has begun to document how recent generations of young workers, compared to older generations of similarly-aged workers, express

a higher preference for leisure time, and a lower sense of work centrality (Twenge et al. 2010; Sharabi 2014). I cannot disentangle age and cohort effects with my cross-sectional data, but these findings suggest that pursuing research questions regarding the existence of lifestyle devotions with longitudinal data could be fruitful.

Moreover, medical, family and lifestyle devotions are not related to decisions made for work, family, or lifestyle in simple, linear ways. While some decisions within the medical professionalization process are shaped by one devotion, others are opportunities to combine competing devotions, taking advantage of the little latitude available during a highly-structured training process to achieve multiple goals and fulfill important emotional and valued responsibilities within the work and home domains. To clarify, Blair-Loy (2003) categorizes her respondents into work-devoted and family-devoted women, based on their decision to work or stay at home. I find that there are additional categories of people defined by how they might attempt to combine competing devotions, even if their eventual decision fulfills only one domain's promises. This pattern is similar to other recent findings that demonstrate that simply sorting women into "work-devoted" or "family-devoted" categories does a poor job at explaining their decisions within work and home domains. Such work notes that changing the analytic category to the underlying strategies or logic used to explain various work-home strategies is a promising research avenue (Gersick 2013).

This departure from other qualitative work examining similar themes (Blair-Loy 2003, Damaske et al. 2014b; Kaufman 2013) might be related to a difference in methodological design. This prior work utilizes life history interviews that require respondents to explain a series of events retrospectively, which might create data in the form of more cohesive narratives about one's devotions. Inconsistencies and doubts that prior decisions could have been laden with

could be smoothed over with age and time. Through the making of each decision at the work-home interface, respondents carefully cultivate their devotions to either work or home domains, learning from previous decisions, and becoming perhaps more or less devoted to one domain or the other. Over the course of time, one can come to understand oneself as "work" or "family" devoted. This is an important finding, and its contribution to our understanding of the dynamics at the work-home interface should not be understated. However, I argue that this categorization obscures the dynamics of decision-making in the moment, and the mechanics of how decision-making can actually serve to reinforce one devotion or another, not simply through the relentless pursuit of individual preferences, but also through a complex interplay between competing devotions and the available opportunities to fulfill such devotions. A study designed to carefully sample those at specific turning points offers a rare opportunity to observe the various ways in which dynamics between structure and agency can reinforce existing pathways, or forge new ones.

Thus, focusing on strategies to combine devotions brings into relief the role structural factors play in shaping available opportunities for medical trainees to pursue their ideal balance of work and home. In terms of those who were able to successfully combine medical and family devotions, lifestyle and medical/family devotions, the existence of these success stories are related to characteristics at the institutional level that allow these residents the ability to make decisions that can satisfy the desire to balance multiple work and home role identities. For instance many of those who utilized a combining devotions narrative had the access to work options that allowed them to also incorporate their family considerations. These trainees often had access to networks of attendings and fellows who notified them of various potential work options that could allow them to fulfill their family devotions without sacrificing a devotion to

medical training. For example, Central University is an incredibly competitive and well-regarded medical training site, and thus the fellows and attendings working there had access to connections that could help students and residents obtain jobs or fellowships with less perceived risk. Frequently trainees in this position spoke about how their mentor or department head worked with them to try and facilitate a favorable solution. In the case of Adam pursuing fellowship training in abdominal MRI, he noted that he sensed he was a favored candidate for the fellowship because he was an internal candidate. Similarly, the feeling that Ashley got from her pediatric department faculty mentor was that her scores and academic standing made her a good candidate for remaining in the same institution to complete her training. This speaks to the relative success that this training institution has achieved in aiding its workers in solving work-family dilemmas. It underscores the importance of institutional and workplace solutions to help those who are combining work and home responsibilities.

Conversely, apparent from decisions that relied on either "sacrifice" or "logistics" was the lack of possible options medical trainees could take to fulfill their devotion to work and home. For instance, a number of trainees who employed either "sacrifice" or "logistics" as a linking mechanism were in a dual-MD household in which both members were making decisions to pursue further medical training. Having to match up timing and duration of training periods, attempting to apply for future opportunities when one's spouse's future was uncertain, or having to take care of children while both partners pursue medical training presented formidable challenges for these medical trainees. As not only medical marriages continue to rise, but also as marriages between men and women in comparably competitive and prestigious occupations increase, it is important to recognize the role that training institutions play in shaping the possible options trainees have in fulfilling commitments to both work and family. For medicine, while

institutionalized processes such as the "couples match" option are available for those couples who are at similar stages of training, there are far more couples who are a few years mistimed in terms of their training that do not benefit from such institutional support. In the greater professional world, both hiring and training institutions need to consider strategies to aid professional workers who may have spouses that are on slightly off-timed trajectories.

My findings have implications for our current explanations of persistent gender gaps in important labor market outcomes. To this debate, I bring the importance of qualitatively examining men and women who are making similar decisions to better understand how gender differences in this decision-making may be related to later labor force market outcomes. First, I find few gender differences in adherence to the medical devotion schema – nearly every respondent was enthusiastic about medicine's promises of an intrinsically fulfilling, intellectually challenging, and financially stable career. Quantitative data that require respondents to rank aspects of a job most important to them miss the complex narratives respondents delineate when explaining important career choices, and can thus obscure important *similarities* between men and women.

Moreover, the existence of "superdads" and female breadwinners spells promise of a new work-home landscape in which work and home duties are more gender-neutral. While a minority, the existence of men and women who are actively re-imagining what it means to combine work and home responsibilities in non-traditionally gendered ways holds promise that there are new avenues through which new ways of organizing labor in and out of the household may be emerging. The existence of "superdads", or men who actively prioritize family, and are willing to change their work commitments *for the family (*Kaufman 2013), and moreover are able to claim it as such, is evidence that masculine norms surrounding what it means to be a husband or

a father can be subject to change. Moreover, the fact that men are even willing to sacrifice some work devotion in the name of family devotion point to the possibility of greater gender equity in the medical workforce.[8] And while it might take an actual family transition or life event, such as getting married, or having children, to instigate such a change, this opens up a new realm of possibility for more equitable paid-unpaid labor tradeoffs within a household, which could be a crucial mechanism towards gender equity in the labor market. The existence of female breadwinners also speaks to this change, demonstrating that gendered notions surrounding roles in the work and at home can be perturbed, and new discourses about how to think about work and home responsibilities are moving into a more gender equitable realm.

While some of my findings imply optimism regarding gender equality in the medical profession, by looking at how men and women attempt to combine competing devotions also serves to expose remaining vestiges of problematic gender differences. For example, while the logistic mechanism was by no means the dominant mechanism that linked competing devotions for medical trainees, it is notable that those who volunteered the logistical mechanism were predominantly women who were unable to fulfill competing devotions to their work and home lives. These linking mechanisms can be pernicious because they code what is inherently a structural lack of options as an individual choice. These schemas paint essential work-family dilemmas as problems that require a solution at the individual level, masking the need to see how such limited opportunities is the result of larger infrastructures, and thus acting to potentially reinforce gender inequalities (Stone 2007). These are frequently women who entered medicine

[8] Though some may note that the *magnitude* of sacrifice remains different for men and women, where men might sacrifice some work opportunities, but still get to pursue their original ambitions, whereas women might be more likely to sacrifice their entire ambitions altogether. (i.e. the case of Ben who shortened his rank list from seven to two institutions vs. Adrienne who opted out of applying altogether). While this may be true, what I focus on in these set of analyses is *how* men and women talk about these decisions – and from this perspective, men feeling able to attribute work sacrifices to family desires represents a change in the direction of gender equality.

devoted to the ethos of being a professional healthcare provider, and committed to performing well in their profession. These are also women who are family devoted, who prioritize their home lives and value being good spouses to their partners and being there for their children and families. However, they cannot seem to find adequate solutions that satisfy both of these competing devotions. Thus, they resort to explanations that focus on logistical matters, simultaneously resigning themselves to not being able to achieve their original work or home aspirations as well as not letting go of their devotions. On the one hand, the logistic linking mechanism allows individuals to understand the decisions they made, even if such a decision was contradictory to what they might have wanted. It is a way for people to move forward with decisions, in the face of unfavorable conditions. On the other hand, such a strategy may be problematic as it masks the underlying structural factors, such as lack of adequate and affordable childcare, or lack of a system to match married medical trainees with different timelines, that can potentially allow these respondents more options to solve their dilemmas.

Medical educators who aspire to dispel gender inequities in the medical labor force, as well as policy makers concerned with broader differences between men and women across occupations, would do well to be attuned to the influences of cultural schemas of devotion at important career turning points. And while certainly work-home concerns may play out over a longer period of time, it is at these crucial turning points that men and women are required to act on these devotions, solidifying their sense of value and worth in these domains, and move their lives forward. Thus, extra institutional support around these decision points, whether it be the decision for a first job, or the decision to pursue further job training could do much in equalizing gender differences by allowing more opportunities for men and women to combine their work and home aspirations. In the medical world, this could mean broadening the couples match

process to include those whose partners have different medical training timelines, or even doing away with the match process as a whole. Reducing the "contract" nature of the match process could make the selection into residency programs more akin to other job markets and allow both residents and training institutions more leeway to work out manageable work-home solutions. More importantly, workplace organizations must recognize that work and home desires are intimately tied, and that a decision in one domain is frequently not made without consideration of its effects in the other domain. Moving towards policies that encourage diversified workplace schedules, equal lengths of maternal and paternal leave, as well as reduced costs for childcare, can do much to increase the number of options men and women have to successfully combine their competing devotions to work and home.

