TIME AND THE WORK/FAMILY INTERFACE IN A FORTUNE 500 ORGANIZATION: THE DIRECT AND INTERACTIVE EFFECTS OF TEMPORAL STRUCTURES, OUT-OF-OFFICE CONTACT, AND POLYCHRONICITY ON NEGATIVE WORK-TO-FAMILY SPILLOVER

by

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ABSTRACT

BRETT ANTHONY AGYPT. Time and the work/family interface in a Fortune 500 organization: The interactive effects of temporal structures, out-of-office contact, and polychronicity on negative work-to-family spillover. (Under the direction of DR. BETH A. RUBIN)

The modern economy is high-paced and demanding, in part due to globalization's effect on business processes and expanded technological capabilities; as a result, employees can experience greater pressure and stress in the workplace that can lead to increased work/family conflict. In light of these more challenging conditions for employees, some work/family scholars have adjusted the theoretical lens by which they operationalize and explain work/family conflict to incorporate employees' temporal norms, cultures, and structures. For example, many organizational scholars have explored how hours worked, paid-time-off, and even work pacing, timing, and cycles are related to work/family conflict. In this dissertation, I employ Layered-Task Time (LTT) – a structural temporal construct that is inherently linked to an employee's work experience – to define workplace conditions that predict negative work-to-family spillover. In addition, I combine this temporal approach with the degree to which employees are contacted outside of the typical workplace and hours (henceforth referred to as "out-of-office contact" or "OOOC") to explore how the integrated nature of the work and nonwork domains influences the work/family interface. Using data from a large, bureaucratically organized Fortune 500 insurance company, I examine the first-order effects of the LTT components on negative work-to-family spillover, and, in an effort to also extend current work/family theory, the interactive effect of these temporal conditions with out-of-office contact on negative work-to-family spillover. Finally, I also explore the interactive effect

of polychronicity, or the degree to which one prefers multi-tasking, on both of these sets of relationships in order to better understand how polychronicity can buffer the negative influence of these temporal conditions and the interactive effect of these temporal conditions with OOOC frequency on negative work-to-family spillover. The results support the majority of the hypotheses presented in this dissertation – specifically, that the temporal conditions operationalized in this dissertation predict negative work-to-family spillover, and that when these temporal conditions are combined with increased work-related contact outside of the traditionally defined work place/time, those effects are stronger. I find support that polychronicity interacts with some of these temporal conditions as well as many of the interactions between these temporal conditions and out-of-office contact to buffer the negative implications of these constructs for negative work-to-family spillover. Finally, I discuss the implications of this research for practice as well as for the theoretical state of current temporality and work/family literature.

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CHAPTER 1: INTRODUCTION

Organizational scholarship has increasingly recognized and explored the role of time in organizational phenomena. When viewed in light of the increased competitiveness that organizational actors experience in today's economy, fueled in part by the increased role of information technologies in and out of the workplace and the longstanding effects of globalization, temporal scholarship can contribute to better understanding the antecedents, moderators and mediators of a variety of individual employee outcomes, including work/family conflict. For example, Schor (1991, 1998) argued that American employees are becoming increasingly overworked due to their working more hours per week, leading to an erosion of employees' quality of life outside of the workplace.

Although some disagree (e.g., Robinson & Godbey, 1999), the general consensus in the organizational sociology literature is that employees are working longer and faster than ever before (Jacobs & Gerson, 2004; Maume & Bellas, 2001; Nomaguchi, 2009). The temporal conditions that have subsequently emerged are in turn leading to increases in employees' work/family conflict (e.g., Hetrick, 2000; Hochschild, 1999) that can result in increased stress, depression, and hypertension (Frone, Russell, & Cooper, 1997), as well as increased role overload and decreased quality-of-life, job satisfaction, and organizational commitment (Moen & Yu, 2000). In turn, there is a growing need to better understand the temporal workplace characteristics that contribute to work/family

conflict and the constructs that may mitigate the negative effect of these characteristics (Golden, Kirby, & Jorgenson, 2006).

Work/family theorists, however, have been slow to integrate these temporal conditions into organizational theory. For example, the predominant work/family theory applied in most work/family scholarship across disciplines to date is role conflict theory. Although a foundational theoretical approach to work/family scholarship, work/family scholars have more recently expounded on a variety of problems that role conflict theory introduces into the literature, one of which being that it employs a particularly economic approach to the work and family domains. Specifically, role conflict theory applies a resource-focused lens in which one's experiences in one domain are impacted by resources gained or lost in the other domain. Today's workplace, however, is not as simply and clearly segmented as it once was a century ago, particularly due to the increased imposition of work outside of the conventional workplace and, subsequently, in the nonwork domain. One of the primary drivers of this shift toward work/family domain integration has been the rapid advancement and integration of information technologies in – and subsequently out of – the workplace. Many workers, especially knowledge workers, are now able to engage in work-related activities outside of the workplace on a regular basis. This presents a problem when using role conflict theory because role conflict theory's mutually exclusive approach to the work and nonwork domains cannot adequately address the gradual integration of these domains.

In this dissertation, I attempt to contribute to the work/family literature by incorporating the degree to which employees are contacted outside of traditional work space and time to better understand how temporal aspects of the workplace interact with

the degree to which one's work and family domains are integrated and, as a result, influence negative work-to-family spillover. To do so, I employ a temporal perspective – specifically, the theoretical components of layered-task time (LTT; Rubin, 2007), a temporal construct that is defined by increased simultaneity, fragmentation, contamination, and constraint – as indicative of the inherent temporal regimes, norms, processes, and structures in the work and family domains. Applying a temporal perspective facilitates a better understanding of how the work and family domains interact, particularly by exploring how job- and organization-level factors (specifically temporal conditions reflective of unpredictability, uncertainty, and constant change) relate to negative work-to-family spillover in light of the increasing role of work in the family domain.

In Chapter 2 of this dissertation, I link macro-level temporal structures to the micro-level negative work-to-family spillover. Additionally, I hypothesize how micro-level temporalities (in this case polychronicity) can buffer the positive effect of these macro-level temporal structures on employees' reported negative work-to-family spillover, and the role of out-of-office contact in these relationships. Furthermore, I contribute to the organizational temporality literature by finding evidence of validation for the presence of multiple temporal structures in today's knowledge-based economy and the very real influence of these temporal conditions on employees' experiences in and out of the workplace.

Chapter 3 of this dissertation describes the process by which I collected data for this study, including a detailed description of the organization from which I collected data, the sample of participants, and the survey instrument that I used to collect data. In

Chapter 4, I detail each quantitative analysis that I performed in this study, including descriptive analyses to better understand each variable's distribution, reliability analyses, confirmatory factor analyses, correlation analyses, analyses of variance, and multiple regression analyses.

Finally, in Chapter 5, I discuss the results of this study, including the theory behind the supported and rejected hypotheses. More substantively, I describe next steps that I and other work/family scholars can take to further study the increasingly blended nature of the work and nonwork domains, particularly when studying knowledge workers. I end this discussion by recognizing the study's limitations and stating the implications of this dissertation for both theory and practice.

CHAPTER 2: A REVIEW OF WORK/FAMILY AND ORGANIZATIONAL TEMPORALITY LITERATURE

Much of traditional work/family scholarship has focused on how time in and out of the workplace affects work/family conflict, and the effect of work/family conflict on a variety of other outcomes including job satisfaction (Eberhardt & Shani, 1984; Logan et al., 1973), performance and organizational commitment (Boles, Johnson, & Hair, 1997; Bond, Galinsky, & Swanberg, 1998; Kossek & Ozeki, 1998; Thompson, Beauvais, & Lyness, 1999), role overload and conflict (Hall & Gordon, 1973), and stress (Bacharach, Bamberger, & Conley, 1991; Burden & Googins, 1987; Frone, Russell, & Cooper, 1997; Kossek & Ozeki, 1998). Overall, the literature states that a natural tension exists between one's temporal experiences in and out of the workplace; this tension can result in negative spillover, or a negative experience in one domain (e.g., the home) due to one's experiences in another domain (e.g., the workplace).

Work/family scholars have varied in their theoretical approach to understanding and studying the work/family interface. For instance, industrial/organizational psychology and organizational behavior scholars have used, and continue to use, role conflict theory as the lens through which they study the work/family interface (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005). Organizational sociologists, however,

have primarily abandoned role conflict theory, turning instead to alternative theories that include gender role theory (Eagly, 1997) and work/family devotion schemas (e.g., Blair-Loy, 2003). Alternatively, organizational communication scholars have focused primarily on social identity theory and role conflict theory to study the work/family interface, but have since begun to incorporate other approaches, including discourse analysis (e.g., Tietze & Musson, 2002) and structuration theory (e.g., Kirby & Krone, 2002).

Despite these disciplinary variations, the majority of work/family scholarship continues to use role conflict theory to better understand the outcomes of the work/family interface. Role conflict theory states that when one uses more resources in one domain (e.g. the workplace) than another (e.g., the home), it causes conflict between the roles that the individual fills in each domain (Greenhaus & Beutell, 1985). The conflicting pressures of each domain cause a psychological tension, especially when the roles that the employee fills in each domain are incompatible. Many organizations actually encourage this conflict by enacting policies that reward sacrificing other time commitments for time spent at work (Ely & Meyerson, 2000).

More recent work/family scholarship, however, has taken on a more gender-cognizant approach in which scholars recognize that the work/family interface has substantially shifted due to the shift in the labor force demographics. Specifically, there has been an influx of women in the labor force, and women are increasingly filling high-status positions in organizations that were traditionally male-dominated. As such, many organizational sociologists have focused on gender as it is structured and developed in interactions, or work/family conflict as a gendered experience (Risman, 1998). Kossek &

Ozeki (1998), for example, found that the negative relationship between work/family conflict and job satisfaction (and life satisfaction) was stronger for women *and* those in dual-career families than men and those in single-earner families.

Also, as American women are spending more time in the workplace, they are committing less time to housework than before (Bianchi et al., 2000), and are cooking and cleaning significantly less (Robinson & Milkie, 1997). Men, however, have failed to reciprocate by increasing their housework. As a result, women experience more stress in coping with the combination of work and housework (Moen & Yu, 2000).

Women also experience greater pressure than men when they decide whether or not to have children. Although many fathers are now managing the home while mothers work in paid employment, mothers still experience the social expectations that they will care for the children disproportionately more than the father (Sasaki, Hazen, & Swann Jr., 2010). As a result, mothers experience greater overall conflict between career and family goals. In fact, mothers suffer a loss of 7% in their average pay for every child they have, regardless of how high-level their job (Budig & England, 2001); men, on the other hand, do not suffer in pay when they have children (Hull & Nelson, 2000). In other words, "some women pay a price by sacrificing family for career; others sacrifice career (or at least wages) for family" (Padavic & Reskin, 2002: 164).

