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Work, Family and Employee Health

Joseph G Grzywacz
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Joseph G. Grzywacz
Center for Family Resilience
College of Human Sciences
Oklahoma State University

Questions and instructions about this manuscript should be directed to: Joseph G. Grzywacz, Ph.D., Kaiser Family Foundation Professor Family Resilience; Director, Center for Family Resilience; 700 N. Greenwood Avenue, Tulsa OK, 74106; joseph.grzywacz@okstate.edu 918-594-8440 (t); 918-594-8558 (f).

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Abstract

Evidence and initiatives suggest that everyday work and family life may shape human health. Unfortunately, this literature remains theoretically underdeveloped and methodologically speculative. This chapter is designed to equip researchers to design and implement effective translational research focused on work and family and employee health. The chapter begins by illustrating the complexity of “health” and prioritizing the value of studying discrete aspects of health. Then, the chapter identifies three primary ways of thinking about “successful integration of work and family,” and it delineates four discrete hypotheses linking successful integration of work and family to health outcomes. This section includes a review of empirical evidence relevant to each hypothesis. The chapter concludes by identifying a high priority agenda for catapulting work, family and health research forward.

Key words: Employee Health; Work-Family Interface; Work-Family Initiatives; Worksite Health Promotion; Health & Productivity Management; Organizational Health
Substantial attention has been placed on the potential public health significance of adults’ ability to successfully integrate everyday work and family life. Several public health threats like the obesity epidemic (Li, Ford, McGuire, & Mokdad, 2007; Li, Ford, Mokdad, & Cook, 2006), staggering increases in the prevalence of chronic diseases like diabetes combined with earlier age of onset (Ford, Li, Little, & Mokdad, 2008; Li, Ford, Zhao, & Mokdad, 2009) coincided with, or followed from, major increases in women’s participation in the labor force between 1970 and 2000 (U.S. Department of Labor, 2014). Initiatives like Workplace Flexibility 2010 and the Whitehouse Forum on Workplace Flexibility used worker health and well-being as a tool for garnering support for legislation and policy solutions to support workers in integrate their work and family lives (Office of the President, Council of Economic Advisors, 2010). In this same period business-led initiatives like Corporate Voices for Working Americans (2005), and advocacy organizations like the Families and Work Institute lauded the health-related rationale for management and human resource development strategies that enabled work-life balance. Most recently, the Eunice Kennedy Shriver National Institute for Child Health and Human Development launched the Work, Family and Health Network with the explicit task of developing and testing the health-related benefits of employer strategies for promoting work-life balance.

Although substantial policy and research attention has been given to describing the health-related consequences of different aspects of everyday work and family life, considerably less attention has been devoted to considering why successful integration of work and family would affect human health. Understanding why successful integration of work and family would affect health is theoretically valuable because it offers an alternative lens for refining the conceptual meaning of concepts like “work-life balance” or “work-family fit”, and it can inform
broader theory building in diverse domains of science including adult development and aging, organizational behavior, and social organization. More practically, understanding why successful integration of work and family would affect human health is essential for designing and implementing strategies that achieve the goal of promoting health. Critiques that the voluminous work-family literature has produced few products benefiting working adults and their families (Kossek, Baltes, & Matthews, 2011) suggest poor theoretical understanding of “work-life” impedes effective action.

The overall goal of this chapter is to equip the design and implementation of effective translational research focused on work and family, and the implications of everyday work and family life for employee health. To achieve this goal, this chapter will: 1) illustrate the complexity of “health” and prioritize the necessity for thinking about discrete aspects of health; 2) identify three primary ways of thinking about “successful integration of work and family” and delineate four discrete hypotheses linking successful integration of work and family to health outcomes; 3) illustrate empirical evidence relevant to each hypothesis, and 4) identify a high priority agenda for catapulting work, family and health research forward.