**Table 3.1 Specialty distribution of entire sample**

| *Specialty* | *Male* | *Female* | *Total* | *% of total* | *Proportion of total PGY-1 positions offered in 2013 match*[a] | *% female among residents and fellows in 2010*[b] |
|---|---|---|---|---|---|---|
| Anesthesiology | 3 | 4 | 7 | 11.5% | 4.8% | 37.1% |
| Dermatology | 1 | 2 | 3 | 4.9% | 0.2% | 63.8% |
| Emergency Medicine | 1 | 2 | 3 | 4.9% | 7.8% | 40.1% |
| Family Medicine | 1 | 4 | 5 | 8.2% | 13.6% | 55.3% |
| General Surgery | 3 | 1 | 4 | 6.6% | 5.3% | 36.2% |
| Internal Med/Peds | 1 | 1 | 2 | 3.3% | 1.6% | 56.6% |
| Internal Medicine | 4 | 4 | 8 | 13.1% | 28.2% | 44.7% |
| Neurosurgery | 1 | 0 | 1 | 1.6% | 0.9% | 13.9% |
| OB/GYN | 1 | 4 | 5 | 8.2% | 5.6% | 81.4% |
| Orthopedic Surgery | 3 | 1 | 4 | 6.6% | 3.1% | 13.2% |
| Otolaryngology (ENT) | 1 | 1 | 2 | 3.3% | 1.3% | 32.3% |
| Anatomical/Clinical Pathology | 0 | 1 | 1 | 1.6% | 2.6% | 53.8% |
| Pediatrics | 4 | 3 | 7 | 11.5% | 11.7% | 72.7% |
| Physical Medicine and Rehabilitation | 3 | 1 | 4 | 6.6% | 0.5% | 40.3% |
| Plastic surgery | 1 | 0 | 1 | 1.6% | 0.5% | 26.3% |
| Psychiatry | 1 | 0 | 1 | 1.6% | 6.1% | 54.5% |
| Radiation Oncology | 1 | 0 | 1 | 1.6% | 0.1% | 33.4% |
| Radiology | 2 | 0 | 2 | 3.3% | 0.7% | 27.6% |
| | | | 61 | | 94.8% | |

[a]Data taken from "National Resident Matching Program, Results and Data: 2013 Main Residency Match®". National Resident Matching Program, Washington, DC. 2013

[b]Data taken from "2012 Physician Specialty Data Book" published by the Center for Workforce Studies at the Association of American Medical Colleges (AAMC), November 2012,

## Table 3.2 Demographic characteristics of interview sample

| All sample | Male | Female | Total | % of sample |
|---|---|---|---|---|
| **Stage in training** | | | | |
| *Student* | 14 | 16 | 30 | 49.2% |
| *Resident* | 18 | 13 | 31 | 50.8% |
| **Race** | | | | |
| *Non-Hispanic White* | 20 | 18 | 38 | 62.3% |
| *Non-Hispanic Black* | 1 | 3 | 4 | 6.6% |
| *Asian/Pacific Islander* | 5 | 7 | 12 | 19.7% |
| *Indian Subcontinent* | 4 | 0 | 4 | 6.6% |
| *Multi-racial* | 1 | 1 | 2 | 3.3% |
| *Other* | 1 | 0 | 1 | 1.6% |
| **Partner status** | | | | |
| *Single* | 7 | 6 | 13 | 21.3% |
| *Partnered (incl. engaged, cohabitating, dating)* | 14 | 10 | 24 | 39.3% |
| *Married* | 11 | 13 | 24 | 39.3% |
| **Age** | 29.4 | 27.8 | | |

| Student only | Male | Female | Total | % of sample |
|---|---|---|---|---|
| **Race** | | | | |
| *Non-Hispanic White* | 8 | 10 | 18 | 60.0% |
| *Non-Hispanic Black* | 1 | 1 | 2 | 6.7% |
| *Asian/Pacific Islander* | 2 | 4 | 6 | 20.0% |
| *Indian Subcontinent* | 2 | 0 | 2 | 6.7% |
| *Multi-racial* | 0 | 1 | 1 | 3.3% |
| *Other* | 1 | 0 | 1 | 3.3% |
| **Partner status** | | | | |
| *Single* | 4 | 5 | 9 | 30.0% |
| *Partnered (incl. engaged, cohabitating, dating)* | 9 | 8 | 17 | 56.7% |
| *Married* | 1 | 3 | 4 | 13.3% |
| **Age** | 26.4 | 26.1 | | |

| Resident only | Male | Female | Total | % of sample |
|---|---|---|---|---|
| **Race** | | | | |
| *Non-Hispanic White* | 12 | 8 | 20 | 64.5% |
| *Non-Hispanic Black* | 0 | 2 | 2 | 6.5% |
| *Asian/Pacific Islander* | 3 | 3 | 6 | 19.4% |
| *Indian Subcontinent* | 2 | 0 | 2 | 6.5% |
| *Multi-racial* | 1 | 0 | 1 | 3.2% |
| **Partner status** | | | | |
| *Single* | 3 | 1 | 4 | 12.9% |
| *Partnered (incl. engaged, cohabitating, dating)* | 5 | 2 | 7 | 22.6% |
| *Married* | 10 | 10 | 20 | 64.5% |
| **Age** | 31.7 | 29.9 | | |

Appendix 3.1 Interview guide

(Interviewer intro): Thank you for taking the time to talk with me today. This project explores the factors involved in the decision to pursue a career in medicine at different stages of the medical professionalization process, and in particular if and how work-life or work-family considerations came into play in the decision making process. I have a consent form here that details your rights as an informant in the study. It tells you that your responses will remain confidential and your identity will not be associated with your responses. The interview should last about 45 minutes to an hour. You may also choose not to answer a question if you do not feel comfortable and also have the right to terminate the interview at any time. I hope that this experience however will be rewarding for you and allow you a chance to reflect on your experiences to this date. Do you have any questions before we begin?

**INTRODUCTION—REASONS FOR PURSUING MEDICINE**

Are you currently a medical student/resident?

How did you become interested in becoming a doctor?

(If not mentioned/offered, probe about):

Can you talk about the influence of family or friends?

Can you talk about the influence of your own educational/extracurricular/personal experiences?

Can you tell me what appeals to you about the practice of medicine?

Why do you prefer the medical profession over, for example, other professions (law/business), or other health professions (nursing, physician's assistant, or public health)?

(If not mentioned/offered, probe about):

- Prestige of occupation/status
- Flexibility in work arrangements/work hours
- Intellectual stimulation/engagement
- Ability to help people.

What specialty are you going into/are you in? Why did you choose this specific specialty?

Was it difficult to choose a specialty? Why?

What people or experiences influenced your decision to choose this specialty?

(If not mentioned, probe about):

- Influences of particular people
- Experiences during childhood
- Experiences during premedical years
- Experiences during pre-clinical years of medical school
- Experiences during clinical rotation years of medical school

(For residents ONLY) Are you planning to pursue a sub-specialty? What sub-specialty is that? Why are you pursuing this sub-specialty, or any sub-specialty?

What was the hardest/easiest part of choosing this sub-specialty, or to pursue a sub-specialty? Why?

What experiences influenced your decision to choose this sub-specialty?

(If not mentioned, probe about):

- Experiences during childhood
- Experiences during premedical years
- Experiences during pre-clinical years of medical school
- Experiences during clinical rotation years of medical school
- Experiences during residency

What kind of workplace would you like to eventually work in? (probe: hospital, academic medicine, private practice, group practice, non-profit work, government, etc.) Why?

How important is geographic location or region in where you are looking for jobs?

**FACTORS SURROUNDING MOST RECENT DECISION IN MEDICAL PIPELINE**

(*For medical students*)

Can you tell me a little bit about your most recent experience of submitting your rank ordered list of residencies?

(Specific probes):

- How did you choose which programs <u>to apply to</u>? What were you looking for in a residency program? Why?
    - How did experiences in medical school (ie. Pre-clinical experiences, clinical rotations, talking with friends, talking with residents) guide how you chose to apply to residency programs?
    - Was it difficult to figure out what residencies you wanted to apply to?
- What programs offered you <u>an interview</u>?

- What was the interview experience like?

- What was your rank order list?
    - How did you come up with that order?
    - Was it difficult to assemble a rank order list? Why?
    - Was there any part of this experience that surprised you? (Interviews, visiting programs, etc?)

- Did certain factors matter more/less to you than you thought they would before you started the application process?

- What academic considerations factored into your decision?
  (Such as prestige of program, quality of training, board scores)

- Were there any non-academic considerations that you factored into your decision? If so, what were they?
    - What about being close to family?
    - What about what your partner wanted?
    - What about having kids?

- (For those who use the couples match option) Can you tell me a little bit about how you and your partner made decisions about residency programs?
    - How did you decide to couples match?
    - How did that influence where you were both applying?
    - What happened when you started hearing back from programs?
    - How did you come up with your final list?

(*For residents)*

Can you tell me a little bit about your most recent experience of applying for a job/fellowships?

(Specific probes):

- How did you choose which jobs/fellowships <u>to apply to</u>? What were you looking for in a job/fellowship? Why?
    - How did experiences in medical school (ie. Pre-clinical experiences, clinical rotations, talking with friends, talking with residents) and/or residency guide how you chose to apply fellowship programs?

- Was it difficult to choose which jobs/fellowships to apply to? Why?

- Was there any part of this experience that surprised you?

- Did certain factors matter more/less to you than you thought they would before you started the application process?

- What academic/work considerations factored into your decision?
  (Such as prestige of program, quality of training)

- Were there any non-academic considerations that you factored into your decision? If so, what were they?
  - What about being close to family?
  - What about what your partner wanted?
  - What about having kids?

**EXPERIENCE DURING STAGE OF MEDICAL TRAINING AND CURRENT WORK-LIFE SITUATION**

Can you tell me a little bit about your medical school experience/residency experience?

What was your academic or work schedule like?

- About how many hours a week did you spend on work per week?

- Would you have rather spent more or less time on work than this amount?

Can you tell me a little bit about your life outside of work/school?

- What do you do in your free time?

- What was your social life like? Who are your closest friends? Are they also involved in medicine?

- During a typical week, about how many hours do you spend on relaxing or doing something leisurely?

- (If married/cohabitating) Can you tell me a little bit about your wife/husband/boyfriend/girlfriend/partner?

  - What do they do? Are they also in medicine?

  - How do you split household chores?
    - (such as who does the cooking, grocery shopping, planning, cleaning up the house, laundry, etc.)

- Do you have children?
    - (If yes) How old are your children?
        - Can you tell me a little bit about what it is like to have kids and be at this stage of the medical education process?
        - How do you and your partner make decisions about childcare? What is the split of childcare like?
    - (If no) Do you plan on having children?
        - When you would like to have children?
        - How many children you would like to have?
        - What are your thoughts on trying to start a family and become a doctor?

- (If single) Are you currently seeing anyone, or dating anyone?
    - Can you tell me what it is like to be dating at this stage of the medical education process? Is it difficult/easy?
    - What are you looking for in a partner?
    - Do you plan on having children?
        - When you would like to have children?
        - How many children you would like to have?
        - What are your thoughts on trying to start a family and become a doctor?

Have you ever felt like you have trouble balancing work and non-work activities or responsibilities?

(If unclear what that means, provide examples):
- Such as feeling like responsibilities at home are interfering with responsibilities at work, or vice versa
- Such as feeling tension when trying to "do everything"

- (If yes) Can you describe an instance where you felt trouble or tension at trying to balance both work and non-work responsibilities?

- What are some strategies you use to maintain "balance" between your work and nonwork life, if any?

- Do you think other (residents/medical students) feel the same conflict or tension? Why?

Did you ever experience any form of discrimination during your training process? (Such as

being treated differently based on your identity?) Can you tell me a little bit about that?

Overall what did you enjoy most about this stage of the medical training process? What did you enjoy the least?

**LOOKING FORWARD**

In your ideal world, where would you be 20 years from now?

Probes:

- What kind of place do you see yourself practicing?
- What kind of patient population do you see yourself serving?
- Who are your colleagues?
- How much would you like to be working?
    - What kind of work would you like to be doing? (hospital administration, surgery, in/outpatient services, etc?)
- Would you like to have a family?
    - What would your family life be like?
    - What would be your ideal balance between work and family?

**FAMILY BACKGROUND**

And finally I'd like to ask a few questions about your family background (and partner's if relevant).

What does your father do?

What does your mother do?

Do you have siblings? Where are they now?

(If both parents worked): What was the household division of labor like when you were growing up with two working parents?