In addition to caring for the home and children, many American workers must also negotiate the care of elderly relatives. As a result of eldercare responsibilities, many workers experience less sleep, leisure time, and even job loss (Padavic & Reskin, 2002). Subsequently, the increased pressure to cope with family and work demands has led to an

increase in the demand for cleaning services, child care centers, and eldercare assistance (Glass, 2000).

All of this research, however, is predicated on the assumption that men and women share in their experiences as a *couple*, when in reality, many single men and women are forced to earn a respectable income while also supporting children and/or elderly relatives. Risman (1998: 74) describes the social pressure that women, particularly single women with household demands, face when they are forced to strike a balance between paid labor and household income. Women endure the product of these social pressures when they decide to take on more time-consuming roles, resulting in others thinking that they are selfish for not conforming to the traditionally acceptable female role.

Despite the unique pressures placed on women, however, men and women alike are experiencing greater pressure to work longer and harder than ever before (Nomaguchi, 2009). Bielby (1998) found that, in response to the increased pressure to spend more time at work, two-thirds of women *and* men would prefer to work 11 hours less per week. Additionally, despite the great progress in analyzing the work/family interface through a gender-centric perspective, the truth is that many employers have not reorganized their work and task structure since the 1950s when men dominated the workforce and wives were expected to take care of the home full-time (Padavic & Reskin, 2002). Hochschild (1997), for example, recorded the following response from a manager in light of employees' request for greater work/family balance:

> "Don't *ever* bring up 'balance' again! I don't want to hear about it! Period! Everybody in this company has to work hard… Just because a few women are concerned about balance doesn't mean we change the rules. If they chose this career, they're going to have to pay for it in hours, just like the rest of us" (71).

Sadly, this is hardly a unique response; many organizational leaders still adhere to this mindset. Managers often fail to recognize the different social expectations and pressures placed on women, and fail to adjust their work/family expectations in turn (Hoobler, Wayne, & Lemmon, 2009).

Male and female employees alike often face conflict between their employee role and their non-employee role, producing interrole conflict that can result in negative spillover (Eby, Casper, Lockwood, Bordeaux, & Brindley, 2005). Interrole conflict typically occurs due to the over- or under-application of three types of resources: time-based, strain-based, or behavior-based resources (Edwards & Rothbard, 2000; Greenhaus & Beutell, 1985).

Time-based conflict, the most common of the three types of conflict (and the most theoretically linked to LTT, to be discussed later), arises when the time that the employee spends in one domain threatens the time that is spent in the other domain. If one applies a "clock-time" approach to characterizing one's temporal experience (i.e., time as it is connected to a universal, objective, and quantifiable timepiece), time is in fact a limited resource, and employees are forced to seek a balance between the amount of time they spend in the work and nonwork domains. Employees who experience time-based conflict

often work overtime or late unexpectedly which hinders the employee's ability to make arrangements for the nonwork domain (e.g., childcare or eldercare). Time-based conflict has been linked primarily to strain (Goode, 1960) and work-family conflict (Marks, 1977). Strain-based conflict arises when one experiences greater strain in one domain, causing that strain to spillover into the person's other domain. If an employee is experiencing a divorce in her nonwork domain, her anxiety may carry over into her work domain and negatively affect her productivity and satisfaction, among other outcomes. Finally, behavior-based conflict arises when an employee's behavior in one role may not fit well in the employee's other role. For example, an executive may be authoritative, militaristic, and overaggressive in his work role, whereas these behaviors may have an adverse effect on the executive's home life.

A great deal of this literature, however, has examined time in and out of the workplace as defined by the "9-5" workday (e.g., Greenhaus & Beutell, 1985), introducing a constraint for those studying the temporality-work/family balance interface (Beutell, 2010). Work in today's economy often requires working outside of the traditional boundaries of the "9-5" workday as well as outside of the conventional workplace – the office. The border that existed between work and home has been "gradually blurred by the advances of 'modernity', as new 'times' emerge through the forces of capitalism, the growth of industrialism, non-conventional organizational structures, and technological innovations" (Kaufman-Scarborough, 2006: 57; see also Schieman, Whitestone, and Van Gundy (2006) for work on border theory). As a result, many employees either telecommute (work from home) or telework (work from a distant but linked location) – in essence working outside of the confines of the conventional

workplace using technological tools like the telephone, computer, and internet. Kirk (2001) claims that over 15 million Americans have home offices or telework regularly. More recently, a WorldatWork survey found that nearly 34 million Americans telecommute regularly (Johnson, 2009). Employers recognize that they save a great deal overhead costs when their employees do not require offices, and many employees relish the prospect of working from home. Additionally, innovations in information technologies have introduced greater capabilities for employees to work outside of the workplace, thus facilitating the telecommuting process (Jackson & van der Wielen, 1998).

Although it is often a requirement for telecommuters to maintain a solitary workspace where nonwork-related interruptions would be minimal, telecommuting diminishes the traditionally salient boundary between one's work life and home life (Tietze & Musson, 2002). The increased integration of work and home domains (Hochschild, 1999; Kanellakis, 2002; Tietze & Musson, 2002) has profound implications for work/family theory, and role conflict theory in particular. No longer can one define spillover as the process of one's experiences in one domain impacting one's experiences in another domain because these two domains have merged – to a varying extent – into a single domain. As a result, rather than operationalize one's temporal experience as segmented in the work domain or the home domain, scholars must consider the implications of an integrated work/family domain for work/family theory (Kaufman-Scarborough, 2006).

Some theorists have explored how the traditional relationship between time and space, as studied in the conventional workplace, has subsequently changed. Giddens

(1991), for example, explored the construct of time-space distanciation, or the process by which the continual, dynamic interplay between social actors and institutions has become stretched over spans of space and time (449). Others have examined the conflict between home and work time for employees; teleworkers in particular do not simply bounce from a home-oriented activity to a work-oriented activity and then back to a home-oriented activity. Rather, the two types of activities (and their temporal byproducts) tend to interact and comingle, producing inconsistent and novel temporal structures (Silverstone, 1993).

Many telecommuters tend to struggle with this process that Kaufman-Scarborough (2006) deemed the "blending of temporal regimes" (63). Employees' families often have pre-established routines and rhythms, and these temporal processes often conflict with the routines and rhythms that the employees have established in their workplace, particularly when the employees lack control over these temporal processes (Silverstone, 1993). Merging these temporalities typically requires employing new organizational mechanisms that reconstitute the relationship between home and work (Tietze & Musson, 2002). In light of these macroeconomic shifts, some work/family scholars (e.g., Bailyn, 1993; Brayfield, 1995; Clark, 2000; Fried, 1998; Presser, 2005; and Scheiman and colleagues' work on boundary or border theory) have incorporated the notion that work now extends beyond the standard workday and workplace in their research (Perin, 1998).

Work/family scholars have also developed a deep literature that is primarily founded on the *conflict* experienced when one operates incongruently in the work and family domains. Although the effects of conflict are by no means unidirectional, the

majority of research on work-family conflict in the organizational sciences focuses on work-to-family spillover rather than family-to-work spillover, despite the notion that operating in different roles can increase one's social support, skill set, self-esteem and well-being (Barnett & Hyde, 2001; Baruch & Barnett, 1987; Frone et al., 1997). Work-to-family spillover has been linked to life and job dissatisfaction (Boles, Johnston, & Hair, 1997; Burke, 1988; Kossek & Ozeki, 1998; Thomas & Ganster, 1995), anxiety (Barnett & Rivers, 1996; Frone, 2000), absenteeism (Barling, MacEwen, Kelloway, & Higginbottom, 1994; Kossek, 1990; Kossek & Nichol, 1992) and intent to quit (Aryee, 1992; Burke, 1988), as well as physical health outcomes like alcohol consumption, depression, and hypertension (Frone, Russell, & Cooper, 1997).

Additionally, a great deal of literature focuses on the antecedents of work-to-family spillover. Some scholars have advocated for the *positive* effects of domain or role integration, or work/family enrichment (Eby, Casper, Lockwood, Bordeaux & Brinley, 2005; Frone, 2003; Greenhaus & Powell, 2006; Voydanoff, 2004; Wayne, Grzywacz, Carlson, & Kacmar, 2007). Enrichment occurs when one's performance in one role is positively affected by the resources gained in the other role (Greenhaus & Parasuraman, 1999). For example, if a mother learns to handle coworker relationships better because of her gained knowledge from handling her teenage children's relationships, the resources or skills gained at home have improved her performance in the workplace.

Despite this thread of research, however, the majority of research on work/family spillover has focused on the *negative* implications of spillover. For example, those who must care for young children, more children, or elders are more likely to experience negative work-to-family spillover due to the greater strain from their increased

responsibilities in the home domain (Frone, Russell, & Cooper, 1997; Greenhaus & Beutell, 1985; Mennino, Rubin, & Brayfield, 2005). Similarly, some scholars have found that women report more work-to-family spillover than men (Gutek, Searle, & Klepa, 1992).

Workplace culture has also been linked to employees' experience of work-family conflict (Galinsky et al., 1996; Greenhaus & Beutell, 1985), and many scholars have called for a greater focus on interventions for organizational leaders to increase the work-family-friendly culture of organizations (Thompson, Beauvais, & Lyness, 1999). Eby, Casper, Lockwood, Bordeaux, & Brindley (2005) also found that employees cope with work-family conflict via supportive supervisors, mentoring, and a more supportive organizational culture. Golden, Kirby, & Jorgenson (2006) called for a greater focus on workplace factors as antecedents of work-to-family spillover; for instance, those who work more hours and have less schedule flexibility experience greater work-to-family spillover (Moen & Yu, 2000), although time management skills mediate these relationships (Byron, 2005). In addition to time management, many practitioners have sought to provide work-family balance policies like flexible scheduling and teleworking; however, the presence of these policies does not have as much of an effect as the informal work-family culture within the organization (Mennino, Rubin, & Brayfield, 2005).

In order to build on the temporal scholarship that links time and the work/family interface, it is integral to first document time as it has been studied in the organizational science literature. Traditionally, organizational scholars have examined time in a variety of ways, but our understanding of time as it is enacted and experienced in organizations

relies on our first understanding how time is enacted and experienced at the individual level.

In his preeminent research study, Taylor (1911) was the first to examine the use and perception of time in the workplace. Since this study, many organizational scholars from various disciplines have identified time as a relevant and influential factor in workplace experiences. Following Taylor's initial time use study, for example, many micro-organizational scholars have examined time allocation (Andorka, 1987; Robinson, 1997), time use (Carlson, 1951; Kotter, 1982), and time management (Covey, 1989; Covey, Merrill, & Merrill, 1994; Macan, 1994).