Employee Health: Complexity and Implications

“Health” is an elusive concept: recognizing “poor health” is easy, while defining health conceptually is exceedingly difficult. The World Health Organization’s classic definition of health as a state of complete physical, mental and social well-being, and not the simple absence of illness provides the closest thing to a consensus definition, although it also is not without criticism because of its ambiguity in measurement (Huber et al., 2011; Saracci, 1997). The architecture of this definition identifies the primary source of the challenge in defining health; that is, health has several dimensions (i.e., physical, mental, and social), and it has at least two
components (i.e., the “objective” presence absence of disease or disorder, and the “subjective” experience or well-being). Consternation and disagreement about the meaning of “health” fundamentally arise from the relative importance different individuals or groups place upon each of the dimensions and components of health. Simple caricatures illustrate the point: which employee is “healthy”, the individual who lacks disease or disorder but lives life under constant vigilance to the threat of disease, or the individual with cancer who reports that real life was found in the battle against the disease?

Ambiguity in the meaning of “health” is clearly illustrated by the two dominant views of health held by employers. The first view of health is that of an organizational liability or expense. This is the view where health care costs and employee health risk profiles, both of which are indicators of morbidity (i.e., disease and disorder), are the primary metrics of interest. It is also the view where health cost management is the primary objective, and the key tactics for achieving the objective revolve around primary, secondary and tertiary disease prevention programs. The second dominant view of health is that of an organizational resource or asset. This is the view where “vitality” and “engagement” and other indicators of employee well-being are the primary metrics of interest. From this perspective employee wellness is the primary objective because it is seen as a source of competitive advantage, and the key tactics to achieving the objective revolve around programs targeting notions of wholeness and balance. Ironically, the assumption underlying each of these perspectives is that “disease and disease prevention” and “wellness” are opposite sides of the same coin; that is, disease prevention is essential to achieving wellness, or that seeking wellness reduces disease risk. These assumptions defy data indicating that a substantial proportion of working adults who are disease free also lack well-
being, and a substantial proportion of working adults with high well-being also have disease (Keyes & Grzywacz, 2002).

Employers’ conceptions of health that conflate disease and disorder (i.e., morbidity) with the subjective experience of “health” (i.e., well-being) pose real challenges to work-life professionals. The role Work-Life Specialists play in achieving an organization’s goals surrounding employee health can be overlooked. In the absence of hard data linking work-life initiatives to disease outcomes, an organization may assume that work-life is inconsequential to health costs management. While this may be true in the short-term, it is likely a mistake given evidence linking workplace flexibility with health promoting lifestyle behaviors (Grzywacz, Casey, & Jones, 2007) and emerging evidence from the Work, Family and Health Network indicating that work-life initiatives contribute to meaningful improvements in disease risk (Berkman, Buxton, Ertel, & Okechukwu, 2010; Moen, Fan, & Kelly, 2013). This evidence suggests that work-life initiatives may be valuable to long-term health cost management. Conversely, the contributions of work-life to an organization’s employee health goals may also be overstated. Popular press and trade journal articles can paint work-life initiatives as a panacea for reducing presenteeism, increasing talent retention, and promoting employee wellness. Although work-life initiatives are likely useful in achieving these wellbeing-related outcomes, their magnitude of effect is likely to be small because each outcome is complex and influenced by multiple forces. A valuable strategy to avoiding each of these challenges is for organizations to fold work-life into its health and productivity management function (Goetzel & Ozminkowski, 2000).

Avoiding monolithic and ambiguous conceptions of health is essential for advancing work, family, and employee health research. Clear and unambiguous concepts are required for
researchers to build theoretical models and rigorously test hypotheses informed by those models. Despite this basic precept of the scientific method, several work-family researchers (the current author included) tend to view conditions like “depression,” “hypertension,” and “diabetes” as comparable indicators of “health” despite the fact each is governed by a different bodily system (i.e., the neurologic, cardiac and metabolic systems, respectively), and each likely has a unique etiology. Likewise, many work-family researchers use research results obtained from studies using indicators of physical or psychological morbidity (e.g., obesity, number of chronic conditions, elevated cholesterol, depressive symptoms, use of alcohol) to draw conclusions about the implications of work and family for worker well-being. For example, the document underlying the White House Forum on Workplace Flexibility (Office of the President, Council of Economic Advisors, 2010) argued that workplace flexibility was essential to worker productivity (an indicator of well-being) based on papers that used measures of morbidity as the outcome. The tendency for work-family researchers to overly simplify the complex processes underlying distinct health outcomes likely contributes to poor model specification and faulty inferences.