What does your partner's father do?

What does your partner's mother do?

Do they have siblings? What do they do?

(If both parents of partner worked): Do you know what the division of labor was like in your partner's household?

# CHAPTER 4

# DOES IT HURT TO HAVE IT ALL? DOCUMENTING THE LONG-TERM CONSEQUENCES OF WORKING AND PARENTING USING A NATIONAL PROSPECTIVE STUDY

## INTRODUCTION

Demographic changes in American families and workplaces in the last half-century have resulted both men and women needing to juggle significant work and home responsibilities throughout the majority of mid-adulthood. Several concurrent trends have contributed, such as the increase in labor force participation rates of mothers (Goldin 2006), the rising economic need for two earners in the household (Sullivan, Warren, and Westbrook 2001), as well as the changing norms surrounding parenting and especially fatherhood (Winslow 2005; Kaufman 2013). Such changes to the labor force and family life have led to a plethora of social science research attempting to better understand the ramifications of these changes for workplaces, families, and individuals.

In particular, significant attention has been paid to the influence of having dual working and parenting responsibilities on health and well-being. While some theories predict worse health for those who are combining potentially conflicting roles and responsibilities (Goode 1970; Greenhaus and Beutell 1985; Coser 1970), the bulk of empirical evidence supports the health enhancing nature of maintaining paid employment while being a parent (Barnett and Hyde

2001; Ahrens and Ryff 2006). Moreover, much of the literature documents a long-term influence of working and parenting on health, finding that maintaining dual work-home roles is associated with better physical and mental health in middle adulthood (Frech and Damaske 2012) as well as lower odds of mortality (Sabbath et al. 2015; Karas-Montez et al. 2015; Tamakoshi et al. 2012; Moen, Dempster-McClain, and Williams 1989).

While the evidence has grown for health benefits of maintaining employment while being a parent, we still do not understand exactly how working and parenting, which tends to occur earlier in the life course, can have long lasting influences on health across the life course. One important mechanism that deserves further exploration is whether experiences of combining paid employment and parenthood influence cumulative health processes, producing differences in long-term health trajectories between those who do combine such work and home roles and those who do not. Are the health differences that we observe in later life between those who do combine work and parent roles and those who do not the result of differences in long-term health trajectories during early adulthood?

Furthermore, while most studies document an association between employment and parenting and health, some argue that more than just role fulfillment, it is the quality of roles that can matter for health (Ahrens and Ryff 2006; Barnett and Hyde 2001). That is, whether or not working and parenting is related to health depends on the level of strain at work or at home, or the time spent in either domain, rather than simply the fulfillment of certain roles. One study notes that a count of work-home roles was not related to depression three years later, but those that reported positive experiences in their work-home roles reported lower rates of depression (Plaisir et al 2008). Such evidence demonstrates that not all workers and parents experience their responsibilities similarly, and it is important to also measure the qualitative aspects of working

and parenting roles to gain a better understanding of the relationship between combining working and parenting and health in the long term.

Finally, much of the work that demonstrates a positive influence of working and parenting on health has been conducted on samples of women, demonstrating that women who combine motherhood with paid employment exhibit better long-term health, compared to mothers who did not work, or childless women. While such work has been foundational for the study of the health effects of multiple role engagement, it is now important to document whether these associations between health and working and parenting extend to men. Changing norms surrounding fatherhood (Kaufman 2013; Damaske et al. 2014; Shows and Gerstel 2009), as well as different social and cultural norms and constraints in the workplace that make men less likely to take advantage of family leave or other family-friendly policies (Williams 2010; Sanchez and Thomson 1997), suggest that men may face different pressures at the work-home interface that could have ramifications for their health.

This study thus aims to address these gaps in our understanding of the relationship between working, parenting, and health. Does combining working and parenting roles influence subsequent trajectories of self-rated health? Does the interaction of work and parenting strain, or time spent in paid and unpaid labor, influence trajectories of self-rated health? Do these associations differ for men and women? I use data from the Americans' Changing Lives Study, a nationally-representative prospective study of adult men and women conducted from 1986 through 2011, to estimate latent growth curve models of self-rated health. I utilize multiple measures of work-parent status at baseline, including working and parenting role status, the balance of time spent in paid and unpaid labor, and the balance of strain between work and home to capture multiple dimensions of individuals' work-home involvement. Findings from these

analyses further our understanding of the relationship between work, family, health, and gender in the United States during a period of rapid social change in these domains.

## BACKGROUND

### *Working, parenting, and individual health trajectories*

Whether combining working and family responsibilities is related to better or worse health for those who are fulfilling such roles is a question that has fueled many research agendas. The theoretical foundations of such queries predominantly rely on role theories, and hypotheses that center on how fulfilling responsibilities dictated by multiple social roles can impact well-being. On the one hand, having to combine potentially competing responsibilities in the work and home domains, especially in the US context where there are few institutional supports for those doing so (Karas-Montez et al. 2015; Glass and Estes 1997) may lead to work-family conflict, or role strain, activating stress processes and leading to worse health (Greenhaus and Beutell 1985; Goode 1970). On the other hand, maintaining active employment while also fulfilling responsibilities as a parent can serve to improve or enhance health by providing health-enhancing resources in the form of material wealth or social networks (Sieber, 1974), generating positive energy that can enrich the experience of being a worker or a parent (Marks 1977), or buffering against social isolation or depression (Thoits 1983).

Scholars studying the connections between work, family, and health have largely amassed evidence in support of the latter relationship, that combining working and parenting roles is beneficial to health. A number of studies have used longitudinal data to show how combining work and home roles is associated with better health over follow-up, demonstrating that maintaining paid employment while being a parent is associated with lower levels of

mortality (Sabbath et al 2015; Karas-Montez et al 2015; Tamakoshi et al 2012; Moen, Dempster-McClain, Williams 1989) higher self-rated mental and physical health (Frech and Damaske 2012; McMunn et al 2006; Janzen and Muharajine 2003) fewer physical limitations, and lower psychological distress (Pavalko and Smith 1999; Moen, Dempster-McClain, Williams 1992). It is worth noting that such a positive impact of combining working and parenting roles is observed even after accounting for non-random selection into work and parent roles that could produce spurious relationships between multiple role engagement and health (Frech and Damaske 2012; Pavalko and Smith 1999). While evidence largely points to the health benefits of working and parenting, there are still some studies which document negative consequences of combining work and home for self-rated health (Hewitt, Baxter, and Western 2006) or note no significant association between combining roles and health (Martikainen 1995).

While we know that combining work and parent roles can be health enhancing, it is less clear how exactly such an experience influences health across the life course. In particular, while men and women frequently fulfill working and parenting roles during early and mid-adulthood, scholars have demonstrated that such an experience can have long-reaching effects, influencing physical and mental health in later life (Frech and Damaske 2012) as well as eventual mortality (Sabbath et al 2015; Karas-Montez et al 2015). While it is clear that the experience of combining work and home roles as a working parent has long-term health consequences, less is known about exactly how such an experience shapes the health of individuals who take on such roles, and continues to influence health as they age and move in and out of life course stages.

Research focusing on health across the life course offers a useful framework to think about the precise ways in which experiences during early and mid-adulthood can shape long-term health. Several studies in this vein have demonstrated that health is a cumulative, path-

dependent process, whereby the health status at one point in time is not only influenced by proximate factors, but can also result from factors that occurred in the far past. Health, as a biological and developmental process thus is shaped by not only contemporary circumstances, but also by an accumulation of events across the life course. Importantly, such studies demonstrate that social factors can influence this cumulative process, and that exposures to stressors at a certain point of the life course may not only have short-term health effects, but can also influence health in path-dependent ways that lead to divergent trajectories of health (Wilson, Shuey and Elder 2007; Pavalko and Caputo 2013). For example, childhood socioeconomic factors can shape adult health through direct effects, such as "physiological scarring" during childhood that can "permanently alter" individual life chances, or through indirectly shaping opportunities throughout adolescence and adulthood, that can in turn influence adult health (Hayward and Gorman 2004: 88).

The availability of longitudinal health data and development of new statistical approaches to modeling within-person change have allowed researchers to explore cumulative processes by estimating latent growth curve models of health – an approach that allows the simultaneous modeling of inter-individual differences as well as intra-individual change across time (Singer and Willett 2003; Wilson, Shuey and Elder 2007). This approach to modeling health has largely been used to study health stratification by socioeconomic factors, such as educational attainment (Wilson, Shuey and Elder 2007; Pavalko and Caputo 2013; Kim and Durden 2007; Yang and Lee 2009; Chen, Yang and Liu 2010), but has also recently been used to demonstrate how parenting or marital strain or changes in marital status can also produce long-term health trajectories (Umberson et al 2011; Umberson et al 2006; Liu 2012; Wickrama et al 1997). These studies demonstrate that social factors at specific points in time can serve to not only influence

the level at which health trajectories begin (intercept), but can also influence the rate of change in health over time (slope), providing evidence that health can be modeled as a cumulative process, and that social experiences may perturb these overall trajectories.

Given that there is existing evidence for a long-term effect of combining paid labor and parenthood, it is important to ask whether such an experience can also influence overall health trajectories of those individuals who combine such roles. Does the experience of combining paid labor and parenthood have long-reaching, and even potentially cumulative influences on health? One study finds that individuals have lower cortisol levels while they are at work, compared to when they are at home, but that subjective measures of stress at work and at home are higher for respondents who were working parents (Damaske, et al. 2014a). The lower levels of objective stress reported at work, compared to at home, may serve to buffer against the negative effects of stress from home, elevating overall health trajectories by preventing exposure to stressful situations that could decrease health faster with age. Conversely, if subjective stress is what matters for health in the long run, then exposure to high levels of perceived strain, as opposed to lower levels of strain, as a working parent may serve to diminish the body's ability to fight disease and limit the body's ability to protect against exposures to other health risks over time. Thus, to better understand how working and parenting can influence health across the life course, I ask, does working and parenting influence health over the life course by shaping health trajectories differently from those who are involved in fewer role responsibilities? Or does the experience of taking on these multiple work-home responsibilities serve to alter the rate of health decline across time? To model such processes, I estimate latent growth curve models to assess the impact of working and parenting during early adulthood on both the level (intercept) and the rate of change (slope) of self-rated health over 25 years time.

*Measuring the work-home interface*

The experience of combining work and parenting roles is by no means homogenous across individuals and groups, and variation in the quality of these roles could lead to differential health outcomes. Recent research and theory suggests that it may not necessarily be the quantity of roles an individual fulfills that has health implications, but rather to what extent such roles are voluntary and provide the individual with positive experiences (Barnett and Hyde 2001; Ahrens and Ryff 2006; Thoits 2012; Plaisir et al 2008; McMunn et al 2006). For instance, working and parenting may actually afford health benefits if the level of strain and time use in both domains remains low and manageable, and the positive benefits of remaining active in both roles are allowed to accrue. Conversely, simultaneously parenting a young child and attempting to fulfill the obligations of a time-consuming and stressful job may present more negative outcomes that outweigh any positive outcomes that can come of being actively involved in multiple domains.