Traditional temporal scholarship has dichotomized individual temporal perceptions in the workplace as either clock-based (i.e., clock time) or event-based (i.e., social time) (Clark, 1978, 1985). Clock time refers to time as objective and therefore quantifiable and measureable (Lee & Libenau, 1999). Clock time operates solely based on the clock and is therefore much easier to capture as a temporal experience (Bluedorn, 2002). Sociologists have argued that clock time is directly linked to regularity and routines due to the universal nature of temporal intervals (Ariotti, 1995). Conversely, social time reflects the social construction of one's temporal experience in which time is not dictated by an objective measure but rather by the various events in one's life (Zerubavel, 1979). Social time is grounded in patterns of social processes and the social actors' conceptual order or organization of time. In other words, the social construction of temporality is not simply a uniformly defined construct, but rather tied directly to the social actor's unique experiences and organization of reality. For example, one can

determine the time by simply observing the clock (e.g., it's 5:30 p.m.) or by considering the events within one's day (e.g., it's almost dinner time).

Others argued that any given experience is a result of both a clock time and social time perspective. For example, Durkheim (1915) argued that time primarily divides one's social experiences based on occasions and activities (i.e., social time), but also noted that these events occur only within the confines of a pre-existing calendar (i.e., clock time). According to Durkheim (1925), a "calendar expresses the rhythm of collective activities, while at the same time its function is to assure their regularity" (11). Our experience of time is therefore not strictly based on social events or the objective clock, but rather a combination of the two perspectives such that time is socially constructed but within an objective calendar (Berger & Luckman, 1966).

Similarly, Sorokin & Merton (1937) argued that time has consistently been misidentified as a quantitative, objective experience based on the clock. In arguing for a more subjective examination of the temporal experience, Sorokin & Merton (1937) claimed that time is not simply an objective matter, but rather one's perception and understanding of time is socially constructed based on one's social interactions and experiences throughout the past, present and future (Flaherty, 1987; Nowotny, 1994). Thus, although many believed that time was only understood and shared across individuals when based on an objective measure of time, time can actually be experienced subjectively across individuals because groups engage in cultural behaviors that institutionalize a temporal experience across those within the group. Specifically, the authors claimed that, "all calendrical systems arise from and are perpetuated by social requirements. They arise from social differentiation and a widening area of social

interaction" (615). In addition, Sorokin & Merton (1937) described the disciplinary differences in explanation of temporal perspectives (e.g., psychologists study individual differences in temporal perspectives whereas economists study the cyclical shifts in economic equilibrium as determined by supply-demand cycles within and created by organizations).

Flaherty (1991) also explored the subjective/objective temporal distinction by examining narratives, interviews, and other forms of text to explore how time is experienced as both objective *and* subjective according to the person's contextual experiences. Specifically, Flaherty (1991) found that time is traditionally synchronized according to the clock or calendar, but that this experience of time is often manipulated in situations that are either extraordinarily eventful or uneventful. In other words, a person's time sense has an objectively synchronized equilibrium, but that time sense can alter according to the events that one experiences.

Reflecting on the subjective experience of time, many anthropologists, sociologists, and industrial/organizational psychologists have also examined the role of chronicity in culture. For instance, Eliade (1954) argued that rather than perceive time as a past/present/future phenomenon, many cultures instead perceived time as a continuum by which they could return to the beginning of time. Bluedorn & Denhardt (1988) commented on these cultures, describing their reality as a participatory experience by which each individual explored his or her reality in order to obtain eternal truth. A great deal of literature has also focused on polychronicity, or one's preference for multitasking, as it is experienced in cultures as well as individuals. I discuss this construct in greater detail later in this chapter.

In addition to individual-level polychronicity, others have examined individual-level past/present/future temporal orientation (Adam, 1992; Ancona, Okhuysen, & Perlow, 2001; Cottle, 1976; Nowotny, 1985, 1987) in which time represents a marker by which each experience is placed in a continuum of behavior and experience, or one's *durée* (Bachelard, 1950). Durée reflects the process of reflecting on one's experiences in life and in doing so developing a temporal continuum by which the past, present and future become tied together. Bird & Jordan (1987) created the first measures of past, present, and future orientations, and Das (1986) examined individual differences in strategic planning efforts, assigning different orientations to people, including those with a "near future" orientation or a "distant future" orientation. Finally, based on the past/present/future temporal orientation paradigm, Purser, Bluedorn, & Petranker (2005) proposed a new temporal distinction between two temporal conceptions: causal-time and flow-time. Causal-time reflects the notion that time unfolds based on our experiences and decisions, such that time is in essence *caused by* those in social interaction. Conversely, flow-time reflects the notion that one cannot interact with time, but rather one can engage in social interaction within time.

All of the aforementioned scholarship on individual temporal experiences has informed research on macro-organizational temporal processes, and although many scholars have examined macro-organizational temporality from a variety of perspectives, organizational temporalities as a whole have endured a cyclical shift over time, starting with the social-time perspective. Prior to industrialization, work was primarily skill-based (e.g., artisans and farmers) and autonomous; time was dictated not by an objective clock, but rather the tasks that employees were responsible for completing throughout the

day. Social anthropologist E.E. Evans-Pritchard studied an African tribe called the Nuer, noting that their time piece was, "the cattle clock, the round of pastoral tasks, and the time of day and the passage of time through a day" (1997:74) rather than the clock. Times of the year were not designated objectively (e.g., months), but rather time was associated with the activity that was performed during that time of the year (e.g., the time of weeding or the time of harvest). The industrial era, however, introduced mechanized processes in the workplace that had implications for employees' temporal experiences. Specifically, due to the high degree of interdependence and simultaneity necessary to perform their jobs, employees in factories and plants had to work on coordinated schedules. Supervisors were therefore forced to rely on a coordinative mechanism (the clock) by which they could inform their employees of when they were to be in the workplace and when they were allowed to leave. Work was therefore reliant on the clock rather than the tasks required by the job, reflecting a macro-organizational shift from a social-time orientation to a clock-time orientation (Thompson, 1967).

Over the last few decades, however, work has undergone another shift. Specifically, work has become more knowledge-based due to a variety of factors, including, but not limited to, globalization and the increased role of information technologies in (and, subsequently, out of) the workplace. Whereas post-industrialized work was once confined to the plants and factories in which many employees worked, employees are now able, and often expected, to work beyond the traditional space defined as the workplace. Specifically, information technologies (e.g., some combination of the internet, laptops, cell phones, home computers, PDAs, and a host of other technological tools) are now connecting employees to the workplace at any time of day

and in any location. Additionally, the knowledge-based nature of work in the current economy allows an employee to perform work-related functions while outside of the workplace and any predefined work hours. Due to the ability for employees to work at any time and from any location, work is no longer just a temporal piece of one's life that can be compartmentalized with ease. Rather, work is now a permeating facet of one's entire life.

Rubin (2007) argues that globalization and the increase in use of information technologies have also contributed to an increased competitive pressure on organizations to perform as rapidly as possible. In response to this increased pressure, organizational leaders have shifted their organizational structures from traditional bureaucratic structures to decentralized, team-based, and overall debureaucratized structures (Ancona & Waller, 2007; Blount, 2004; Cappelli et al., 1997; Perrucci & MacDermid, 2007; Rubin, 1995, 1996). By doing so, organizations introduce more team-based structures that are useful in increasing flexibility and driving innovativeness and creativity (Barker, 1999; Marks, Mathieu, & Zaccaro, 2001; Moss, Salzman, & Tilly, 2005; Saunders et al., 2004); team-based structures can also provide an innovative source of competitive advantage for organizations (Arrow, 1974; Kogut & Zander, 1992). Finally, altering one's organizational structure to become more debureaucratized also introduces a more networked organizational structure in which knowledge transfer is abundant – an integral process to a knowledge-based organization (Tsai, 2001).

As organizational leaders alter their organization's structure, they in turn influence the temporal structure of work within those organizations (Rubin, 2007). Due to the 24/7 nature of knowledge-based work, the pressure for employees to complete

work at unprecedented speeds and at any time, and the constant connection between employees and the workplace due to various information technological capabilities, employees' productivity is no longer tied to the clock but rather the completion of each employee's various responsibilities. Rubin (2007) theorized that this temporal shift has induced the emergence of a new temporal perspective called layered-task time (LTT) in which time is tied directly to the task structure in one's job and organization. In knowledge-based organizations, employees are forced to negotiate a variety of tasks at any given time and as these tasks become "layered" upon one another, the employee must negotiate which tasks to complete, when to complete them, and in what order, including whether or not to jump between tasks or complete each task one at a time.

Agypt & Rubin (2012) argued that Rubin's notion of LTT consisted of five job-level and five organization-level temporal structure components. Specifically, jobs characterized by LTT are high in time urgency, simultaneity, fragmentation, contamination, and constraint. Time urgency reflects the increased pace of work required to complete the job, simultaneity reflects the need to multitask to perform the job, fragmentation reflects the discontinuity of one's work, contamination reflects the need to use multiple skill sets on multiple tasks in one's job, and constraint reflects the need to work to deadlines in one's job.

Organizations characterized by LTT are high in schedule unpredictability, synchronization, pace unpredictability, allocation and cycle; however, both allocation and cycle have failed to yield much evidence of internal consistency or validity in recent studies, and thus subsequent empirical explorations of LTT have excluded these two variables (e.g., Agypt & Rubin, 2009). Schedule unpredictability reflects the notion that

organizational deadlines, meetings, and schedules change unpredictably, synchronization reflects the need to work across organizational and departmental boundaries, and pace unpredictability reflects the unpredictable changes in the pace of work throughout the organization.

In an effort to better understand and explicate the construct of LTT and its multiple facets, Agypt & Rubin (2012) examined the relationship between some of the LTT facets (simultaneity, contamination, constraint, and schedule unpredictability) and polychronicity. The authors confirmed hypotheses reflecting the notion that those who are more polychronic are more satisfied in jobs and organizations that are characterized by these LTT components. In doing so, the authors also empirically verified the then-theoretical construct of LTT as a workplace condition in today's economy. Still, very few scholars (except Agypt, Rubin, & Spivack, 2012) have explored the implications of LTT components in the workplace for individual employees beyond job satisfaction, despite the deep literature base that connects temporalities to important outcomes like work/family balance.