Work and family researchers have several considerations requiring attention when selecting a “health” outcome. First, researchers must consider the time course of the health outcome. Some indicators of health from biometrics (e.g., ambulatory blood pressure, cholesterol and triglycerides), biomarkers (e.g., salivary cortisol, C-reactive protein as an indicator of inflammation), and symptom identification and severity are valuable because they offer insight into possible disease processes or dysregulation; however, they are also highly labile, often with significant moment-to-moment variability that cannot be confused with disease. Other health endpoints including manifest (e.g., hypertension, diabetes, major depression, obesity) or subclinical disease (e.g., intima media thickness, hyperthyroidism) have a
protracted onset making progression of the condition unclear. Although manifestations of these conditions may vary from day to day (e.g., elevated blood pressure following high salt intake), the underlying pathology remains generally constant. Researchers therefore need to select health outcomes whose temporal variability (either between or within individuals) or onset corresponds with the work and family phenomenon of interest.

Second, and similarly, researchers need to consider the time horizon of assessment with regard to the work and family phenomenon of interest. Glycosylated hemoglobin, for example, is an aggregate measure of glucose control over a 90-day period; consequently, a researcher would need to collect serial assessments at least 90-days apart to test the hypothesis that work-family conflict impairs successful management of the diabetes. Similarly, because it has both an intensity and duration component, “depression” researchers must be attentive to both components to accurately differentiate elevated depressive symptoms from “depression” per se. Finally, although it is naïve to presume that every health outcome is affected by a single bodily system, work, family and health researchers must become familiar with the bodily system(s) governing the health outcome of interest. Sadly, many work, family and health researchers know very little about “health” (Grzywacz & Ganong, 2009). They articulate wonderful hypotheses about why a work-family experience should be associated with a health outcome; but more often than not, researchers lack a refined motivation for selecting specific health outcomes (e.g., why select depressive symptoms over anxiety symptoms? should the study focus on symptom frequency or discomfort from symptoms?), or ability to generate hypotheses about differential associations of a work-family experience with one health outcome relative to another. Indeed, as a blind reviewer once commented to me which discussing a study “it is basically the triple crap hypothesis: you take someone in a crappy situation, expose them to more crap (or take some crap...
away), and you get a (more or less) crappy outcome”. Monumental steps forward will occur when work, family and health researchers become as nuanced on the “health side” of the model as they are on the “work and family side”.

**Successful Integration of Work and Family: Health Implications and Hypotheses**

Linking success navigating daily work and family life with employee health requires explicit consideration of the meaning of “success”. The work-family literature has assumed three distinct positions on this issue over time (Grzywacz & Butler, 2008). Driven by notions that the worlds of “work” and “family” were greedy institutions vying for an individual’s limited resources (Goode, 1960), the minimal conflict perspective argues that “success” is indicated by few or no conflicts between work and family responsibilities. The enhancement perspective recognizes the importance of minimizing conflicts between work and family, but it views “success” in terms of the level of synergy between work and family or the degree to which work and family “fit” together (Barnett & Hyde, 2001). Most recently work-family researchers have begun thinking about successful navigation of work and family in terms of “balance”. Whereas the minimal conflict and enhancement perspectives focus on negative and positive exchanges between work and family, the balance perspective views success in terms of effectiveness in both the work and family domains (Greenhaus & Allen, 2010; Grzywacz & Carlson, 2007).

Implicit in the work, family and employee health literature are four primary explanations for why success in work and family would influence health. Each of these explanations and corresponding hypotheses is described next. Although the hypotheses linking work and family success with health has wide potential utility, the specific value of each explanation is partially contingent on the view of “success” and meaning of “health.” Consequently, the description of
each explanation includes an explicit section on the practical implications of these theoretical ideas for work-life practice.

The Time-Bind Hypothesis

The time-bind hypothesis, following the powerful metaphor coined by Arlie Hochschild (1997), is fundamentally based in the empirical reality that time is a finite resource. Time spent performing activities for one life role (e.g., employee) is unavailable for performing activities for another life role (e.g., father) and for personal self-care. Consequently, the fundamental thesis underlying the time-bind hypothesis is that meeting the responsibilities of jobs and family leaves little time for individuals to engage in key behaviors activities needed for the production of health.