Existing studies have documented how aspects of working and parenting, such as the level of strain and the amount of time spent, are related to health. Plaisir and colleagues (2008) follow a sample of workers for three years, and demonstrate that while the number of roles individuals reported did not influence changes in depression scores, reports of positive experiences in each role (working and parenting) were associated with lower levels of depression later in the observation period. Other studies document that rather than participation in roles, it is the time spent doing tasks related to either work or home roles that is associated with health. For example, one study demonstrates that working more than 40 hours a week is associated with worse physical health at midlife (Kleiner and Pavalko 2010), while another finds evidence of a cross-sectional association between increased depression and hours spent in housework, regardless of participation in work or home roles (Glass and Fujimoto 1994). Thus, in order to

gain a better understanding of the influence of multiple roles on health it is important to measure more than simply whether they are held. In this study, I consider both the amount of time and the level of strain associated with working and parenting by examining how the distribution of time spent in each domain, as well as the combination of strain from each role, influence trajectories of self-rated health.

*Including men, and the role of gender moderation*

Much of the literature that documents a positive relationship between combining work and home roles has focused on the experience of women (Ahrens and Ryff 2006; Bianchi and Milkie 2010). With the drastic increase in the labor force participation of women since the 1970s, and especially married mothers with young children, there came increasing concern about how such demographic trends might influence mothers' well-being, family stability, and child development (Bianchi and Milkie, 2010). Important early research on the consequences of holding multiple work-home roles found that, contrary to public concern and role strain hypotheses, women, on average, did not suffer when they combined work and home responsibilities. Such studies compare the outcomes of working mothers, stay-at-home mothers, women who only work for pay, and women who are neither working nor parenting, and show that women that engage in both paid and unpaid labor exhibit better health than those who are only engaged in one or no domains (Frech and Damaske 2012; McMunn et al. 2006; Pavalko et al. 2007; Schnittker 2007).

While such studies comparing different groups of women were essential, their focus means we know less about how combining fatherhood and paid employment can influence the health of men across the life course. Recent studies document a shift in men's attitudes about parenting, with a new expectation to not only be "breadwinning" fathers but also "nurturing" and

involved fathers (Kaufman, 2013; Damaske et al 2014b; Shows and Gerstel 2009; Nomaguchi and Johnson 2014). We also know that men are increasing their hours spent at home, and specifically increasing their time spent in childcare (Sayer 2005). However, men face different social and cultural norms and constraints in the workplace, compared to women, that reduce their likelihood of taking advantage of family leave or other family-friendly policies (Kaufman, 2013; Williams, 2010; Sanchez and Thomson 1997). This suggests the importance of including men in studies of the work-home interface, particularly as they may face qualitatively different kinds, or even higher levels of, role conflict, which can subsequently influence their health trajectories across the life course.

Moreover, we also do not know whether the relationship between working, parenting, and health differs for men and women who are in similar work-home situations. The relatively few studies that compare men and women who both work and parent show that working mothers tend to incur higher levels of guilt and emotional distress than working fathers (Glavin et al., 2011; Hewitt et al., 2006; Simon, 1997). A qualitative study of working mothers and fathers argues that fulfilling responsibilities as a paid employee as well as a parent may be more stressful for women compared to men in similar situations, due to the gendered expectations for women to be primary caregivers (Simon, 1997). However such studies have mostly been conducted using cross-sectional data, or drawing on small qualitative samples. I thus extend our understanding of the health consequences of working and parenting by examining whether such associations look similar for men and women in a large, nationally-representative and longitudinal sample.

## DATA AND METHODS

### *Data*

The data for this study come from five waves of the Americans' Changing Lives (1986-2011) survey (ACL). The ACL study began in 1986 with a multi-stage stratified area probability sample of the continental U.S. household population of adults over the age of 25, with an oversampling of African Americans and people over the age of 60. Baseline face-to-face interviews were conducted with 3,617 men and women. Follow up interviews were conducted in 1989 (N=2,867), 1994 (N=2,562), 2002 (N=1,787), and 2011 (N=1,427). At each wave, respondents reported information about their work and home lives and answered detailed health and stress questions. Further information about the ACL is available elsewhere (House et al., 1994; Lantz et al., 2005). The ACL is an ideal study for my research questions as it includes a rich set of health, psychosocial, and behavioral measures, collected from a nationally representative sample of American adults, followed for 25 years. This enables me to model health trajectories and link these trajectories to work-home statuses and characteristics of these roles. For the purposes of these analyses I exclude individuals who indicate they are neither working nor parenting from the sample. I do this for two reasons: 1) those who are not involved in any roles are mostly aged 65+ in 1986, and thus have significantly worse health, conflating the relationship between role engagement and health with the aging process, and 2) doing so minimizes the issue of health selection as those who are not involved in work or parenting a child, and are not over the age of 65, are possibly unable to do so due to health concerns. This results in a final analytic sample of 2,149 individuals, or 8,169 person-wave observations.

### *Measures*

The dependent measure of interest is self-rated health. This is measured at all waves of the survey with the following question: "How would you rate your health at the present time? Would you say it is excellent, very good, good, fair, or poor?" Responses were reverse coded

such that high values indicate better health (5=excellent, 1=poor). Key predictors include measures of a respondent's involvement in paid work and parenting roles at the first wave of the study. The first way I measure involvement in working and parenting is with a categorical measure of working and parenting role statuses. I use a combination of employment information and information from the household roster; working full-time is defined as working 35 hours or more for pay, with part-time defined as working 34 hours or less. Parenting is defined as reporting a minor child in the household (17 years or younger). I combine working and parenting statuses to create a 6-category variable (working full-time and parenting, working part-time and parenting, working-full time only, working part-time only, parent only, no role). I use this variable for sample selection, and drop those respondents who are not fulfilling either social role.

I also measure a respondent's involvement in the work and home domains by looking at the balance of time spent between work and home domains. Time use measures are calculated using several items from the ACL that I will describe in turn, and are recorded as annual hours spent in an activity. First, number of hours spent in paid labor is calculated from a survey item asking respondents for the number of hours they worked in the past week at their main job, and then multiplied by the reported number of weeks they worked that year. The resulting range of annual work hours was 0-4940 hours. I top-coded work hours at 80 hours/week (4160 hours a year, $99.5^{th}$ percentile) in order to allow the influence of the maximum distribution of work hours, but also minimize the influence of extreme hours (i.e. those who reported working 90 hours a week, for 52 weeks a year).

The total number of hours spent at home was calculated from a sum of reported annual hours spent in housework, childcare, household maintenance, volunteer work, and providing unpaid assistance to friends, relatives, or neighbors. With this measure, I include more than just

childcare hours because it is possible that being a parent influences time spent in more work than just childcare – such as in housework and household maintenance, providing assistance to others, or becoming a community volunteer. The continuous number of hours spent in housework was calculated by multiplying the hours reported spent in housework per week (based on an open-ended question) by 52. Childcare hours was assessed by a categorical item that asks, "About how many hours do you spend in an average week caring for the child(ren) who live(s) here? (1) less than 10, (2) 10-19, (3)20-39, (4) 40 or more". A continuous variable was constructed using the mid-points of all the categories, with the top category assigned a value of 45, and then multiplied by 52 to obtain hours per year. Household maintenance hours were assessed with the item "Altogether, how many hours did you spend doing these things [maintaining or improving the home] during the last 12 months? (1) less than 20 hours, (2) 20-39 hours, (3) 40-79 hours, (4) 80-159 hours, (5) 160 hours or more". A continuous variable was constructed using the midpoints of the categories, with a value of 180 assigned to the top category. Volunteer hours were also assessed similarly, with a categorical item asking, "About how many hours did you spend on volunteer work of (this kind/these kinds) during the last 12 months? (1) less than 20 hours, (2) 20-39 hours, (3) 40-79 hours, (4) 80-159 hours, (5) 160 hours or more". A continuous variable was constructed using the midpoints of the categories, with a value of 200 assigned to the top category. Hours spent providing unpaid assistance was assessed with the item "Altogether, about how many hours did you spend doing these things during the last 12 months? (1) less than 20 hours, (2) 20-39 hours, (3) 40-79 hours, (4) 80-159 hours, (5) 160 hours or more". A continuous variable was constructed using the midpoints of the categories, with a value of 200 assigned to the top category.

The maximum numbers of hours for each activity are as follows: childcare 2340 hours

per year, household maintenance 180 hours per year, housework 4940 hours per year, volunteering 200 hours per year, and paid labor 4940 hours per year. As the total number of hours in a year is 8760 hours, one can see that it is certainly a possibility, with the way the variables are constructed, for an individual to report more hours than are available in the year (and this is not taking into account leisure hours and sleep hours). However, it is also possible for a respondent to be doing multiple tasks related to different kinds of unpaid labor at the same time. Therefore, I top-code total unpaid hours at the substantive cutoff of 4160 hours per year, or 80 hours of unpaid labor per week, which translates to about the 95$^{th}$ percentile.

To create a measure that incorporates a respondent's time spent in paid and unpaid domains, I first dichotomize total hours spent in both domains. For working hours I used the substantive cutoff of 40 hours/week in paid labor. For hours spent in unpaid labor, I examined the distribution of hours spent and used the cutoff of 30 hours/week. This allows me to create a single measure of the distribution of time use between both domains – high level of time spent in both domains, high levels of time spent in work/low levels of time spent in unpaid labor, low levels of time spent in work/high levels of time spent in unpaid labor, and low levels of time spent in both domains.

Using a similar logic, I create a 4-category indicator of the balance of strain associated with working and parenting. I measure level of work strain with the following survey item "In general, how often do you feel bothered or upset in your work? (1) Almost always, (2) Often, (3) Sometimes, (4) Rarely, (5) Never". I reverse coded the item such that high values indicate higher levels of strain. I categorized those who indicate any instances of being upset at work as having high levels of work strain, and those who never experience feeling bothered at work as low levels of strain at work. I measured level of parenting strain with the following survey item

" How often do you feel bothered or upset as a parent? (1) Almost always, (2) Often, (3) Sometimes, (4) Rarely, (5) Never". Similar to work strain, I also reverse coded the item such that higher values indicate higher levels of strain. I categorized those who indicated that they rarely or never feel bothered or upset as a parent as having low levels of parenting strain, and those who sometimes, often, or almost always feel bothered as a parent as having high levels of parenting strain. Then I created a four-category measure of balance in strain between work and parenting roles (high levels of work and parent strain, high levels of work/low levels of parent strain, low levels of work/high levels of parenting strain, low levels of strain in both work and parent roles).

To account for potential confounding in the work-parent factors and self-rated health relationship, I also include various time-varying and time-constant controls in multivariable analyses. Time-constant controls include education (less than high school (ref), high school grad, some college, college grad), race (black=1), and cohort (1=those born prior to 1902, 7=those born between 1952 and 1962). As there is a wide range of age of respondent observed at baseline, I include a continuous measure of birth cohort to adjust estimates for potential cohort differences in age patterns of health. To account for non-random selection of respondents into certain work-parent categories, that can then influence their health trajectories, I include a time-constant measure of baseline chronic conditions measured in 1986. This measure is a count of conditions a respondent indicated they had out of the following: arthritis/rheumatism, lung disease, hypertension, heart attack, diabetes/high blood sugar, cancer, foot problems (such as problems with circulation, corns, or callouses), stroke, broken or fractured bones, or lost any amount of urine beyond control. Time-varying controls include marital status (married/cohabitating (ref), divorced/separated, widowed, never married) and household income (in thousands of 1986

dollars).