In this study, I seek to further understand temporal structures in the workplace through LTT; specifically, I seek to connect these temporal structures to the theoretically relevant dependent variable of work-to-family spillover. Generally speaking, LTT components reflect an environment in which an employee is faced with a variety of tasks that require the employee to triage the tasks, creating a stress-inducing environment that requires greater emotional and cognitive resources. Stressful job characteristics have consistently been linked to increases in work-family conflict (Barling & Macewen, 1992; Doby & Caplan, 1995; Hughes & Galinsky, 1994; Jackson, Zedeck, & Summers, 1985);

thus, it would follow that environments characterized by increased levels of LTT would lead to increases in work-family conflict, and more specifically, work-to-family spillover (although work-to-family spillover can have positive implications, my consideration of work-to-family spillover throughout this dissertation will focus on the *negative* implications of spillover). Despite this overall predicted negative relationship, each LTT component can be specifically related to work-to-family spillover. Additionally, my foundational hypotheses about the LTT and negative work-to-family spillover relationship are informed by role conflict theory; however, I then introduce additional, more complex hypotheses that expand on role conflict theory by considering the interaction of the work and family domains in light of the increased amount of out-of-office contact that employees endure when outside of the traditional workspace and time.

Time urgency represents the temporal pressure that a job places on employees. Scholarship has consistently linked time urgency to work-to-family spillover, such that those who experience greater temporal pressure in the workplace also experience increased work-to-family spillover (Carlson, 1999; Carlson & Perrewe, 1999; Fox & Dwyer, 1999; Greenhaus et al., 1987; Grzywacz & Marks, 2000; Mennino, Rubin, & Brayfield, 2005). Employees expend greater cognitive resources due to temporal constraints are more likely to have less of these cognitive resources upon returning to the home domain, leading to an increase in work-to-family spillover. As a component of LTT, time urgency should therefore lead to increased work-to-family spillover. Therefore:

H1: Time urgency will be positively related to negative work-to-family spillover.

Simultaneity reflects the degree to which a job requires multitasking. The work/family literature does not address multitasking directly; however, those who multitask expend themselves more than those who do not multitask (Wickens, 2008). Much like time urgency, increased cognitive expense will reduce the employee's cognitive capacities in the home domain, leading to a greater work-to-family spillover. For example, Kirmeyer (1988) found that attending to multiple tasks at one time leads to work overload and increased stress. I therefore hypothesize that:

H2: Simultaneity will be positively related to negative work-to-family spillover.

Fragmentation reflects the degree to which one's job is fraught with interruptions, forcing the employee to jump from task to task. The work-family balance literature has revealed that increased interruptions in the workplace result in increased stress and work-family spillover (Mark, Gudith, & Klocke, 2008; Zijlstra, Roe, Leonora, & Krediet, 1999). Additionally, employees who must jump from task to task may have difficulty completing tasks in the workplace (Chisholm, Collison, Nelson, & Cordell, 2008); the seemingly simple act of switching from task to task has been shown to take a greater amount of time due to the need to recalibrate one's psychological mechanisms for each specific task (Kieffaber & Hetrick, 2005) that can result in the employee completing less work than usual.

Additionally, employees may then feel increased pressure in the workplace to complete their respective tasks, and may feel compelled to work on the tasks outside of the work domain (and subsequently in the family domain). Bringing work home or spending more time doing work each has direct implications for employees' experiences in the home domain, particularly for their interactions with cohabiters or family members.

Regardless of whether employees are performing work in or out of the workplace beyond their standard work hours, they are spending less time with their loved ones due to the increased pressure to complete their work tasks. This decrease in interactions will hurt their relationships, leading to greater negative work-to-family spillover. For all of these reasons I hypothesize that:

H3: Fragmentation will be positively related to negative work-to-family spillover.

Contamination reflects the extent to which a job requires not only switching tasks in the work day, but also switching the skills that the employee uses when completing these variable tasks. Although similar to fragmentation, contamination is unique in that the employee is not just switching tasks, but activities. Although Chisholm, Collison, Nelson, & Cordell (2008) linked task-switching to a decrease in productivity, they failed to address whether or not those tasks require different skills. When switching activities, employees expend greater cognitive resources; cognitive psychologists call this task-set reconfiguration (TSR), and claim that this process results in a loss of cognitive resources, or "switch cost" (Rogers & Monsell, 1995). Overusing cognitive resources in the work domain can result in less cognitive resources in the home domain that subsequently leads to greater work-to-family spillover.

Also, Zijlstra, Roe, Leonora, & Krediet (1999) performed a study in which tasks were interrupted by either simple tasks (tasks that were irrelevant to the original task but required a different skillset to complete) or complex tasks (more challenging in nature but similar to the original task), and found a negative relationship between complexity (i.e., working on a different task requiring similar skills) and employees' emotional state. In other words, the authors found that working on different tasks requiring *different* skills,

despite the ease of the tasks, resulted in increased emotional stress. Finally, having to work on myriad activities interchangeably also reflects complex work that has been positively linked to work-family conflict (Voydanoff, 2002). Based on these findings, I hypothesize that:

H4: Contamination will be positively related to negative work-to-family spillover.

Jobs characterized by increased temporal constraint require the employee to work according to deadlines and schedules. The work-family literature has linked control over one's schedule to decreases in work-family conflict (Byron, 2004; Kelly & Moen, 2007; Kossek, Lautsch, & Eaton, 2006; Moen, Kelly, & Huang, 2008; Valcour, 2007; Voydanoff, 1988), such that increased control allows employees to schedule and coordinate work during work hours, resulting in less work-to-family spillover. Working to deadlines, however, regardless of control, likely results in increased temporal pressure to complete work which has been linked to work-to-family spillover (Carlson, 1999; Carlson & Perrewe, 1999; Greenhaus et al., 1987; Grzywacz & Marks, 2000; Mennino, Rubin, & Brayfield, 2005).

Employees who must work to deadlines may also feel increased pressure to complete tasks, and if unable to complete them in the workplace, would also be more likely to take work home with them in order to complete the tasks prior to their deadlines. This decrease in opportunities to interact with loved ones will again result in increased work/family conflict due to the denigration of these relationships. Subsequently, those working under conditions of temporal constraint are likely to experience increased work-to-family spillover. I therefore hypothesize that:

H5: Constraint will be positively related to negative work-to-family spillover.

Schedule unpredictability reflects the degree to which organizational schedules, deadlines, and meetings change unpredictably. The work-family literature has linked unpredictable shifts in schedules and routines to increases in work-family conflict (Fox & Dwyer, 1999) due to a lack of control over these changing temporal markers. Anderson, Coffey, & Byerly (2002), for example, found that decreased schedule flexibility (i.e., greater rigidity in one's schedule) led to increased work-family conflict. Unpredictable changes in deadlines can force employees to work outside of the work domain (and subsequently in the family domain) because they may not have the time required to complete the tasks while in the workplace. For instance, an employee in a job characterized by constraint might receive an urgent, time sensitive task from his/her supervisor while at home, and the employee would likely feel obligated and pressured to complete the task immediately regardless of their being outside of the work domain. This again would likely exacerbate the relationships that the employee shares with his/her family or friends, thus resulting in negative work-to-family spillover.

Although some scholars have identified control over schedules as a potential mediator of the negative effect that increased workloads can have on one's work/family balance (Byron, 2004; Kelly & Moen, 2007; Kossek, Lautsch, & Eaton, 2006; Moen, Kelly, & Huang, 2008; Valcour, 2007; Voydanoff, 1988), the control one has over one's schedule does not necessarily correlate with the unpredictability of their work schedules. Schieman & Glavin (2008) found that those with *more* control over their schedule brought their work home with them *more* frequently than those with less control over their schedule. Although they control when they are working, unpredictable changes to deadlines, schedules, or other temporal markers can be imposed on employees at any

time. Additionally, Schieman & Glavin (2008) found that bringing work home was positively related to work-to-family conflict. This finding, combined with the lack of relationship between temporal control and unpredictable shifts in temporal markers, informs the following hypothesis:

H6: Schedule unpredictability will be positively related to negative work-to-family spillover.

Synchronization reflects the degree to which employees must coordinate schedules, deadlines, and other temporal markers with other employees across intraorganizational boundaries (i.e., working across departments, teams, or business units). Working with others often leads to "coordination loss," or the time and resources that are wasted when waiting on information transfer among team members. Coordination loss will often lead to increased temporal pressure to complete work, greater task and role ambiguity, and stress (Kellogg, Orlikowski, & Yates, 2006). Gulati & Singh (1998), for example, argued that employees have the added stressor of worrying about managing task interdependence when working across organizational boundaries. All of the outcomes that result from coordination loss (temporal urgency, task and role ambiguity, and stress) have been linked to work-to-family spillover; I therefore hypothesize that:

H7: Synchronization will be positively related to negative work-to-family spillover.

Pace unpredictability reflects the degree to which the pace of work in organizations changes suddenly. Sudden changes to one's work environment have been linked to work-family conflict (Burke et al., 1980), as have sudden shifts in work pace while operating under tight deadlines (McCarthy, Darcy, & Grady, 2010). Overall

unpredictability in work routines that can arise when the pace of work shifts unpredictably has also been linked to work-family conflict (Fox & Dwyer, 1999; Shamir, 1983). When employees must operate under unpredictably changing temporal conditions, the employees will likely experience sudden temporal pressure to complete work. When unable to complete this work during work hours, the employees will be forced to complete the work during off-work hours, leading to increased work-to-family spillover due to the employee's spending less time with his/her family. Therefore, I hypothesize that:

H8: Pace unpredictability will be positively related to negative work-to-family spillover.

Polychronicity refers to the degree to which an employee prefers and values multi-tasking (Bluedorn, 2002; Hall & Hall, 1988). First introduced by Edward T. Hall in *The Silent Language* (1959), polychronicity has undergone a series of conceptual examinations and operationalizations. Hall (1991) and Hall & Hall (1987) explored polychronicity as a cultural phenomenon, arguing that some cultures are more or less polychronic than others. Hall (1983) argued that countries near the Mediterranean (e.g., southern Europe and northern Africa) were more polychronic, whereas countries in Northwest Europe (e.g., Germany & England) were more monochronic. Similarly, Usunier (1991) found that Brazil was more polychronic than France or Germany, as were Japan and North American countries. Monochronic cultures embodied a more linear perception of time, whereas polychronic cultures embodied a more cyclic, layered perception of time through which individuals perceived and completed tasks simultaneously rather than linearly.

Since Hall (1959) defined polychronicity as a *culture's* behavioral orientation, organizational scholars have extended the construct of polychronicity to the individual level of analysis; specifically, Kaufman et al. (1991) and Bluedorn et al. (1999) each created measures of polychronicity at the individual level (the Polychronic Attitudes Index, or PAI, and the Inventory of Polychronic Values, or IPV). Following these measure creation and validation efforts, Conte, Rizzuto, & Steiner (1999), Kaufman-Scarborough & Lindquist (1999), and Hobbs & Farr, (2004), among others, have further validated these measures and the general application of polychronicity at the individual level.