There is a substantial body of evidence consistent with the time-bind hypothesis. Substantial increases in consumption of refined carbohydrates between the early 1970s and the mid-1990s (Chun, Chung, Wang, Padgitt, & Song, 2010; Gross, Li, Ford, & Liu, 2004), and increases in eating out (Kant & Graubard, 2004) could be interpreted as increasing reliance on commercially prepared foods coinciding with the substantial growth in women’s labor force participation. Evidence suggests decrements to lifestyle habits, like physical activity, across early adulthood; periods of the lifespan accompanied by major changes in work and family (Frech, 2014; Kern, Reynolds, & Friedman, 2010; Kwan, Cairney, Faulkner, & Pullenayegum, 2012; Nomaguchi & Bianchi, 2004). Other evidence documents changes in health-related behaviors like diet and physical activity following employment status changes (Bauer, Hearst, Escoto, Berge, & Neumark-Sztainer, 2012) and family transitions like marriage or parenthood (Berge, Larson, Bauer, & Neumark-Sztainer, 2011; Hull et al., 2010; Laroche et al., 2013; Ortega et al., 2011). These findings, along with evidence from more theoretically-driven social and
behavioral science studies, are frequently interpreted as indicating that, as adults work and family lives become more complex, they have less time for pursuing healthy dietary and physical activity habits (Au, Hauck, & Hollingsworth, 2013; Bauer et al., 2012; Frech, 2014; Nomaguchi & Bianchi, 2004).

If the time-bind hypothesis were relevant to employee health, practical solutions that “make time” or alleviate “time binds” should be associated with enhancements to worker health (Galinsky, Sakai, & Wigton, 2011). Perhaps the most concrete example of such a practical solution is workplace flexibility, particularly schedule flexibility. Schedule flexibility can result in avoided “time binds” because workers have discretion over when they perform their job-related tasks. Likewise, schedule flexibility can be used to “make time;” a 30-minute period before lunch can be leveraged into sufficient time for a bout of exercise, shower and healthy lunch. Or, schedule flexibility can be used to reorganize a daily or weekly work schedule to create pockets of functional time by organizing several small periods scattered across a calendar to occur sequentially. The notion that schedule flexibility helps workers “make time” or alleviate “time binds” underlies a long-standing belief that worksite flexibility is a key to successful worksite wellness programming (Allen, 2002; Stokols, Pelletier, & Fielding, 1996).

Despite the widespread interest in workplace flexibility, there are surprisingly few convincing tests of the time-bind hypothesis for employee health. The Work, Family and Health Network is currently analyzing results from their definitive testing of the time-bind hypothesis focused on workplace flexibility; however, results from their pilot work are suggestive. An implementation of a “results only work environment” (ROWE) intervention focused on building flexibility at the team level, found changes in physical activity and other lifestyle behaviors (Moen et al., 2013). These researchers also found that a portion of the change in health behavior
was explained by reductions in negative spillover from work to family. Results from observational studies (primarily cross-sectional) have linked perceptions of workplace flexibility with better cholesterol values (Thomas & Ganster, 1995), fewer physical symptoms (Janssen & Nachreiner, 2004; Thomas & Ganster, 1995), and less sickness absence (Ala-Mursula, Vahtera, Kivimaki, Kevin, & Pentti, 2002; Ala-Mursula et al., 2006; Ala-Mursula, Vahtera, Linna, Pentti, & Kivimaki, 2005). The preponderance of cross-sectional evidence at the expense of few intervention or longitudinal studies undermine the ability to draw any conclusions about the salience of the “time-bind” hypothesis in understanding employee health (Beauregard & Henry, 2009; Kossek et al., 2011).

The Competing Priorities Hypothesis

The central idea of the “competing priorities” hypothesis is that satisfying work and family responsibilities is a central task of adult development. Because of the prominence of satisfying these tasks, other activities of daily life take lower priority. Two strands of adult development theory support this basic idea. Lachman and Boone-James (1997) posit that managing the multiple responsibilities of daily work and family life is a central task of adult development, particularly during midlife (p. 11). Heckhausen, (1997) contends that many social roles and responsibilities like motherhood and climbing the career ladder have temporal boundaries that close during midlife thereby posing restrictions on goal achievement. Because temporal restrictions on achieving social roles and responsibilities frequently precede age-related health declines that normatively occur in later midlife or early late-life, Heckhausen argued that adults may prioritize their work and family responsibilities over their own health.