*Analytic Strategy*

I estimated latent growth curve models of trajectories of change in self-rated health by age, across the five waves of data. Such an analytic strategy allows me to examine how both the intercepts and the slopes of the estimated age trajectories of health may vary based on the work-home status of an individual at baseline, an approach that has been used by other researchers to examine health trajectories in the ACL (Singer & Willett, 2003; Thomas, 2011; Umberson et al., 2011; Yang & Lee, 2009). Applying a growth curve modeling strategy allows me to model important growth parameters that determine the trajectory of health across time for an individual, using inter- and intra-individual differences in health across time to model deviations from an average intercept and average slope. Thus, I can examine the extent to which working and parenting experiences at baseline influence both the levels of health at baseline (intercept), as well as the rates of change in health (slope) across the life course.

The ACL data can be thought of as having two levels, with repeated measures at level one nested within individuals at level two. Accordingly, the linear growth curve model can be specified as a combination of both level one and level two models. The level one model is specified as the following:

Level 1: $Y_{it} = B_0 + B_1A_{it} + B_2A_{it}^2 + B_3\mathbf{X}_{it} + e_{it}$

Where $Y_{it}$ is self-rated health for individual *i* at time *t* (where *t*=1, 2, 3, 4, and 5 for ACL waves 1-5), $A_{it}$ is age for individual *i* at time *t,* $\mathbf{X}_{it}$ represents a vector of time-varying controls (marital status and household income) and $e_{it}$ is the random within-person error term, assumed to be normally distributed with a mean of 0 and a variance of $\sigma^2$. Based on previous research using self-rated health as the outcome, I include an age-squared term in the level one model (Yang &

Lee, 2009). Age is centered at age 25 the youngest age at wave 1, to provide a substantively meaningful constant term. The terms $B_0$, $B_1$, and $B_2$ represent the intercept, linear growth rate, and quadratic growth rate, respectively. These terms are further modeled as a function of person-level attributes in the following level two models:

$$B_0 = Y_{00} + Y_{01}S_i + Y_{02}WH_i + Y_{03}G_i \times WH_i + Y_{04}\mathbf{C}_i + u_{0i}$$

$$B_1 = Y_{10} + Y_{11}S_i + Y_{12}WH_i + u_{1i}$$

$$B_2 = Y_{20}$$

Where G represents the gender of the individual (1=male), $WH_i$ represents the key independent measure of interest, work-home involvement of the individual *i* at 1986, and $\mathbf{C}_i$ represents a series of time-constant controls (baseline number of chronic conditions, cohort, race, and education. $u_{0i}$ and $u_{1i}$ are individual-specific level two residuals.

To obtain a baseline average trajectory of self-rated health, I estimate a growth curve model without WH terms (Model 1). Then I add measures of work-home involvement to see if the intercepts and linear rate of change of the trajectories differ by categories of work-home involvement (Model 2). Significant coefficients for the work-home measures ($Y_{02}$ and $Y_{12}$) would indicate differences in the intercepts and slopes by type of work-home engagement. I then examine whether the influence of work-home engagements on the intercepts of the trajectories differs by gender by adding a gender interaction (Model 3). Significant coefficients for the gender interactions ($Y_{03}$) would indicate differences by gender in the influence of work-home engagement on the levels of health trajectories. I additionally test a model that included a gender interaction for the influence of work-home engagement on the linear rate of change, but as the coefficients of interest did not reach significance and the model fit was not significantly improved, I left this interaction out of the final model. I estimate this series of models separately

for each measure of work-home engagement (role status, balance of time use, balance of strain). All analyses are weighted to be representative of the U.S. population in 1986. All analyses were conducted using Stata 12.1, using the *xtmixed* command.

## RESULTS

Table 4.1 reports weighted descriptive information about the analytic sample, with baseline characteristics calculated by person, and time-varying characteristics calculated across person-years. The mean level of self-rated health across all fives waves of the study is 3.84 with a standard deviation of 0.97. About half the sample is male, with an average age of just over 40 years old in 1986. About 24% of the sample has a college education, whereas about 18% of the sample has less than a high school degree. About 12% are black, and on average the sample is relatively healthy, with less than one chronic condition reported at baseline. Over 75% of the sample indicated they were married (or cohabiting in a marriage-like relationship) at some point during the study, with 12% reporting that they had divorced or separated, under 6% reporting they were widowed, and over 6% reporting that they had never married during the study. The average household income across the study period is about $38,000 in 1986 dollars.

[TABLE 4.1 ABOUT HERE]

Table 4.2 examines the distribution of the analytic sample in the various work-home categories in 1986 by gender. Just under 40% of the overall sample was working full-time and parenting a minor child in the household at the first wave of the study. Men are more likely to be working full-time and parenting, compared to women, with 49% of men and 28% of women in this category ($p<0.001$). Only 7% of the sample were working part-time and parenting, with less than 2% of men but more than 12% of women in this category ($p<0.001$). Another 34% of the

sample was working full-time only, and nearly 9% of the sample was working part-time only, with more men than women working full-time. About 11.4% of the sample was parenting only, with significantly more women (20.01%) than men (3.01%) indicating this role status.

There are fewer gender differences in work-home time use and work-parent strain levels, compared to work-parent role status. About 19% of the sample reported high levels of time use in both work and home domains, with no significant gender differences. About 40% of the sample reported high levels of time spent at work and low levels of time spent at home, though this was more common among men (56.5%), compared to women (21.41%, $p<0.001$). About 24% of the overall sample report low levels of time spent at work and high levels of time spent at home, with more women (44.24%) reporting this balance of time use than men (5.33%). About 18% of the sample report low levels of time spent in both domains, and there is no gender difference in this category of balance of time use.

About 40% of the sample reported high levels of working and parenting strain at baseline, a figure that did not differ between men and women. About 40% of the sample report high levels of work strain and low levels of parenting strain, with men more likely to report this balance of strain (48.27%) compared to women (31.91%). Over 10% of the overall sample report low levels of strain at work and high levels of strain as a parent, and men (4.09%) are less likely than women (17.38%) to report this kind of balance in sources of strain. About 9% of the sample report low levels of both working and parenting strain, and there are no differences between men and women in reporting this kind of balance in strain.

[TABLE 4.2 ABOUT HERE]

Tables 4.3 through 4.5 report growth curve model estimates of the three different work-home measures on trajectories of self-rated health. Model 1 in all three tables shows that there is

no significant gender difference in mean levels of self-rated health (B=0.087), and that self-rated health declines as respondents age at the rate of 0.0194 ($p<0.000$) units per year. It is possible that the wide age range at baseline obscures important gender differences in baseline health. There is a gender difference in the rate of change in self-rated health, whereby men are declining slightly faster than women, with a coefficient of -0.0034 ($p<0.1$). Model 1 also shows that the number of chronic conditions in 1986 is negatively related with the mean level of self-rated health (B=-0.3057, $p<0.000$). Education is positively related to the mean level of self-rated health, with higher levels of education linked to higher levels of self-rated health, as demonstrated by the positive and significant coefficients on the education covariates. Household income is also positively related to mean levels of health ($p<0.05$). Net of other factors, more recent cohorts report worse mean levels of health compared to earlier cohorts, with a decrease of 0.2502 units per cohort ($p<0.000$). This large coefficient could be due to a misspecification in the cohort variable, and a categorical, as opposed to continuous measure, should be used in order to account for nonlinearities by cohort in the relationship between age and health. Blacks also report lower mean levels of self-rated health (B=-0.0943, $p<0.05$).

[TABLE 4.3 ABOUT HERE]

Model 2 and Model 3 in Table 4.3 examine the relationship between work-parent role statuses and the age-graded trajectories of self-rated health. In model 2, compared to those who are working full-time and parenting, those who are working part-time and parenting report slightly higher mean levels of self-rated health (B=0.1588, $p<0.1$). Additionally, those who are working part-time only also have slightly higher mean levels of self-rated health (B=0.1863, $p<0.1$). Though not significant, the coefficient for part-time work and parenting is also positive (B=0.0970, $p=0.140$), indicating a higher health level compared to those who are working full-

time and parenting. In contrast, the health levels of those who are parenting a minor child only do not differ significantly from those who are working full-time and parenting (B=-0.0954, p=0.345). Work-parent role status does not have an influence on the rate of change by age, with coefficients for this interaction ranging from B=-0.0008 for full-time work only to B=-0.0071 for part-time working parents. Finally, model 3 demonstrates that there are no gender differences in the influence of work-parent role status on the initial levels of self-rated health. However, including a gender interaction increases the significance and magnitude of the coefficient for part-time working and parenting (B=0.2090, $p<0.05$). Furthermore, the addition of gender by work-parent status interactions at the intercept changes the significance of the rate of decline for part-time working parents from non-significance to marginally significant. Compared to those who are working full-time and parenting, those who are working part-time and parenting exhibit a slightly faster decline in self-rated health, with a coefficient of -0.0076 ($p<0.1$).

Table 4 displays growth curve model estimates of work-home time use on age trajectories of self-rated health. In model 2, compared to those with high levels of time use in both paid and unpaid labor, those with low levels of time use in both paid and unpaid labor exhibit higher levels of initial self-rated health (B=0.1551, $p<0.1$). However, those with low levels of time use in both domains also exhibit a faster rate of decline in self-rated health (B=-0.0055, $p<0.1$) compared to those who have high levels of time use in both work and home domains. Model 3 demonstrates that these relationships hold even after the inclusion of gender interactions at the intercept, and that these relationships do not differ between men and women.

[TABLE 4 ABOUT HERE]

Finally, table 5 displays growth curve model estimates of work-parenting strain on age trajectories of self-rated health. In model 2, compared to those with high levels of strain from both working and parenting, those with high levels of strain from work, but low levels of strain

from parenting have slightly higher mean levels of self-rated health (B=0.1155, p<0.1). Additionally, those who have low levels of strain from both working and parenting exhibit a faster decline in health compared to those who have high levels of strain from both working and parenting (B=-0.0086, p<0.05). Including gender interactions in model 3 reduces the significance of the covariate for high work/low parent strain. However, the covariate for the rate of change for those with low levels of strain from both working and parenting remains marginally significant (B=-0.0082, p<0.1).

[TABLE 5 ABOUT HERE]

## DISCUSSION & LIMITATIONS

These findings provide modest support that working and parenting in early to mid-adulthood shape health trajectories over the life course. First, I demonstrate that health does indeed follow an age-graded trajectory that declines over time, and that this rate of decline differs between men and women. I then demonstrate that this average trajectory is perturbed by experiences of working and parenting. In terms of role statuses, those parents working part-time have overall higher levels of self-rated health compared to those who are working full-time and parents. However, working part-time and being a parent is also associated with a moderately faster decline in health over time. This finding is interesting given that we have evidence demonstrating that dual involvement in paid labor and parenthood leads to better, and not worse, health. I discuss potential reasons for these discrepant findings below.