Conte, Rizzuto, & Steiner (1999) and Bluedorn (2002) argued that polychronicity, much like facets of the Big 5, is actually a personality trait due in part to similarity in self- and peer-ratings of individual polychronicity, and just like any personality trait, individuals can vary on the polychronicity continuum at any given time. Cotte & Ratneshwar (1999) found that people vary their behavior along the continuum of polychronicity in work versus leisure time. Similarly, Bluedorn (1998) claimed that some are more capable of sliding along the polychronicity continuum than others. Al-Qawasmi & Vasquez de Velasco (2006) describe the process by which individuals transition from monochronicity to polychronicity, claiming that this process induces "flow," or the experience by which an employee experiences challenging work that stretches his or her existing skillset as well as "clear proximal goals and immediate feedback about the progress that is being made" (Nakamura & Csikszentmihalyi, 2002: 90). Those who experience flow also intensely concentrate on the tasks at hand, lose the ability to reflect self-consciously, and experience a complete distortion of the subjective

temporal experience (Csikszentmihalyi, 1996). In other words, those who experience the shift from monochronicity to polychronicity (or flow) are intensely engaged in their work tasks, an act that is more likely for those in creative occupations [e.g., writers (Perry, 1999), as well as musicians, dancers, and rock climbers (Csikszentmihalyi, 1975, 2000)].

Since Hall's (1959) description of polychronicity as a behavioral orientation, subsequent analyses have identified polychronicity as a *preference* for multitasking that likely results in the behavior of multitasking, albeit not always (Bluedorn, 1998). Interestingly, König, Bühner, & Mürling (2005) found no significant relationship between multitasking and polychronicity. It would thus appear that polychronicity reflects a preference more so than a behavior (Bluedorn, Kalliath, Strube, & Martin, 1999; König & Waller, 2010).

A variety of scholars have examined polychronicity's relationship with different dependent variables, including job satisfaction (Arndt, Arnold, & Landry, 2006; Auerbach, 2002; Bluedorn, 2002, Hecht & Allen, 2005), various facets of the Big Five (Conte & Gintoft, 2005; Conte & Jacobs, 2003; Payne & Philo, 2002), mental ability (Conte & Jacobs, 2003), organizational commitment (Slocombe & Bluedorn, 1999), and turnover (Arndt, Arnold, & Landry, 2006), among others.

Scholars have not, however, explored polychronicity's relationship with work/family conflict. This is particularly interesting given that, much like the modern knowledge-based workplace, the home is in part defined by the tasks that must be completed. Once employees are back in their home, they are forced to negotiate home management and productivity tasks like cleaning, cooking, and laundry. Cohabitating employees and employees with families must negotiate their domestic responsibilities as

well as the domestic responsibilities shared with their partner, friends, and/or family. This may be particularly challenging for employees who spend their time at work negotiating a variety of work-related tasks. Polychronicity, however, will likely mitigate the negative overload that employees experience when inundated with task expectations in the workplace, resulting in less stress and, consequently, less negative work-to-family spillover.

H9: Polychronicity will be negatively related to negative work-to-family spillover.

Agypt & Rubin (2012) were the first to examine polychronicity as a moderating variable in a study that linked some LTT facets to job satisfaction, but only as moderated by polychronicity. Specifically, they found that those who are more polychronic have greater job satisfaction under conditions of increased simultaneity, fragmentation, contamination, and schedule unpredictability. No other research, however, has examined the polychronicity/LTT relationship and its potential effect on employee outcomes, despite LTT and polychronicity sharing some conceptual overlap [Rubin (2007) likened LTT to "P"-time, or polychronic time].

Polychronic employees report higher job satisfaction in jobs that require multitasking (Agypt & Rubin, 2012). Since polychronic employees are often more capable of successfully managing multiple tasks at one time (Zhang, Goonetilleke, Plocher, & Liang, 2005), they will likely be buffered from the negative effect of simultaneity on their work-family balance. Thus, those who are more polychronic will likely experience less work-to-family spillover than those who are more monochronic. Therefore, I hypothesize that:

H10: Polychronicity will moderate the relationship between simultaneity and negative work-to-family spillover such that those who are more polychronic will experience less negative work-to-family spillover than those who are more monochronic in jobs characterized by high simultaneity.

Polychronic employees are also more capable of managing interruptions in the workplace, whereas monochronic employees are less comfortable working under these conditions and likely expend more cognitive resources in dealing with interruptions (Kaufman-Scarborough & Lindquist, 1999). If those who are more polychronic expend less cognitive resources due to frequent interruptions than those who are more monochronic, then those who are more polychronic are less likely to experience work-to-family spillover in jobs characterized by greater fragmentation. In other words, polychronicity will buffer the positive relationship between fragmentation and negative work-to-family spillover. I therefore hypothesize that:

H11: Polychronicity will moderate the relationship between fragmentation and negative work-to-family spillover such that those who are more polychronic will experience less negative work-to-family spillover than those who are more monochronic in jobs characterized by high fragmentation.

Contamination reflects the degree to which a job requires that employees must use different skills to perform different tasks interchangeably. Polychronic employees are more comfortable working under these conditions due to their increased ability to switch activities (Kaufman-Scarborough & Lindquist, 1999). Subsequently, monochronic

employees will likely expend greater resources in the workplace to manage these various activity switches. If polychronic employees expend fewer cognitive resources due to activity switching, then they will likely experience less work-to-family spillover. In other words, polychronicity buffers the positive effect of contamination on an employee's work-to-family spillover. Therefore, I hypothesize that:

H12: Polychronicity will moderate the relationship between contamination and negative work-to-family spillover such that those who are more polychronic will experience less negative work-to-family spillover than those who are more monochronic in jobs characterized by high contamination.

Monochronic employees prefer to "plan in detail, develop schedules, and keep track of activities" (Kaufman-Scarborough & Lindquist, 1999). Polychronic employees, on the other hand, are more comfortable working under conditions of unpredictability and uncertainty – conditions reflective of an environment high in schedule unpredictability. Monochronic employees are more likely to expend extra cognitive resources in response to temporal unpredictability that can result in less availability of cognitive resources in the home domain, or greater work-to-family spillover. Polychronic employees, on the other hand, are less likely to expend extra cognitive resources in response to temporal unpredictability; polychronicity should therefore buffer the positive effect of schedule unpredictability on negative work-to-family spillover. I therefore hypothesize that:

H13: Polychronicity will moderate the relationship between schedule unpredictability and negative work-to-family spillover such that those who are more polychronic will experience less negative work-to-family

spillover than those who are monochronic in jobs high in schedule unpredictability.

I do not anticipate that polychronicity will interact with the remaining LTT components to influence negative work-to-family spillover for the following reasons. First, jobs characterized by high temporal urgency may require working quickly, but a preference for multitasking does not necessarily result in working more quickly. Polychronic and monochronic employees alike will struggle to work under conditions of time urgency, which should have no bearing on their negative work-to-family spillover. Additionally, polychronicity should not have any particular influence on the relationship between constraint and negative work-to-family spillover. Jobs characterized by constraint are driven by deadlines; although polychronic employees may be more comfortable working in that type of environment due to their preference for multitasking (Agypt & Rubin, 2012), a preference for multitasking does not necessarily equate to effective multitasking (König, Bühner, & Mürling, 2005). As a result, polychronic and monochronic employees alike will struggle to complete their tasks and will be forced to work more hours in or out of the workplace, subsequently experiencing the same degree of negative work-to-family spillover.

There is also no theoretical relationship between synchronization and polychronicity in affecting negative work-to-family spillover. Those who are more polychronic should not benefit at all when forced to synchronize activities, schedules, and deadlines across departmental boundaries; rather, monochronic employees should experience the same challenges and stress when forced to work across intraorganizational boundaries, resulting in the same experiences of negative work-to-family spillover.

Finally, unpredictable changes in pace should not interact with polychronicity to influence negative work-to-family spillover. Polychronic employees may be more comfortable working under unpredictable conditions (Kaufman-Scarborough & Lindquist, 1999), but they are no more capable of completing tasks during unpredictable changes in work pace than monochronic employees due to the simple fact that polychronicity is a preference, not an ability (König, Bühner, & Mürling, 2005).

In addition to the proposed hypotheses above, I am also interested in how the work/family interface has fundamentally changed due in part to the increased capabilities that new information technologies afford organizations and their actors. Specifically, workers can now interact with the workplace at any time and place; in essence, employees can be tethered to the workplace by the very technologies they use to accomplish their work (Green, 2002).

Technology has traditionally been implemented in the workplace to enable work; today's traditional office towers rely entirely on telecommunications technologies to organize internal space (Pool, 1977; Townsend, 2001). The information technologies literature has long established that the "dominant technologies of a particular historical period define the temporal organization and cultural understandings of it. Recent investigations of capital, industrial, and labor times (Thompson; 1967; Thrift, 1996; Rifkin, 1987; Adam, 1990), or 'internet time' (Lee & Liebenaur, 2000), are cases in point" (Green, 2002; 283-284). In other words, the use of technology reconstructs our understanding and use of space and time.

Consider, for instance, mobile technologies. Frissen (1995) argues that mobile devices are "space-adjusting technologies" that constitute our understanding of place and

time and subsequently the relationship that exists between our professional and private life. Technology that binds people across space actually compresses our activities and relationships into more frequent and shorter periods of communication (Townsend, 2001), leading to an unprecedented amount of instantaneous interaction across space (Nowotny, 1994).

To the average business leader, the increased presence and capabilities of technologies in the workplace can actually drive employees to work faster, but there are additional consequences to employees beyond work facilitation. Massey (1993) explored the role of power in these relationships, describing "power-geometries" that are integral to our social construction of the relationship between space and time. In other words, we must also consider the relationships among the actors whose times and spaces are being influenced by technologies:

> "For different social groups and different individuals are placed in very distinct ways in relation to the flows and interconnections. This point concerns not merely the issue of who moves and who doesn't… it is also about power relation *to* the flows and the movement. Different social groups have distinct relationships to this anyway – differentiated mobility: some are more in charge of it than others; some initiate flows and movement, others don't; some are more on the receiving end of it than others; some are effectively imprisoned by it… This is, in other words, a highly complex social differentiation. There is the dimension of the

> degree of movement and communication, but also dimensions of control and initiation" (Massey, 1993: 61-62).

Massey (1993) is shedding light on how power dynamics influence the role of technological mobility in actors' lives; those in power do not just use information technologies to enable work, but they are also able to control employees outside of the workplace. This is particularly interesting given that most practitioners have traditionally implemented flexible technologies in the workplace to support work/family balance. Some scholars, however, have found that although work-related technology outside of the home can increase efficiency and allow employees to conduct tasks at home, work-related technology outside of the home can also create a work environment at home that can disrupt one's nonwork life (Hill, Miller, Weiner, & Colihan, 1998).

Batt & Valcour (2003) found support for these contrasting effects; in a study of 557 dual-earner white collar employees, the authors found that information technology use outside of the workplace was positively related to employees' perceptions of control, as well as work-family conflict. Technology enables employees to better control their workflow outside of the workplace, but the disruptive effects of work in the home (enabled by technology) persist despite this perceived control.