There are few direct tests of the “competing priorities” hypothesis. Anthropologists were among the first to document beliefs about the potential differential salience of daily work and
family responsibilities relative to personal self care. Backett (1992) conducted a series of in-depth interviews with middle-class working parents about their health-related behaviors and beliefs. Analyses of these interview data documented strongly held beliefs that personal health behaviors such as exercise and dietary modifications were of lesser priority than pressing demands of family members and employers. Bianchi's (2000) analysis of data from the American Time Use Survey provides a concrete illustration of the competing priorities hypothesis: she demonstrated no differences in time spent with children between employed and non-employed mothers. However, employed mothers did report spending less time sleeping than non-employed mothers, suggesting that working mothers prioritized time with children over sleep; a health-related activity with substantial implications for disease and morbidity.

There is also indirect evidence that adults, especially young to midlife adults may prioritize their work and family responsibilities. Decrements in positive health habits across early adulthood (Frech, 2014; Kern et al., 2010; Kwan et al., 2012; Nomaguchi & Bianchi, 2004) could be interpreted as indicating that adults prioritize their work and family responsibilities over personal self-care, recognizing time is a finite resource. The food security literature points to the competing priorities hypothesis; 8.9% of non-impoverished households with children have low or very low food security, but only 3.4% of these households have a child with low or very low food security (Coleman-Jensen, McFall, & Nord, 2013). This suggests that in the majority of cases of household food insecurity, one or more working parents (because they are not in poverty) is purposefully cutting back on their own food to ensure their child has enough to eat. Similarly, others report that employed mothers prioritize feeding their children (Jabs et al., 2007), but do so as quickly as possible in order to move on to other tasks is suggestive that working adults prioritize work and family responsibilities (i.e., feed the children, get tasks done)
over health (i.e., nutritional quality of foods consumed). This suggestion parallels earlier results suggesting that common food coping strategies used by employed adults, like redefining the meaning of “healthy” or reducing expectations surrounding family meals and eating (Devine et al., 2006). Finally, my personal experience is that, as job and family responsibilities have grown, I have increasingly abandoned my lunch-time workout to finish up one more task, or skip breakfast so that I can personally take my kids to the bus-stop rather than having them walk themselves.

If the “competing priorities” hypothesis has value for understanding employee health, workplace programs seeking to improve employee health would be informed by one of two possible change strategies. The first change strategy is overt attempts to change employees’ priorities to encourage prioritizing personal health and self-care over daily work and family responsibilities. Although this strategy appears selfish and therefore undesirable at first blush, arguments that employees should “take care of themselves so they can be more productive” or that “you need to take care of yourself so that you can take care of them” (referring to family) are inherently steeped in the “competing priorities” hypothesis. Similarly letting employees participate in health programming on company time, a presumed hallmark of employer commitment to worksite health promotion, is one concrete manifestation of an attempt to help workers prioritize their own health over work responsibilities. The second change strategy is offering initiatives that acknowledge the prioritization of work and family into the very design of the worksite health promotion program. If the only functional time to attend a worksite fitness center is before or after work, every employee who has a family is forced to make a decision between “personal health” and “family time”. Explicit attempts to eliminate forced choices like this will likely be more effective for promoting fitness center usage and building healthier
employees. Human resource initiatives that allow workers to “buy out” of job assignments in exchange for participation in health promotion programs would be another way of designing initiatives that acknowledge the general priority for work and family responsibilities over personal self care.

The Holism Hypothesis

The “holism hypothesis” takes serious Rosabeth Kanter Moss’s contention that “work” and “family” are not separate spheres of life (1977); it challenges the dualistic notion that workers can have a meaningful work life OR family life, but not both, and supposes that workers can have both. Informed by role theory, Sieber (1974) was among the first to introduce the radical idea that combining multiple roles yielded net benefits rather than losses. Marks (1977) followed these ideas and argued that experiences in different roles could complement each other in a synergistic fashion resulting in the production rather than depletion of limited resources. The “holism hypothesis” therefore argues that variation in the level of synergy between employees work and family responsibilities or coherence across work and family roles will contribute to variation in health outcomes.