In terms of time use and level of strain, I find that those who maintain a balance in their time between work and home domains, and spending less time at work and at home (compared to those who spend high levels of time in both domains), have better levels of health, but also

experience a faster decline in their health over time. Finally, I find that those who report low levels of strain in both work and home domains face a faster rate of decline in self-rated health over time. These results provide modest support for the notion that working and parenting experiences can shape health in the long run by influencing health trajectories. These results also demonstrate the importance of measuring multiple dimensions of the work-home interface, as results may differ depending on whether we examine role status, time balance, or levels of strain.

Interestingly, I do not find significant gender differences in the associations between work-home involvement and age trajectories of self-rated health. Examining the results in table 4.2 may provide a better understanding of this finding. Table 4.2 demonstrates that men and women tend to select into different work-home situations. Thus differences in health by types of work-home situations may be more strongly influenced by how men and women select into working and parenting situations, rather than gender differences in the working and parenting experience. Unfortunately I cannot observe how men and women may select into these roles as much of the selection processes occurred prior to observation in these data, since respondents were all 25 and older (and in many cases, considerably older) at baseline. Future work should account for how men and women may differentially select into working and parenting experiences to better understand how the relationship between working, parenting, and health can differ by gender.

What do these results imply, in terms of the long-term health consequences of working and parenting? First, combining part-time work with parenting while may serve to initially alleviate stress burden from combining potentially competing social roles, but part-time work may also not afford as many health benefits as full-time work, thus leading to a faster decline in health compared to those who are employed full-time. Frech and Damaske (2012) also observe

something similar, noting that mothers who are either employed part-time, or experience intermittent employment, after the birth of their first child, report better health at age 40 than mothers who did not work at all, but report worse health than mothers who worked full-time. The results from the time use models demonstrate that not only is involvement in both paid labor and parenthood health enhancing, but that these benefits might only accrue when time pressure or overload is low, and the time spent in both domains is manageable.

The strain results seem the most counterintuitive, as the majority of the literature demonstrates that high levels of strain as a working parent is associated with worse health, whereas these findings demonstrate that lower levels of strain is associated with worse health across the life course. Here measurement strategies might offer a potential explanation for discrepant results. First, it is possible that it is a poor methodological strategy to turn a potentially ordinal concept of work or parenting strain into a dichotomous measure, imposing high/low cutoffs for measures of working and parenting strain. Perhaps health differences may be more readily observed across the full variation in levels of strain rather than between imposed "high" and "low" levels of strain. Alternatively it might also be possible that rather than tapping into the stressfulness of the situation, such strain measures assess one's level of engagement or commitment to a specific domain or role. Feeling less engaged with a role might result in feeling less bothered with such a role. Low levels of engagement with work and home domains may be related to worse health. Relatedly, it is possible that these measures of strain do not capture fully the qualitative experiences of working and parenting, as it may pertain to health. A more nuanced measure of the stressors and strains, but also perhaps of the benefits (i.e. satisfaction with work/parent role), might also aid in better understanding how the qualitative experience of combining work and parent roles might be related to health over the life course.

While this study represents one of the initial attempts to demonstrate differences in health trajectories by working and parenting experiences with growth curve models, there are a few limitations to bear in mind when interpreting the results. First, the ACL data are one of the few data sets that are nationally representative, and collect a wealth of health information over a long period of follow up. However, the ACL sample captured a wide range of ages at baseline, thus including persons from a wide range of life course stages. Such a design makes it difficult to disentangle age, period, and cohort effects that could be operating. Controlling for birth cohort at the individual level as well as focusing on respondents who were younger and fulfilling work and/or home role obligations ameliorates some of this concern. However, future studies modeling health trajectories should attempt to use narrower birth cohort groups.

Additionally, measures of working and parenting experience collected at one point in time may not accurately represent an individual's experience of working and parenting. Such a strategy ignores how men and women might strategize around such dual commitments over a mid-adulthood. It may be the case that these strategies have stronger implications for health over time, rather than just point-in-time measures of experiences as a working parent. For example, one study finds that modifying one's employment for the sake of one's children is associated with important psychological consequences, and that this relationship differed between men and women (Carr 2002). It may also be the case that rather than simply exposure to dual work-home roles, it is the sequence or duration of such combinations of roles that have health ramifications. For example, studies demonstrate that certain sequences, timing, and duration of being a working parent have important ramifications for mortality, as well as physical and mental health in later life (Sabbath et al 2015; Frech and Damaske 2012). Thus, future studies should attempt to model the dynamic ways in which working, having significant home responsibilities, and health are

related across the life course.

Finally, while the study controlled for baseline health status, it is still not possible to rule out health selection as driving some of the documented associations. While the ACL provides a wealth of information on health over follow-up, there are no measures of health status prior to baseline, when I measure respondent's work-home involvement. Such information is needed to adequately address bias that could occur if respondents with specific health characteristics are more likely to select into specific working and parenting roles, or to balance time or strain differently, which then could affect their health in later life. In order to address such important alternative explanations, future studies should aim to use data that include measures of health pre- and post- combining work and home roles in order to disentangle these multiple mechanisms.

## CONCLUSIONS

I find modest evidence that work-home role status, with regards to working for pay and being a parent, can influence long-term health trajectories. I also find that these relationships do not differ much by gender. These findings are somewhat surprising based on the current state of literature. However, I consider non-significant results and lack of gender differences to be related to potential measurement as well as model specification issues. Future studies should think carefully about how to measure the work-home experience, especially as it pertains to longer-term consequences. Future studies using a non-cohort sampling design should also endeavor to minimize the conflation of age and cohort effects in the process of modeling health trajectories. Furthermore, these categories could differ in meaning significantly between men and women, such that gender-stratified models may be required to truly examine gender differences in the

relationship between work, parenting, and health.

Demographic changes in American workplaces and families in the last half-century mean that men and women are juggling work and home responsibilities for a significant period of their adult life course. It is important for policymakers designing institutional supports for workers and parents to know that combining such roles may not only influence well-being in the short run, but could have potentially long-reaching ramifications. While taking on multiple roles in the work and home domains may provide health benefits, policymakers and researchers should continue to explore the conditions under which the benefits of such a role combination are maximized and the detrimental consequences are minimized. Such efforts can further aid our workers and family members to minimize the consequences of work-family conflict and allow the health benefits of multiple role engagement to accrue.

**Table 4.1 Weighted Descriptive Information about Analytic Sample (Americans' Changing Lives 1986-2011)**

| | % or Mean | Std. Dev. |
|---|---|---|
| Self-rated health (1 low 5 high, averaged across waves) | 3.84 | 0.97 |
| % male | 50.68% | |
| Age at 1986 | 40.47 | 11.62 |
| *Education* | | |
| Less than HS | 18.07% | |
| HS grad | 33.32% | |
| Some college | 24.91% | |
| College grad | 23.70% | |
| % Black | 11.52% | |
| Baseline # chronic conditions (0 - 7) | 0.68 | 0.97 |
| Cohort (1 oldest, 7 most recent) | 5.87 | 1.17 |
| *Marital status (time varying)* | | |
| Married/cohab | 75.32% | |
| Divorced/Separated | 12.19% | |
| Widowed | 5.65% | |
| Never Married | 6.84% | |
| HH Income (in the $1000s, 1986 dollars, time varying) | 38.67 | 47.36 |
| Number of individuals | 2,149 | |
| Number of observations | 8,169 | |

**Table 4.2 Percent of analytic sample in work-home situations in 1986 (Americans' Changing Lives Study 1986-2011)**

| | Overall % | % Men | % Women | Gender diff? |
|---|---|---|---|---|
| *Work-parent role status* | | | | |
| Full-time Work and Parenting | 38.97% | 49.21% | 28.44% | *** |
| Part-time Work and Parenting | 7.00% | 1.81% | 12.34% | *** |
| Full-time work only | 33.72% | 39.22% | 28.06% | *** |
| Part-time work only | 8.92% | 6.75% | 11.15% | *** |
| Parent only | 11.40% | 3.01% | 20.01% | *** |
| *Work-home time use* | | | | |
| Hi Work/Hi Home | 18.76% | 18.92% | 18.60% | |
| Hi Work/Lo Home | 39.19% | 56.50% | 21.41% | *** |
| Lo Work/Hi Home | 24.52% | 5.33% | 44.24% | *** |
| Lo Work/Lo Home | 17.52% | 19.25% | 15.76% | |
| *Work-parent strain levels* | | | | |
| Hi Work/Hi Home | 40.09% | 39.96% | 40.22% | |
| Hi Work/Lo Home | 40.20% | 48.27% | 31.91% | *** |
| Lo Work/Hi Home | 10.64% | 4.09% | 17.38% | *** |
| Lo Work/Lo Home | 9.06% | 7.67% | 10.49% | |
| N | 2,149 | 931 | 1,218 | |

+ < 0.1, *<0.05, **< 0.01, *** <0.001 (two-tailed tests)

**Table 4.3 Growth Curve Model Estimates of Working and Parenting Status on Self-Rated Health (Americans' Changing Lives Study 1986-2011)**

| Fixed Effects Parameters | Model 1 | | Model 2 | | Model 3 | |
|---|---|---|---|---|---|---|
| **For Intercept** | | | | | | |
| Intercept | 5.7580 | *** | 5.6256 | *** | 5.6231 | *** |
| Male | 0.0887 | | 0.0706 | | 0.0852 | |
| *Work-parent role status* | | | | | | |
| Full-time Work and Parenting (ref) | | | | | | |
| Part-time work and Parenting | | | 0.1588 | + | 0.2090 | * |
| Full-time work only | | | 0.0970 | | 0.0741 | |
| Part-time work only | | | 0.1863 | + | 0.1618 | |
| Parent only | | | -0.0954 | | -0.0708 | |
| *Work-parent role status X Male* | | | | | | |
| Full-time Work and Parenting (ref) | | | | | | |
| Part-time work and Parenting x Male | | | | | -0.2727 | |
| Full-time work only x Male | | | | | 0.0396 | |
| Part-time work only x Male | | | | | 0.0518 | |
| Parent only x Male | | | | | -0.2413 | |
| **For Linear Rate of Change** | | | | | | |
| Intercept | -0.0194 | *** | -0.0170 | *** | -0.0168 | *** |
| Male | -0.0034 | + | -0.0043 | * | -0.0047 | * |
| *Work-parent role status* | | | | | | |
| Full-time Work and Parenting (ref) | | | | | | |
| Part-time work and Parenting | | | -0.0071 | | -0.0076 | + |
| Full-time work only | | | -0.0008 | | -0.0008 | |
| Part-time work only | | | -0.0047 | | -0.0046 | |
| Parent only | | | -0.0050 | | -0.0048 | |
| **For Quadratic Rate of Change** | | | | | | |
| Intercept | -0.0001 | | -0.0001 | | -0.0001 | |
| **Controls** | | | | | | |
| Baseline # chronic conditions | -0.3057 | *** | -0.3031 | *** | -0.2988 | *** |
| Cohort (1 oldest, 7 most recent) | -0.2502 | *** | -0.2274 | *** | -0.2281 | *** |
| Black | -0.0943 | * | -0.0874 | * | -0.0880 | * |
| *Education* | | | | | | |
| Less than HS (ref) | | | | | | |
| HS grad | 0.2695 | *** | 0.2333 | *** | 0.2281 | *** |
| Some college | 0.2950 | *** | 0.2517 | *** | 0.2469 | *** |
| College grad | 0.4473 | *** | 0.3873 | *** | 0.3863 | *** |
| *Marital status (time varying)* | | | | | | |
| Married/cohab (ref) | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Divorced/Separated | -0.0430 | | -0.0559 | | -0.0541 | |
| Widowed | -0.0570 | | -0.0574 | | -0.0586 | |
| Never Married | 0.0498 | | -0.0005 | | -0.0051 | |
| HH Income (in $1000s) | 0.0008 | * | 0.0008 | * | 0.0008 | * |
| N of persons | 2149 | | 2149 | | 2149 | |
| N of observations | 8169 | | 8169 | | 8169 | |
| **Random Effects -- Variance Components** | | | | | | |
| Level 1: within person (residual) | 0.5058 | | 0.5046 | | 0.5046 | |
| Level 2: in intercept | 0.1268 | | 0.1222 | | 0.1220 | |
| Level 2: in growth rate | 0.0002 | | 0.0002 | | 0.0002 | |
| Goodness of Fit (BIC) | 26549.05 | | 26575.08 | | 26600.68 | |
| Deviance | 26386.90 | | 26340.86 | | 26330.44 | |