Much of the research on technology's influence on the work/family interface has focused on telecommuters (Hill et al., 1998) because telecommuting primarily evolved based on two factors: the increased mobility of work through information technologies and employees' desire for greater work/family balance (Shamir & Salomon, 1985). As a

result, telecommuters present a ripe opportunity to researchers to study the role of technology in driving employee behaviors and perceptions, including work/life balance.

Given that telecommuting has emerged as a solution to employees' desire for greater work/life balance, practitioners have long-assumed that technology-enabled telecommuting has a positive effect on a variety of employee outcomes (e.g., discretionary effort, performance, satisfaction, intent to stay), and the majority of scholarship supports this finding (Gajendran & Harrison, 2007). Much of this literature, however, relies entirely on self-report data that likely inflates the purported effect of telecommuting on key outcomes like productivity and work/family balance. For example, in Gajendran & Harrison's (2007) meta-analysis, telecommuting was positively related to autonomy, employee/supervisor relationship quality, job satisfaction, and supervisor-ratings of performance, and negatively related to turnover intentions, role stress, and work/family conflict.

Technology enabling work outside of the workplace can also have direct temporal implications as well. Throughout the industrialization era, distinct boundaries existed between the work and home areas, creating two domains that were nearly mutually exclusive (Clark-Campbell, 2000; Nippert-Eng, 1995). Both of these domains demanded commitment and loyalty from the person, so much so that Coser (1974) labeled them both "greedy institutions" (77). Today's economy, however, demands more of employees, requiring flexibility in their work routines, and often leading to the execution of work tasks in the home domain. This shift has profound implications for the temporal norms, routines, and processes that are embedded within one's work experience. Prior to the technological advancements that allow employees to work from outside of the

established workplace, social relations were embedded in their local context; in today's economy, however, social relations are disembedded from their local context, which Giddens (1990) described as, "the 'lifting out' of social relations from local contexts of interaction and their restructuring across indefinite spans of time-space" (21). As a result of this disembedding, the once inherent link between time and space has become demarcated, leading to the emergence of novel temporalities that are no longer derived from a "situatedness of place" (Giddens, 1991: 16).

Tietze & Musson (2002) explored these new temporalities in a qualitative study in which the authors interviewed and observed multiple employees who worked to varying degrees from home. When working from home, many of the employees attempted to be "at work" at a specific time, but this was rarely possible because employees often had to renegotiate times based on the needs of their spouse or children. One employee described the process of constantly being pulled away from his work routines, claiming he had to, "'giv[e] up the notion of untouchable work routines while the family is around'" (324). These work routines became fragmented, or as one participant described it, the "normal continuous working day 'is often all bits and pieces'" (324). These interrupted workflows often occurred at irregular times, and also occasionally resulted in a loss of concentration, among other things. In addition to interruptions from family, many employees welcomed interruptions from social acquaintances, rationalizing the behavior due to their increased flexibility allowing them to continue or finish work at a later time.

Telecommuters again provide some insight into understanding how employees' home domains are directly influenced by their work roles. For example, Tietze &

Musson (2002) found that telecommuters with families developed their own unique rhythms and patterns that often influenced the closing routine of the employee's work day. These routines included cleaning up the workspace, preparing dinner, picking up children from school or daycare, and changing into more leisurely clothes. Calling these "closing routines," however, was really a misnomer; many of the employees resumed their work activities later in the evening. In other words, the employees' workdays stretched much longer than the traditional 8-hour workday, but consisted of more non-work or family-derived interruptions throughout the day. Interestingly, the telecommuting employees also worked considerable amounts on the weekends, so much so that one participant described weekends as, "no longer the pure utopia of non-work" (325). The weekend, much like the home domain, was no longer segregated as a work-free zone; in other words, work permeates not just spatial boundaries but temporal boundaries as well. As a result, Tietze & Musson (2002) found that as more employees increasingly conduct work outside of the workplace, the work and family domains are no longer mutually exclusive, and have instead become integrated, or blended.

Even employees who do not formally telecommute, however, can be easily contacted about work-related matters outside of the conventional workspace and work time, and the outcomes will surely be similar in kind. In today's economy, knowledge workers in particular are easily connected to the workplace through e-mail, phone calls, and other technological tools. As a result, employees in their conventionally-defined "nonwork domain" can be more readily reminded of the stress that awaits them in the workplace, often to the point that they feel obligated to reduce that stress by working

more outside of the workplace. I therefore hypothesize that increased out-of-office contact (OOOC) will positively predict negative work-to-family spillover:

H14: OOOC will be positively related to negative work-to-family spillover.

Time urgent work should theoretically increase one's work-to-family spillover (Hypothesis 1); those who are reminded of that time urgent work more frequently will experience the stress associated with that work while in their traditionally-defined nonwork domain, causing greater negative work-to-family spillover. Furthermore, those employees may be more likely to try to complete that work at home, leading to greater negative work-to-family spillover. I therefore hypothesize that:

H15: OOOC will moderate the relationship between time urgency and negative work-to-family spillover such that those who are contacted more outside of the workplace will experience more negative work-to-family spillover than those who are contacted less outside of the workplace in jobs high in time urgency.

Jobs characterized by high simultaneity require multitasking, and increased contact outside of the office often requires an added degree of multitasking given that one's temporal routines must switch unpredictably between work activities and family activities. This layer of complexity is compounded when one considers that the home domain is characterized by a polychronic temporal regime that is fraught with multiple tasks/activities (Daly, 1996; Tietze & Musson, 2002). Because the home domain characteristically requires multitasking, those contacted more in the home domain in jobs that also require multitasking will likely experience greater negative work-to-family spillover.

H16: OOOC will moderate the relationship between simultaneity and negative work-to-family spillover such that those who are contacted more outside of the workplace will experience more negative work-to-family spillover than those who are contacted less outside of the workplace in jobs high in simultaneity.

Those who are contacted more outside of work are forced to negotiate increased fragmentation in both their nonwork routines as well as their work routines, assuming that they occasionally engage in work in response to that OOOC. This fragmentation exacerbates the temporal and cognitive cost associated with switching tasks (Kieffaber & Hetrick, 2005). As a result, many employees' work and nonwork tasks may be more difficult to complete (Chisholm, Collison, Nelson, & Cordell, 2008), subsequently leading to greater negative work-to-family spillover.

H17: OOOC will moderate the relationship between fragmentation and negative work-to-family spillover such that those who are contacted more outside of the workplace will experience more negative work-to-family spillover than those who are contacted less outside of the workplace in jobs high in fragmentation.

Transitioning to and from home- or family-based activities to work-based activities would also have implications for one's work/family balance due to the inherently different nature of these activities. Contamination reflects the degree to which one must transition between tasks that require different skillsets, and performing work-based and family-based activities often require very different types of skills when compared to work-based tasks. The need to transition to and from these activities

introduces an added layer of complexity to one's work experience (Voydanoff, 2002) that would compound the already positive influence that contamination has on one's negative work-to-family spillover.

H18: OOOC will moderate the relationship between contamination and negative work-to-family spillover such that those who are contacted more outside of the workplace will experience more negative work-to-family spillover than those who are contacted less outside of the workplace in jobs high in contamination.

As described previously, constraint reflects the degree to which one's job requires one to work to schedules and deadlines. In jobs that are more defined by schedules and deadlines, employees who are contacted more outside of the workplace are more likely to feel the stress and pressure of those deadlines as they are increasingly reminded of, and possibly responding to, their impending schedules and deadlines. In other words, increased OOOC will positively moderate the influence of constraint on negative work-to-family spillover.

H19: OOOC will moderate the relationship between constraint and negative work-to-family spillover such that those who are contacted more outside of the workplace will experience more negative work-to-family spillover than those who are contacted less outside of the workplace in jobs high in constraint.

Temporal flexibility is often cited by in the organizational temporality literature as a beneficial aspect of working outside of the workplace (Tietze & Musson, 2002). Unpredictable schedules, however, impair an employee's ability to plan and schedule,

essentially removing the beneficial aspect of the temporal flexibility that employees often seek. As an employee is increasingly contacted outside of the workplace in a job high in schedule unpredictability, they can no longer simply plan according to the employee's (and the employee's family's) needs; the employee must instead respond to the unpredictable shifts in temporal markers, often resulting in one's work impinging on one's home life. I therefore hypothesize that:

H20: OOOC will moderate the relationship between schedule unpredictability and negative work-to-family spillover such that those who are contacted more outside of the workplace will experience more negative work-to-family spillover than those who are contacted less outside of the workplace in jobs high in schedule unpredictability.

Synchronization reflects the degree to which one must coordinate with others across intraorganizational temporal (and likely spatial) boundaries; the disembedded nature of time and space in those interactions increases the challenge of communicating across those boundaries (Giddens, 1990). Being more connected to the workplace enhances this challenge by diminishing, and sometimes removing, any shared temporal or spatial norms among employees who must synchronize their work activities outside of the traditionally defined workplace and time. In other words, temporal incongruity caused by increased OOOC will strengthen the positive relationship between synchronization and negative work-to-family spillover.

H21: OOOC will moderate the relationship between synchronization and negative work-to-family spillover such that those who are contacted more outside of the workplace will experience more negative work-to-family

spillover than those who are contacted less outside of the workplace in jobs high in synchronization.

Unpredictable changes in work pace have been linked to work-family conflict (McCarthy, Darcy, & Grady, 2010), as has overall unpredictability in work routines (Fox & Dwyer, 1999). When employees of organizations that are high in pace unpredictability are contacted more frequently outside of the work domain, those employees are increasingly confronted with the stress and pressure of those unpredictable changes in work place, compounding the effect of work pace unpredictability on work-family conflict. Furthermore, family-based tasks are often wrought with pace unpredictability as well, and the increased interaction of the work and nonwork temporal regimes will likely only intensify the positive relationship between pace unpredictability and negative work-to-family spillover.

H22: OOOC will moderate the relationship between pace unpredictability and negative work-to-family spillover such that those who are contacted more outside of the workplace will experience more negative work-to-family spillover than those who are contacted less outside of the workplace in jobs high in pace unpredictability.

The work and home domains, as they have been traditionally understood and defined, engender their own unique *social* norms, routines, and practices. Similarly, the work and home domains engender their own *temporal* norms, or regimes. One such temporal aspect of these domains is polychronicity (Daly, 1996). Although polychronicity is best understood in today's literature as an individual-level or cultural temporality, scholars previously, albeit briefly, explored polychronicity as a structural

temporality. The home domain is considered polychronic due to the myriad tasks required of any individual, and this is particularly true for those who have spouses or cohabiters and especially true for those living with children. The polychronic nature of the home domain was actually the impetus for the theoretical construction of layered-task time; Rubin (2007) claimed that LTT is much akin to polychronic time. The home domain often requires working on multiple tasks at once, many of which emerge and change unpredictably. Additionally, completing tasks in the home domain often requires working with others and coordinating multiple tasks and schedules at once.