The evidence base for the “holism hypothesis” as it pertains to employee health is among the least developed. There is some evidence that indicators of synergy between work and family are associated with self-reported physical health and the number of chronic medical conditions (Grzywacz, 2000). van Steenbergen and colleagues (2007) were the first to demonstrate that indicators of synergy between work and family were associated with objective indicators of health like cholesterol and body mass index, as well as sickness absence in both cross-sectional and longitudinal data. Subsequent longitudinal research has linked indicators of synergy between work and family to physical health-related quality of life (Carlson et al., 2011). Cross-
Sectional evidence suggests that synergy between work and family is associated with greater physical activity among women (Grzywacz & Marks, 2001). There is some emerging evidence that interventions can promote synergies between work and family (Albertsen et al., 2014), but there is no evidence that interventions targeting the creation of synergies between work and family yield positive changes in health outcomes.

If the “holism hypothesis” was useful for understanding variation in employee health, worksites may have several strategies for promoting synergies between work and family. Albertsen and colleagues (2014) reported positive changes in work-family facilitation, an indicator of synergy between work and family, by implementing an information technology-based self-rostering program wherein staff could fit their personal needs around the demands of the organization in terms of when and how much they worked. Drawing on the Job Characteristics Model (Hackman & Oldham, 1976), Wayne and colleagues (2007) argued that jobs that are enriched with task significance and skill variety would be useful in creating synergies between the worlds of work and family. Studies of the putative causes of synergy between work and family suggest that investments in employee training and management practices that put decision making in the hands of employees may also be useful in promoting employee health (Grzywacz & Butler, 2005).

The Strain Hypothesis

The theoretical and empirical backbone of the work, family and health argument is the strain hypothesis. Informed heavily by the role strain perspective (Goode, 1960) that work and family are each greedy institutions vying for the finite amounts of time and other resources available to individuals, the presumption was that work-family conflicts were inevitable byproducts of attempts to integrate work and family, and that work-family conflict is a cogent
stressor (Greenhaus & Beutell, 1985). The fundamental thesis of the strain hypothesis is that combining work and family is stressful, and the physical and emotional strains resulting from these stressors undermine human health.

There is an impressive body of literature documenting associations between work-family conflict and various indicators of health. A now nearly decade-old meta-analysis reported an average correlation of $r = -0.23$ between indicators of work-family conflict and health (Mesmer-Magnus & Viswesvaran, 2005). Two literature reviews (Frone, 2003; Greenhaus, Allen & Spector, 2006) suggest that stresses and strains at the work-family interface, particularly work-family conflict, may undermine employee physical health. Grzywacz and Tucker (2008) critically reviewed the literature and pointed out the heavy reliance on self-reported indicators of health, the tendency to focus on general indicators of health as opposed to discrete health outcomes, and a predominance of cross-sectional studies compromised the ability to generate meaningful conclusions about the physical health-related implications of work-family conflict and potentially other strains at the work-family interface.

However, research examining the potential viability of the strain hypothesis has become increasingly sophisticated. Prior to the launch and dissemination of pilot data from the Work, Family and Health Network, research began addressing gaps in the previous literature. Although the literature remains riddled with cross-sectional studies, prospective research continues to emerge linking strains associated with work-family conflict with self-reported symptoms (Grzywacz, Butler, & Almeida, 2008), heavy alcohol use (Leineweber, Baltzer, Magnusson Hanson, & Westerlund, 2013; Wolff, Rospenda, Richman, Liu, & Milner, 2013) and indicators of morbidity like sickness absence (Clays, Kittel, Godin, Bacquer, & Backer, 2009) and use of health care services (Christiaens & Bracke, 2014) over time. Diary studies that mimic case-
crossover studies wherein individuals serve as their own control have been used to show links suggestive that alcohol use (Wang et al., 2010) is heavier on days wherein individuals experience more work-family conflict. Similarly, depending on the level of supervisor support, heart rate and blood pressure may be higher on days with elevated work-family conflict (Shockley & Allen, 2013). Others are linking work-family conflict with discrete indicators of health like musculoskeletal pain (Hammig, Knecht, Laubli, & Bauer, 2011), or behaviors with clear health implications like intensity of daily smoking (Macy, Chassin, & Presson, 2013; Nelson, Li, Sorensen, & Berkman, 2012), poorer eating habits (Grace, Williams, Stewart, & Franche, 2006; Roos, Sarlio-Lahteenkorva, Lallukka, & Lahelma, 2007) and poorer family food environments (Bauer et al., 2012).