+ < 0.1, *<0.05, **< 0.01, *** <0.001 (two-tailed tests)

**Table 4.4 Growth Curve Model Estimates of Work-Home Time Use on Self-Rated Health (Americans' Changing Lives Study 1986-2011)**

| Fixed Effects Parameters | Model 1 | | Model 2 | | Model 3 | |
|---|---|---|---|---|---|---|
| **For Intercept** | | | | | | |
| Intercept | 5.7580 | *** | 5.7004 | *** | 5.7223 | *** |
| Male | 0.0887 | | 0.0421 | | -0.0060 | |
| *Work-home time use* | | | | | | |
| Hi Work/Hi Home (ref) | | | | | | |
| Hi Work/Lo Home | | | 0.1336 | | 0.0851 | |
| Lo Work/Hi Home | | | 0.0217 | | -0.0119 | |
| Lo Work/Lo Home | | | 0.1551 | + | 0.1728 | + |
| *Work-home time use X Male* | | | | | | |
| Hi Work/Hi Home X Male (ref) | | | | | | |
| Hi Work/Lo Home X Male | | | | | -0.0187 | |
| Lo Work/Hi Home X Male | | | | | 0.1122 | |
| Lo Work/Lo Home X Male | | | | | 0.0790 | |
| **For Linear Rate of Change** | | | | | | |
| Intercept | -0.0194 | *** | -0.0174 | *** | -0.0176 | *** |
| Male | -0.0034 | + | -0.0032 | | -0.0030 | |
| *Work-home time use* | | | | | | |
| Hi Work/Hi Home (ref) | | | | | | |
| Hi Work/Lo Home | | | -0.0032 | | -0.0032 | |
| Lo Work/Hi Home | | | -0.0035 | | -0.0033 | |
| Lo Work/Lo Home | | | -0.0055 | + | -0.0056 | + |
| **For Quadratic Rate of Change** | | | | | | |
| Intercept | -0.0001 | | -0.0001 | | -0.0001 | |
| **Controls** | | | | | | |
| Baseline # chronic conditions | -0.3057 | *** | -0.3048 | *** | -0.3057 | |
| Cohort (1 oldest, 7 most recent) | -0.2502 | *** | -0.2454 | *** | -0.2446 | *** |
| Black | -0.0943 | * | -0.0930 | * | -0.0954 | * |
| *Education* | | | | | | |
| Less than HS (ref) | | | | | | |
| HS grad | 0.2695 | *** | 0.2615 | *** | 0.2609 | *** |
| Some college | 0.2950 | *** | 0.2816 | *** | 0.2815 | *** |
| College grad | 0.4473 | *** | 0.4230 | *** | 0.4204 | *** |
| *Marital status (time varying)* | | | | | | |
| Married/cohab (ref) | | | | | | |
| Divorced/Separated | -0.0430 | | -0.0478 | | -0.0478 | |
| Widowed | -0.0570 | | -0.0577 | | -0.0559 | |
| Never Married | 0.0498 | | 0.0179 | | 0.0223 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| HH Income (in $1000s) | 0.0008 | * | 0.0008 | * | 0.0008 | * |
| N of persons | 2149 | | 2149 | | 2149.000 | |
| N of observations | 8169 | | 8169 | | 8169.000 | |
| **Random Effects -- Variance Components** | | | | | | |
| Level 1: within person (residual) | 0.5058 | | 0.5051 | | 0.5052 | |
| Level 2: in intercept | 0.1268 | | 0.1258 | | 0.1254 | |
| Level 2: in growth rate | 0.0002 | | 0.0002 | | 0.0002 | |
| Goodness of Fit (BIC) | 26549.05 | | 26587.35 | | 26611.22 | |
| Deviance | 26386.90 | | 26371.16 | | 26368.00 | |

+ < 0.1, *<0.05, **< 0.01, *** <0.001 (two-tailed tests)

**Table 4.5 Growth Curve Model Estimates of Work-Parent Strain on Self-Rated Health (Americans' Changing Lives Study 1986-2011)**

| Fixed Effects Parameters | Model 1 | | Model 2 | | Model 3 | |
|---|---|---|---|---|---|---|
| **For Intercept** | | | | | | |
| Intercept | 5.7580 | *** | 5.7353 | *** | 5.7521 | *** |
| Male | 0.0887 | | 0.0583 | | 0.0224 | |
| *Work-parent strain levels* | | | | | | |
| Hi Work/Hi Home (ref) | | | | | | |
| Hi Work/Lo Home | | | 0.1155 | + | 0.0707 | |
| Lo Work/Hi Home | | | -0.0752 | | -0.1112 | |
| Lo Work/Lo Home | | | 0.1460 | | 0.1861 | |
| *Work-parent strain levels X Male* | | | | | | |
| Hi Work/Hi Home X Male (ref) | | | | | | |
| Hi Work/Lo Home X Male | | | | | -0.1343 | |
| Lo Work/Hi Home X Male | | | | | 0.2375 | |
| Lo Work/Lo Home X Male | | | | | 0.0759 | |
| **For Linear Rate of Change** | | | | | | |
| Intercept | -0.0194 | *** | -0.0182 | *** | -0.0182 | *** |
| Male | -0.0034 | + | -0.0033 | | -0.0033 | |
| *Work-parent strain levels* | | | | | | |
| Hi Work/Hi Home (ref) | | | | | | |
| Hi Work/Lo Home | | | -0.0004 | | -0.0004 | |
| Lo Work/Hi Home | | | -0.0015 | | -0.0023 | |
| Lo Work/Lo Home | | | -0.0086 | * | -0.0082 | + |
| **For Quadratic Rate of Change** | | | | | | |
| Intercept | -0.0001 | | -0.0001 | | -0.0001 | + |
| **Controls** | | | | | | |
| Baseline # chronic conditions | -0.3057 | *** | -0.3024 | *** | -0.3049 | *** |
| Cohort (1 oldest, 7 most recent) | -0.2502 | *** | -0.2477 | *** | -0.2477 | *** |
| Black | -0.0943 | * | -0.0824 | * | -0.0856 | * |
| *Education* | | | | | | |
| Less than HS (ref) | | | | | | |
| HS grad | 0.2695 | *** | 0.2534 | *** | 0.2553 | *** |
| Some college | 0.2950 | *** | 0.2639 | *** | 0.2675 | *** |
| College grad | 0.4473 | *** | 0.4022 | *** | 0.4079 | *** |
| *Marital status (time varying)* | | | | | | |
| Married/cohab (ref) | | | | | | |
| Divorced/Separated | -0.0430 | | -0.0501 | | -0.0492 | |
| Widowed | -0.0570 | | -0.0540 | | -0.0520 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Never Married | 0.0498 | | 0.0054 | | 0.0063 | |
| HH Income (in $1000s) | 0.0008 | * | 0.0008 | * | 0.0008 | * |
| N of persons | 2149 | | 2149 | | 2149 | |
| N of observations | 8169 | | 8169 | | 8169 | |
| **Random Effects -- Variance Components** | | | | | | |
| Level 1: within person (residual) | 0.5058 | | 0.5042 | | 0.5041 | |
| Level 2: in intercept | 0.1268 | | 0.1231 | | 0.1217 | |
| Level 2: in growth rate | 0.0002 | | 0.0002 | | 0.0002 | |
| Goodness of Fit (BIC) | 26549.05 | | 26563.59 | | 26580.65 | |
| Deviance | 26386.90 | | 26347.40 | | 26337.44 | |

+ < 0.1, *<0.05, **< 0.01, *** <0.001 (two-tailed tests)

# CHAPTER 5

# CONCLUSION

This dissertation brings a sociological understanding to bear on experiences at the work-home interface. All three substantive chapters begin from the premise that work and home roles are social roles that individuals fulfill within the context one's life course trajectory. Each chapter examines a different experience at the work-home interface, paying attention to important similarities and differences between men and women, as well as providing insight into how a life course perspective can deepen our understanding of the experience of combining work and home responsibilities. This final chapter will summarize the main conclusions from each substantive chapter, discuss some limitations of the dissertation as a whole, and propose emerging questions that have been generated by this research. I will also conclude with a discussion of the policy implications of this work.

Chapter 2, "How Do Family Role Transitions across the Life Course Influence Perceived Spillover? A Test of Role Strain and Role Enhancement Perspectives," uses two waves of a national sample of working adults to demonstrate how family role transitions are related to perceptions of spillover between work and home domains, net of demographic controls and pre-transition reports of spillover. Our findings highlight the importance of considering role strain and role enhancement as dual processes, rather than competing processes, as it is possible to experience both within one transition. Such a finding opens up new avenues of research that can

examine how role strain and role enhancement processes combine to shape individual outcomes. Rather than considering the fulfillment of potentially competing work and home roles as a net positive or negative, studying how role strain and role enhancement mechanisms may cluster together can provide potentially fruitful new avenues in work-family research.

Chapter 3, "Combining Competing Devotions: The Role of Work, Family, and Lifestyle Devotions in the Career Decisions of Medical Trainees," utilizes qualitative interview data from medical trainees to demonstrate how men and women navigate competing devotions to work, family, and personal lives when making important career decisions in the medical training process. This work builds on prior research that demonstrates the role of cultural schemas in shaping women's accounts of their decisions at the work-family intersection (Blair-Loy 2003) by showing how both men and women utilize these devotion schemas to understand their decisions. Moreover, they also attempt to explain their decisions in such a way as to fulfill more than one competing devotion. This study demonstrates the powerful ways in which cultural schemas shape how men and women understand their work-home choices, as decisions that result in the inability to fulfill a devotion to work or home is still explained in such as way as to reinforce one's devotion to that domain.