The proliferation of work and nonwork integration as facilitated by information technologies has led to an interaction of temporal norms and regimes between and across domains. For example, the workplace routinely develops its own temporal norms, including expectations around punctuality, deadlines, schedules, and time management, leading to the generation of temporal regimes (Lewis & Weigert, 1981). The home domain is no different; the various household members all engage in different roles and identities, all of which have their own temporal regimes that impact the temporal regime in the home domain (Hochschild, 1999). When employees bring their work into the home domain, these temporal regimes interact, the implications of which have not been explored in organizational scholarship to date (Kaufman-Scarborough, 2006). Additionally, success in either of these domains hinges on one's ability to manage the temporal aspects associated with the respective regime; as work increasingly impedes on an employee's nonwork domain through increased OOOC, the employee may experience incompatibility between the work and nonwork temporal regimes and suffer the

consequences in both their work and nonwork experiences (Kaufman-Scarborough, 2006).

Simultaneity reflects the need to multitask, and as employees experience increased OOOC in nonwork environments that also require multitasking (e.g., the home domain), they encounter a greater need to multitask across activities and temporal regimes. As a result, those who are more polychronic will likely be more comfortable navigating the multitude of tasks that they are faced with, particularly as both work- and nonwork-derived activities require multitasking. In other words, as OOOC and simultaneity increase, polychronicity will lessen the resultant negative work-to-family spillover that employees would otherwise experience.

H23: Simultaneity, OOOC, and polychronicity will interact such that at high levels of simultaneity, polychronicity will moderate the relationship between OOOC and negative work-to-family spillover; those who are more polychronic will experience less negative work-to-family spillover in jobs characterized by high simultaneity and high OOOC frequency.

Fragmentation reflects the degree to which one must jump from task to task in one's job. As one experiences increased OOOC frequency, the employee engages increasingly in work tasks that are characterized by interruptions in jobs high in fragmentation. The home domain, however, is also defined by fragmentation. Furthermore, OOOC causes greater fragmentation in the nonwork domain. In other words, as employees experience increased OOOC in the home domain (which is also characterized by increased fragmentation), they must negotiate the increases in interruptions in order to mitigate any potential negative effects, specifically negative

work-to-family spillover. Polychronicity can moderate the positive effect of fragmentation on negative work-to-family spillover because those who are more polychronic are more comfortable managing interruptions in their scheduled workflow (Kaufman-Scarborough & Lindquist, 1999).

H24: Fragmentation, OOOC, and polychronicity will interact such that at high levels of fragmentation, polychronicity will moderate the relationship between OOOC and negative work-to-family spillover; those who are more polychronic will experience less negative work-to-family spillover in jobs characterized by high fragmentation and high OOOC frequency.

Whereas fragmentation reflects the need to change tasks, contamination reflects the need to apply different skills or skillsets when performing variable tasks. Contamination is also reflected in the nonwork, or home, domain; one must use myriad skills when performing different tasks in the home domain. For instance, on any given night, one may cook dinner, carry a conversation with a loved one, and watch the local news or some other television show, all while keeping watch over the children. All of these tasks reflect different activities that require different skills. Those who are more polychronic are more comfortable in environments fraught with activity-switching (Kaufman-Scarborough & Lindquist, 1999), and will likely manage these changes in activities much easier than those who are more monochronic. If one works in a job that is characterized by contamination, and as one's work is increasingly pushed into their nonwork domain through greater OOOC, the degree of contamination inherent in the work, and nonwork, domain will likely be compounded, resulting in increased likelihood of negative outcomes like negative work-to-family spillover. Polychronicity, however,

will likely buffer this effect as polychronic people are more comfortable switching activities (Kaufman-Scarborough, 1999), resulting in less negative work-to-family spillover.

H25: Contamination, OOOC, and polychronicity will interact such that at high levels of contamination, polychronicity will moderate the relationship between OOOC and negative work-to-family spillover; those who are more polychronic will experience less negative work-to-family spillover in jobs characterized by high contamination and high OOOC frequency.

Unpredictable changes in temporal markers can increase stress and result in greater negative work-to-family spillover (Fox & Dwyer, 1999). As one is increasingly contacted about work in the nonwork domain, one is more likely to experience sudden changes in schedules and deadlines (Tietze & Musson, 2002), and the employee may have to work in response, compounding the employee's already increased negative work-to-family spillover. Polychronicity, however, can mitigate these negative implications, particularly because those who are more polychronic are more comfortable in environments fraught with uncertainty and unpredictability (Kaufman-Scarborough & Lindquist, 1999). This increased comfort should assist the employee in handling the effects that emerge from these temporal structures, and as a result should lead to a decrease in negative work-to-family spillover.

H26: Schedule unpredictability, OOOC, and polychronicity will interact such that at high levels of schedule unpredictability, polychronicity will moderate the relationship between OOOC and negative work-to-family spillover; those who are more polychronic will experience less negative

work-to-family spillover in jobs characterized by high schedule unpredictability and high OOOC frequency.

CHAPTER 3: METHODS

As evidenced in the last chapter, a variety of scholars representing many disciplinary perspectives have extended the temporality literature in myriad directions. As such, time as it is understood, operationalized, and empirically measured is complex; if one is to measure time and understand how temporalities at various levels influence an employee outcome like work-to-family spillover, one must first consider how best to operationalize time as it is experienced in organizations. For example, due to the subjective or intersubjective nature of time (Rodomeyer, 2006), it would be beneficial for organizational scholars to study time as it is socially constructed and uniquely experienced. This perception of temporality might be best explored qualitatively. On the other hand, temporal experiences, although often subjective, are commonly shared experiences across individuals in teams, groups, cultures, and even organizations. Additionally, the majority of temporal research has focused on objective time (i.e., clock time, Adam, 1995; Ancona, Okhuysen, & Perlow, 2001; Bluedorn & Denhardt, 1988; Butler, 1995), or fungible time (Bluedorn, 2002) which reflects the quantifiable nature of time. This perception of temporality is best explored quantitatively.

LTT was first introduced as a macro-level construct, and although future research has explicated its subcomponents at various levels of analysis (e.g., Agypt & Rubin, 2012), LTT remains a construct that exists to varying degrees across jobs and organizations. Applying a quantitative method will enhance my ability to generalize the

results beyond the context of this research. Because my research is grounded in the relationship between organizational and temporal structures, I would like to eventually expand my findings and subsequent research to organizations of all sizes and structural orientations. Given the nature of my hypotheses, the foundation of LTT scholarship, and that the majority of temporal research has found that although social actors vary in their social construction of time (Sorokin & Merton, 1937) time is still typically characterized as *objective*, I have determined that a primarily quantitative methodology is most fitting for this research. I revisit the benefits of a qualitative approach, however, in the Discussion section of this dissertation.

I negotiated access to sample a large, Fortune 500 insurance company called Pato[1]. Studying a single organization is useful in research streams that are underdeveloped (Ragin & Becker, 1992); additionally, it allows me to "retain holistic and meaningful characteristics of real-life events" (Yin, 2003) including temporal and organizational phenomena. By focusing on a single organization, I am more able to isolate unique effects that are organization-specific and identify the process by which they have come to fruition. Working with a single organization rather than sampling a variety of organizations also allows me greater flexibility in my sampling approach; I can (and was able to) work with organizational leaders to determine the best approach to measurement and sampling prior to actually collecting the data. This single-organization approach also provides the opportunity for follow-up should I desire to do so in the future (Yin, 2003).

In order to gain access, Dr. Beth Rubin and I contacted the organization's Chief Learning Officer to describe our research interests and their relevance for Pato. We then

[1] I use the pseudonym "Pato" to protect the organization's identity.

set up a face-to-face meeting at their headquarters, and explained in greater detail the specific phenomena that we wished to study and the sampling framework we would ideally use in their organization. We also explained that should they choose to allow us to sample their organization's employees, we could provide a customized analysis of the results to the organization's leadership. After answering a series of questions about the process and confidentiality, Pato leadership agreed to allow us to survey their entire organization, or roughly 4200 employees. This sampling approach is ideal because surveying the entire population increases the probability of obtaining an accurate representation of the entire organization (Fowler, 2009). Also, sampling from the entire organization ensures that each employee has an equal opportunity of responding to the survey; probability sampling, on the other hand, risks sampling certain parts of the population and failing to sample other parts.

Prior to surveying the entire organization, however, I piloted the survey multiple times to ensure that it was ready for deployment. Specifically, I piloted the survey first with my faculty advisor and other subject matter experts (SMEs) to ensure that the questions were appropriate, targeted, and most likely to provide valid data. Additionally, I piloted the survey with Pato's leadership because they made it clear that the items in the survey must reflect the language that Pato has used in past employee surveys. Once the language was approved by Pato's leadership, I finally piloted the survey with a few non-Pato employees who have worked in the insurance industry for an extended period of time. This strategy allowed me to become more cognizant of industry cycles that may affect the data beyond those described by Pato leadership.

Once I successfully piloted the survey and felt that it was ready for deployment, I entered the final survey text into the online survey tool SurveyShare. I recruited the entire Pato population of employees for the study using an e-mail list that I obtained from Pato leadership. I then sent the survey link in an e-mail to all Pato employees asking them to participate in the study. As a reward, I offered thirty $50 gift cards from Amazon.com[2]. After one week, I sent a reminder e-mail to all Pato employees to remind them to take the survey if they had not already done so. After an additional two weeks, I closed the survey and used a random number generator to choose the thirty gift card winners.

In addition to the survey, I also examined the policies that Pato has enacted that most closely relate to the phenomena of interest. Like most large, bureaucratic organizations, Pato's list of policies is exhaustive and governs employee behavior at a granular level, including an "Hours of Work Policy" that explicitly describes the normal work week and precisely when employees can and cannot work. For instance, the policy states that "the normal workday consists of eight hours of work with an unpaid meal period; however, some work schedules consist of 12-hour, 10-hour, and 7.5-hour days. Short breaks are considered as time worked. Leadership may schedule overtime when it is deemed necessary." The policy also states the situations in which managers can force employees to work regardless of the employee's needs. The policy even goes so far as to state that there are no formal breaks in Pato; rather, employee breaks are governed by the leadership of each department.

[2] The incentives for participation were funded by a Faculty Research Grant that Dr. Beth Rubin and Dr. Charles Brody obtained from UNC Charlotte.