The most definitive test of the strain hypothesis is emerging from the Work, Family and Health Network. Results from pilot work implicate work-family conflict in sleep disruption (Crain et al., 2014; Jacobsen et al., 2014), musculoskeletal pain (Kim et al., 2013) and several discrete health behaviors (Moen et al., 2013). Further, results from pilot work suggest that workplace modifications can minimize experiences of work-family conflict (Moen, Kelly, Tranby, & Huang, 2011). Results from the randomized trials are forthcoming, but the available evidence is highly suggestive that the strain hypothesis is valuable for understanding health outcomes of work-family experiences. Further, the available evidence suggests that strain may be working through behavioral (e.g., sleep, alcohol, smoking, eating behavior) and physiological (e.g., heart rate, blood pressure) mechanisms to affect discrete health outcomes.

If the strain hypothesis has value for understanding employee health, workplace programs informed by one of two possible strategies may result in health improvements.
The first general strategy would be systematic attempts to minimize employee exposure to work-family conflicts or other similar stressors (e.g., role overload, inter-role strain) at the work-family interface. Workplace flexibility or schedule control again provides a concrete example of strategies to minimize conflicts because employees could use this option to avoid conflicts between work and family. Results from Albertsen and colleagues (2014) quasi-experimental study support the potential value of this general strategy. The second general strategy would be to help employees better cope with work-family conflicts as they arise, perhaps through stress management programs that focus on problem-focused coping or mindfulness, or by providing resources like schedule control or working remotely to accommodate conflicts should they arise.

Each of the proposed hypotheses can be seen in dominant areas of intervention inquiry used in the work-family literature. Workplace flexibility can be interpreted from the “time bind” hypothesis as a concrete strategy for making time or helping workers better organize their time. In similar fashion, it can be interpreted from a “competing priorities” perspective in that it allows individuals to tend to their priorities as they see fit rather than imposing one or more priorities on workers. Because workplace flexibility often requires the development of new skills and work management strategies (see Baltes, Briggs, Huff, Wright, & Neuman, 1999), the “holism” hypothesis is also relevant because workers may acquire new skills and opportunities that enable more synergies between work and family. Finally, as just discussed, workplace flexibility can be viewed from a “strain” perspective in that it offers the possibility to minimize exposure to forced choices between work and family and the subsequent strain that may follow.

Similarly, the growing interest in family supportive supervisory behaviors as a corporate strategy for promoting worker health can be interpreted from several of the hypotheses outlined above. Supervisors who acknowledge obligations outside the workplace and provide supports to
help workers achieve these obligations reflects a concrete mechanism for letting workers organize their lives around their personal priorities rather than corporate priorities. Supervisor support is also likely to be an invaluable coping resource in the face of work-family conflict; the strain of work-family conflict is likely to be much lower for individuals who have a supportive supervisor relative to a supervisor who expects workers to “leave their family at the door.” Finally, to the extent that social capital emerges from a family supportive supervisor is likely to yield psychological and potentially behavioral outcomes that benefit employee health.