Chapter 4, "Does it Hurt to Have it All? Documenting the Long-Term Consequences of Working and Parenting Using a National Prospective Study," uses nationally-representative and longitudinal data to find a modest association between working and parenting role occupation and qualities and subsequent trajectories of self-rated health. Results show that experiences at the work-home interface can have long-reaching influences on individual outcomes, and operate to shape pathways of health over the life course. Moreover, I demonstrate that it is important to measure work-home involvement in multiple ways, moving beyond simply a count of role

statuses, and that the mixture of work-home strain and time use can also have long-reaching ramifications for individual well-being.

Overall, all three studies highlight the importance of incorporating men's experiences into an understanding of the work-home interface that has heretofore largely focused on experiences of women (Bianchi and Milkie 2010; Hill 2010; Ahrens and Ryff 2006). In terms of within-gender differences, examining samples that include men show that there is variation in men's experiences at the work-home interface. Transitions into fatherhood and into marriage serve to influence changes in perceived spillover, relative to men who do not experience such transitions. In the qualitative chapter, similar to others who have studied fathers' work-family balance (Kaufman 2013), I find an alternative form of the family devotion schema that values fathers shifting their work commitments for their children. I also find that men attempt to combine competing devotions to work and family, either through taking advantage of work opportunities that allow them to simultaneously be involved parents and spouses, or through sacrificing some work devotion in the name of family. These findings reveal that the drastic social changes over the last half-century have impacted men as well as women, and thus it will continue to be fruitful to also consider men's experiences at work-home interface.

With regards to between-gender differences, these studies provide only modest evidence of significant differences in this particular set of outcomes, between men and women who fulfill similar work-home role responsibilities. For example, the first and third chapters document few gender differences: Apart from a few modest differences, the first study shows that men and women largely experience transitions in family roles similarly with regard to their perceptions of spillover. In the third study, I do not find significant gender differences in the association between work-home factors and long-term health trajectories. This is perhaps surprising, given

the large literature on the gendering of work and home roles (Sanchez and Thomson 1997, Baxter et al. 2008). However, this does corroborate prior work that demonstrates few gender differences at the work-home interface (Thoits 1983, 1986; Bellavia and Frone 2005; Schieman, Milkie, and Glavin 2009). Such findings can be interpreted several ways: First, though aggregate level findings show similar associations between work-home role fulfillment and individual outcomes for men and women, it is possible that the mechanisms behind such associations may be gendered. Men may perceive greater negative spillover when combining role responsibilities due to the limited options for paternal vs. maternal leave, whereas women may perceive greater spillover due to the gendered expectation to spend more time in childcare and housework. Second, it may be that the gendering of roles plays out more in compositional differences in work-home roles, rather than as a moderating influence. Gendered norms surrounding breadwinning and caregiving can serve more to shape the way men and women move in and out of various work-home role configurations than moderate the association between such role configurations and individual outcomes. Future research should consider both to better understand the ways gender can shape experiences at the work-home interface.

This empirical work also emphasizes the utility in applying a life course perspective to the study of the work-home interface. The first two empirical chapters are linked by their focus on turning points, or transitions across the life course, at the work-home interface. The first empirical chapter relates transitions in family roles to perceptions of both positive and negative work-home spillover, demonstrating that entering or leaving a family role can influence the perception of how work and home domains influence one another. The second empirical chapter documents how turning points in a medical career can be powerful moments where men and women alike attempt to combine competing devotions towards work, family, and personal lives,

in order to achieve desired outcomes for their careers and families. Taken together, the two studies emphasize the significance of key turning points in shaping work and home pathways, through shifting levels of positive/negative spillover, and by requiring men and women to make tough choices about their devotion to work, family, and personal lives. The third empirical chapter departs from this approach, and shifts the focus to the long-term health consequences of combining working and parenting responsibilities. This study builds on prior work on the cumulative processes of health to make a case for how combinations of work-home roles can shift the engines underlying health to produce long-term consequences. Through examinations of turning points and trajectories, this set of studies shows how incorporating a life course perspective to the study of the work-home interface sheds light on the mechanisms through which work and home roles can influence individual well-being in the long-term.

In conducting these studies, I combine evidence attained from both qualitative and quantitative methods, and thus demonstrate the key insights to be gained from studying the work-home interface through a multi-method lens. Quantitative analytic techniques allow us to assess aggregate-level associations between work and home factors and important outcomes. The systematic collection of data from a large sample of respondents over time allows the estimation of key associations between work-home factors and outcomes such as health and well-being, track within-person changes, mitigating unobserved variable bias, and appropriately match data to questions about life course pathways of work and family. However, qualitative data are better suited to providing deep insight into the mechanisms behind such aggregate associations. Qualitative data can show how cultural meanings of work and home shape individual interpretations of responsibilities in the two domains, and subsequently, how such interpretations and meanings influence individual outcomes. For example, while we know from chapter 2 that

men and women shift in their levels of spillover when they face transitions into and out of various family roles, chapter 3 demonstrates that these shifts in spillover can be linked to how individuals might value work and home roles differently. A transition in family roles can be related to a moment when one's competing devotions are questioned, and thus work can be perceived to be spilling over into important home responsibilities, or vice versa. The combination of the two approaches paint a more nuanced picture of the ways in which experiences at the work-home interface shape individual outcomes.

*Future research directions*

Future research on the work-home interface should continue to examine samples that include both men and women in order to build a larger empirical base on between- and within-gender differences in combining work and home roles, as well as the outcomes thereof. It is important to assess not only whether men and women in similar work and home situations face similar consequences (gender moderation), but also how men and women are differentially sorted and selected into work and home role configurations (selection and compositional differences by gender). Additionally, as the life course perspective dictates, it is also important to examine change over time, within-person change, as well as leverage insight from the examination of turning points on how broader work home pathways are constructed. Building life course insight into our understanding of the work-home interface situates work and home pressures within the context of one's life course trajectories, isolating important mechanisms through which work-home roles can influence individual outcomes, and illustrating how these outcomes can be long-reaching.

Future work should also consider how such associations differ by race and ethnicity, social class, and cultural context. Due to the analytic designs of the first and third studies, I

lacked the statistical power needed to examine how the association between work-home roles and individual outcomes might be moderated by race and social class. Furthermore, prioritizing a sample design with repeated measures within a respondent over time meant that respondents who were less likely to attrite were also more likely to be non-Hispanic white and have higher levels of education (Radler and Ryff 2010). Taken together with a qualitative study on medical professionals, the findings from this dissertation may generalize better to a more White and privileged group of workers attempting to combine work and home roles. This is a limitation because other research has documented racial differences in the relationship between role accumulation and health (Jackson 1997). Prior studies have also noted how the experience of combining work and home roles can differ by social class (Damaske 2011), as family formation patterns vary by educational attainment (Blossfeld and Huinink 1991), and access to jobs that can aid in the balancing of work and home roles are fewer among low-class as compared to high-class occupations (Kalleberg 2009). Thus future research on the experience of combining work and home roles should seek to better understand how such experiences are unequally distributed by social class and race.

Moreover, the meaning of multiple role engagement, and subsequently the association between multiple role engagement and health, has also been shown to differ by cultural and political contexts across different countries (Tamakoshi et al 2012; Kikuzawa 2005). For example, Kikuzawa (2005) finds that involvement in multiple work and family roles holds fewer mental health benefits for the elderly in Japan, as compared to the elderly in the US, noting that differences in the social meanings of being a family member and a worker in Japan can yield different multiple role-health associations, relative to the US. Moreover, different countries operate under different policy regimes regarding organizational and institutional support for

workers who have families, subjecting those in different countries to vastly different constraints and opportunities when combining work and home roles (Karas-Montez et al 2015; Williams 2010). Leveraging between-country differences in work-family policy regimes can shed more light on the context within which role accumulation may be beneficial as opposed to detrimental.

It is also important to broaden our understanding of home and family roles beyond a focus on parenting and being a spouse. While these are certainly key family roles in the adult life course, a narrow focus on these two events ignores the wide variety of home roles that one can take on while maintaining paid employment. For example, more than a quarter of adults live alone, and many working adults spend a significant amount of their adult years living alone, thus making the work-life balance issues of single-person households important to consider (Fox 2009). This narrow focus also ignores the significant home responsibilities of caregivers to the elderly and disabled who must also maintain paid employment. One in five adults between the ages of 35 and 64 provide care for a family member, and over 60% of caregivers are simultaneously involved in the paid labor force (N. Marks, 1996; Pavalko & Henderson, 2006). How are the work-home conflicts for workers that combine paid labor and caring for an elderly parent, or disabled relative, unique? What can we learn from one type of work-home role combination that can be applied to another? As the proportion of elderly increase, the size of the population that requires care will grow, making the experiences at the work-home interface of those who combine paid labor and caregiving responsibilities of crucial importance to understand. At the very least, our research concerns and policy agendas must broaden to consider the experiences at the work-home interface for a constellation of home roles outside of parenthood and marriage.

*Policy implications*

The findings in this dissertation imply several important take away points that are relevant for the formation of future social policy to aid our workers and family members. First, policies enacted to support workers who have significant home responsibilities should endeavor to avoid gender-specific implications. The research in this project demonstrates that conflict at the work-home interface is not a solely female experience, and that both men and women navigate and seek solutions for complex work-home dilemmas across the life course. Directing all work-family policy efforts toward women may serve to exacerbate gender inequities in the workplace and at home, while also failing to support a significant portion of the labor force. This is not to say that efforts to support working mothers are ill-advised, but rather they should be paired with efforts to support working fathers. Not only does this address the needs of men balancing work and home roles, but can also serve to reduce working mother's burdens in dual-working couples as responsibilities in the home become more gender egalitarian with institutional supports. This research would also support policy endeavors that target families (of all types) rather than individuals as a more cohesive way of addressing work-home imbalances.

Moreover, this research suggests that targeting important turning points, such as when career decisions are being made, or when one transitions into a new family role, can do much to shape the experience at the work-home interface, and subsequently influence individual outcomes. While certainly it can be argued that such turning points are the result of events and experiences prior, and to be sure these moments deserve policy attention, findings from these studies make a case for how turning points can shift the work-home experience, such as changing perceived levels of work-home spillover, or requiring men and women to confront competing devotions to work and home. Devising strategies so as to minimize negative experiences during such turning points, and institutionally supporting opportunities for positive work-home

experiences, can serve to have long-reaching ramifications.

Finally, this dissertation demonstrates how work and family domains are intricately tied. We cannot pretend that work decisions are made independently of family concerns, or that the consequences of home characteristics and conditions do not ripple through the work domain. Increasing policy attention towards ways to ameliorate negative experiences at the work-home interface, while maximizing opportunities for men and women to make decisions that can satisfy their ideal balance between work and home, can do much to alleviate gender differences in the home and in the workplace and improve individual and family well-being.

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