High Priority Research Agenda

The preceding discussion highlights several high priority research needs. The first high priority research need is studies of discrete and unambiguous measures of “health”. Although there is little agreement of what health is, there is consensus that there is at least six domains of health, including morbidity (e.g., presence of manifest or subclinical disease, presence of psychiatric disorder), pain (including attentiveness to presence, duration, and intensity), impairment (e.g., joint mobility, range of motion, cardiac function), mental impairment (e.g., problems focusing attention, recall difficulty, impulsiveness or poor decision making), role-related impairment (e.g., sickness absence, “chemo-brain” creating difficulty returning to work following cancer treatment, inability to care for young children because of low back pain), and social impairment (e.g., injury-related disfigurement leading to social isolation, difficulty interacting in public spaces because of anxiety). Building a critical mass of work and family research focusing on each conceptually distinct domain of health is sorely needed. A corpus of research in each area will enable more focused meta-analyses to summarize those domains of health most sensitive to work and family experiences, which would, in turn, inform stronger theorizing.
There are several areas of work, family and health research that are ripe for development. The first ripe area is the role of work and family in chronic disease management. Operating under the broader label of “adherence”, clinicians across multiple specialty areas ranging from diabetes, to pulmonology, to oncology and dermatology are asking themselves “we have great treatments for several conditions; why don’t patients use them as they are prescribed?” A series of studies articulating work- and family-related variation in glycosylated hemoglobin for both adult and pediatric diabetes management would be immensely valuable for scientific understanding, and (recognizing that employers frequently shoulder the bill for health costs) for creating workplace solutions to disease management. Research focused on delineating the breadth, depth, and costs associated with work- and family-related mental impairment is a second area ripe for development. Importantly, this research would need to be attentive to mental impairment from affective and behavioral disorders, as well as from cognitive impairment resulting from distraction, rumination, or preoccupation. These later forms of impairment may be particularly acute if they occur in specific situations (e.g., distracted surgeon, preoccupied bus driver or air traffic controller). Work ability, a specific classification of role-related impairment, is the third area ripe for further research. Although work ability has existed in the vocational rehabilitation world for decades, it has demanded substantial attention since many forms of cancer were classified as “chronic” as opposed to “life threatening” conditions. Here, the fundamental question is to what extent work- and family-related experiences support or impair a person’s ability to work despite the presence of disease, disability, or the sequelea of medical treatments. A common issue in breast cancer survivorship is experience of “chemo-brain,” or the mental impairment resulting from high doses or radiation or chemotherapy, and the circumstances that exacerbate or mitigate the experience. A final area that is ripe for
development is exploitation of the entire field of biomarkers, including the use of devices for monitoring key indicators of health such as sleep, physical activity, and diet (Buxton et al., 2013). As Buxton and colleagues outline, biomarkers and device data are invaluable for moving beyond same-source data problems, and for moving closer to the behavioral and physiological mechanisms involved in human health.

Work, family and employee health research must expand its conceptual repertoire. The vast majority of existing research is implicitly or explicitly built on some type of stress model. Stress theories are indeed one useful tool for considering possible health consequences of work and family experiences, and advancements in field methods for assessing distinct types of stress responses are likely valuable for hypothesis testing (Buxton et al., 2013). However, as was highlighted earlier in this chapter, there are at least three other classes of hypotheses that may be useful for understanding work, family and employee health. Researchers are encouraged to break out of the comfortable stress framework by purposefully designing studies that test alternative explanations (e.g., the “time bind” or “competing priorities” hypotheses). Or better still, researchers are encouraged to design studies that purposefully test the power of one hypothesis (say the “time bind”) against the “strain” hypothesis; this type of study would advance understanding much more rapidly than null hypothesis studies.

Intervention work is sorely needed in the work, family and health literature. The paucity of intervention research will be partially alleviated as results from the Work, Family and Health Network continue to emerge. However, more research under different models and assumptions will be needed. Consider, for example, the potential significance of daily work and family life for diabetes management, a chronic condition that requires adherence to complex regimen of medication, diet, physical activity and other lifestyle behaviors (American Diabetes Association,
If the “time bind” hypothesis has merits, personal time management sessions, or “meal preparation in 30 minutes or less” programs may be useful for promoting enhanced disease self management. Following basic best practices used by vocational rehabilitation specialists, perhaps case managers could work with supervisors of individuals with chronic diseases like diabetes to create work arrangements that are more conducive to disease management. Ideally, of course, it would be best if the entire organization adopted family-friendly practices, but targeted implementations for specific workers with specific conditions provide natural experiments.

Conclusion

The work, family and health literature has made significant strides in the past several decades. Much has been accomplished to create a compelling foundation to presume that everyday work and family life and their coordination may affect employee health. This foundation is concretized and shored up by emerging results from the Work, Family and Health Network. Nevertheless, the literature is not yet mature. This chapter was written with the goal of equipping investigators to design and implement effective translational research focused on work, family and health. One tool offered in this chapter was encouragement for work, family and health researchers to be more thoughtful about the conceptual and practical handling of “health”. A second tool offered was alternative theoretical frameworks and hypothetical arguments for why work and family might affect health. These frameworks were then illustrated in light of current zeitgeists like workplace flexibility and family supportive supervisory behaviors. The final tool offered in this chapter was direction for high priority future research. Each of these tools will help bring the work, family and employee health literature to maturity to ensure that our science will create solid outcomes for employers, workers and their families.
References


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