Pato also implemented a "Telework Policy." The policy establishes employee eligibility, participation, management, and maintenance of the program. Interestingly, Pato leadership states that the purpose of the telework program is to, "attract and retain the best employees, improve efficiency, improve workplace flexibility, improve communication, reduce cost, promote business continuity, and confirm Pato's corporate culture." This is particularly interesting because the policy lists aspects of the various LTT components and work/family balance as benefits of teleworking. Specifically, the policy states that Pato attracts and retains the best employees by "maintaining a best place to work environment, including more flexible work options, improved work/life balance for employees, reducing time spent commuting, and a less stressful work environment, all resulting in increased overall job satisfaction," and that teleworking will "improve workplace flexibility by eliminating the mismatch of business cycles, facilities acquisition, and disposal; improving business continuity; and reducing office churn." In other words, this policy was enacted to promote some of the conditions of LTT in order to *combat* work/family conflict; this, of course, is exactly the opposite of what I have hypothesized.

Employees who are eligible for the formal teleworking program must have been selected by leadership based on current and previous job performance and suitability for teleworking. In order to participate, employees must work in jobs that can be performed entirely away from the main worksite, have established start and end times that are easily defined and can be planned and scheduled, work toward easily measurable work outputs, perform work that does not require face-to-face contact, and perform work that relies extensively on use of the computer and/or telephone. Additionally, employees must have

worked for at least one year at Pato, have completed at least 90 days in their position, achieved a rating of "meets expectations" in the most recent performance review, have an acceptable absenteeism record, and have not received a corrective action in the last year.

There is also a rigorous enrollment process, including a comprehensive self-assessment, an extensive manager review, required functional management approval, and an agreement that the employee must sign that states explicitly how the employee must work while away from the worksite. Due in part to the rigor of the application process, only a small percentage of employees take part in the teleworking program (less than 5%, according to Pato leadership, although 8% of our sample acknowledged that they participate in the program).

The participants reflect a diverse sample across all measured demographic variables (e.g., sex, age, and race) as well as structural variables (e.g., department size, function, and structure). Of the 4214 employees who I recruited, 2225 employees responded (response rate = 53%). Participants varied across departments; 2% worked in Accounting, 1% worked in the Actuarial department, 17% worked in Business and Support Services, 15% worked in Claims, 25% worked in Client Services, 3% worked in the Printing/Communications department, 3% worked in Compliance, 4% worked in Facilities Support, 3% worked in Financial Services, 14% worked in Information Technologies, 5% worked in Legal Training/Human Resources, 4% worked in Marketing, and 5% worked in Sales (these percentages accurately reflect the overall percentage of Pato employees in each department). Additionally, 69% of the sample was female. The sample was also predominantly Caucasian (64%); the rest of the sample was African-American (25%), Latino/Hispanic (5%), Asian (2%), American Indian/Alaska

Native (0.4%), Native Hawaiian/Other Pacific Islander (0.4%), or another race (3%). The race and gender distributions of participants also reflect those of Pato employees; approximately 67% of Pato employees are female and 37% of Pato employees are non-Caucasian (a one-sample t-test revealed no significant difference).

The sample was also well-educated; 31% had attended some college, 31% had finished a four-year college degree, 11% were high school graduates, 10% had a post-secondary degree, 10% had a graduate degree, 5% were technical school graduates, and 3% had post-graduate or professional training. Twenty-percent of the sample held a supervisory role, and the participants had an average organizational tenure of 9 years (SD = 7.580) and an average age of 40 years (SD = 10.539). Ninety-five percent of the sample worked in a team. Eighteen percent of the sample was salaried in a management role, 31% were salaried in a non-management role, 1% were hourly in a management role, and 50% were hourly in a non-management role. Two-percent of employees worked only part-time. Sixty-nine percent of the sample was married or cohabitating. Finally, 51% had at least one child under the age of 18 living with them, and 15% had eldercare responsibilities.

The survey contained a variety of measures, many of which had been validated in past scholarship. First, my main independent variables are the eight components of LTT. In the past, my coauthor and I created a measure of the components of LTT with some evidence of content validity and reliability (Agypt & Rubin, 2012). Based on data collected through this initial study, I determined which items would assess each component of LTT using past evidence of content validity and reliability. In this process,

I examined factor loadings of items, various fit indices using different combinations of items, and the Cronbach's α if items are removed for each component.

Responses to all items were provided on a five-point Likert scale, ranging from "Strongly Disagree" to "Strongly Agree." At the job level, I measure time urgency using the following items: "My job requires that I work fast" and "I feel pressured by time at my job." I measure simultaneity, or the degree to which a job requires multitasking, using the following items: "I am forced to do various tasks at the same time at my job" and "The ability to multi-task is necessary to effectively do my job." I measure fragmentation, or the degree to which a job is characterized by interruptions, using the following items: "My job requires that I break up my work over small periods of time" and "At my job, I typically have to work on tasks for a little bit of time, take a break from that task, and then work on it again later." I measure contamination using the following two items: "When I'm working on one task at my job, I often get interrupted by a task that requires different skills" and "When I find myself 'in the zone' at work, I tend to get interrupted by a different task that requires a different skill." Finally, I measure constraint, or the degree to which an employee must work to deadlines, using the following three items: "Deadlines dictate the beginning and end of my work tasks," "I often am trying to meet multiple deadlines in my job," and "My job often requires that I work to deadlines."

At the organization-level, I measure schedule unpredictability using the following items: "Pato has predictable schedules of work" (reverse-coded) and "Pato has predictable schedules of deadlines" (reverse-coded). I measure synchronization, or the degree to which employees must coordinate temporal markers across intraorganizational

boundaries, using the following items: “Pato requires that I synchronize my work activities with others in the company” and “My job requires that I coordinate my work tasks with the schedules of others at Pato.” Finally, I measure pace unpredictability using the following items: “The amount of work that I get increases and decreases in a predictable manner” (reverse-coded) and “The speed at which I must work increases and decreases in a predictable manner” (reverse-coded).

I also included measures of two additional organization-level components of LTT – namely, allocation and cycle. Allocation refers to the degree to which the organization dictates when employees must work, and cycle refers to the degree to which the organization must work according to work cycles. To measure allocation, I used the following two items: “My daily work activities result in efficient use of time,” and, “Pato does not determine when I perform different work tasks” (reverse-coded). To measure cycle, I used four items, including, “Work cycles at Pato are regular” (reverse-coded), and, “Work cycles at Pato are dictated by our industry.” These measures proved difficult to measure in past research studies (e.g., Agypt & Rubin, 2012); for instance, allocation shared a strong, negative correlation with autonomy, so much so that it became clear that allocation was best assessed using autonomy. Similarly, cycles are difficult to define and measure due to their multidimensional nature; scholars have dedicated entire research streams to better understanding the nature and influence of cycles. Subsequently, cycles can be assessed in a variety of ways, including duration, predictability, intermittence, controllability, or alignment with other cycles (e.g., industry cycles). As a result, my measure of cycle was not nearly comprehensive enough to accurately address the role of cycles in Pato employees’ work. Due to the already large scope of this study, and my

failure to gather much evidence of content validity or reliability in this data collection effort, I chose not to incorporate these measures into this study.

It is important at this point to also address a potential limitation of this study; namely, two-item measures are less than ideal from a psychometric standpoint. The measures had to be short, however, because Pato leadership determined that the survey must be short. Also, I am working with co-investigators on other research studies and included measures relevant to those studies in this survey as well. As a result, I shortened my measures to ensure that I could include all of the measures from the various studies in the survey instrument.

In order to capture the unpredictable manner by which the work domain impinges on the nonwork domain, I measured OOOC by asking, "How often do coworkers, supervisors, managers, customers or clients contact you about employment-related matters outside of normal work hours? Include telephone, cell phone, beeper, and pager calls as well as faxes and e-mail that you have to respond to." Respondents could choose a value between 1 and 7, in which 1 indicated, "Never," and 7 indicated, "Many times a day."

I am also interested in how polychronicity interacts with some of the components of LTT to influence work-to-family spillover; therefore, I measured polychronicity using six items derived from Bluedorn et al.'s (1999) Inventory of Polychronic Values (IPV). The IPV reflects the extent to which employees prefer and value multi-tasking, and although it was originally focused on the cultural level, others have applied the IPV at the individual-level with favorable evidence of construct-validity and reliability (Conte, Rizzuto, & Steiner, 1999). To measure individual-level polychronicity, I chose the six

items that contributed most to the content validity and reliability of the IPV in past studies using a process similar to the process that I used to determine the items for each LTT component. These items include, "I like to juggle several activities at the same time" and "I believe it is best for people to be given several tasks and assignments to perform." Respondents used a 5-point Likert scale that ranges from "Strongly Disagree" to "Strongly Agree."

I also measured a series of variables that I would include in my analyses as controls. For instance, I control for whether or not participants are engaged in Pato's teleworking program. Pato is publically recognized as a telework-friendly organization due to their purportedly large-scale teleworking program. Subsequent analyses revealed that only a small group of individuals take part in the formal teleworking program, and a large percentage of employees who are not formal teleworkers actually work outside of the workplace a great deal. Teleworkers likely experience LTT uniquely compared to those working in the conventional workplace and also likely experience OOOC uniquely as well; I therefore must control for the effect of being enrolled in the teleworking program.

I also assessed autonomy, or the freedom that employees have to determine what tasks to perform and when they perform these tasks. Autonomy is a core job characteristic (Hackman & Oldham, 1974) that has been linked to LTT (Agypt & Rubin, 2012) and work-to-family conflict (Voydanoff, 2004). Given these pre-established relationships, I control for autonomy using a four-item measure that includes items assessing both task autonomy and temporal autonomy. Responses follow a 5-item Likert scale that ranges from "Strongly Disagree" to "Strongly Agree."

Rubin's (2007) introduction of LTT theorizes that the temporal structures have emerged in response to shifts in organizational structure. Based on this theoretical notion, it is important to control for any effects of structure on the dependent variable in order to isolate the effect of the various temporal structures; however, the sampling frame for this study is limited to one organization which limits the variance required to properly assess organizational structure's effect on the dependent variable. Therefore, I chose to examine *departmental* structure, using measures derived from Hage & Aiken's (1967) measures of centralization and formalization. To do this, I asked that the participants think about the department within which they work prior to responding to the items. I use the following items to measure departmental centralization: "There can be little action taken at Pato until a supervisor approves a decision" and "Even small matters have to be referred to someone higher up for a final answer." Also, I use three items to measure departmental formalization, including "We are to follow strict operating procedures at all times at Pato" and "We have procedures at Pato for every situation."

I also control for the employee's position, because some employees receive generous work/family benefits (e.g., paid time off hours, telework options and flexible scheduling). Employees are broken down as either salaried or hourly, and those who are salaried receive greater access to benefits. I measure position by asking whether or not they are hourly or salaried. Additionally, I asked participants the average amount of hours that they work per week, because those who work more hours are more likely to report higher work-to-family spillover (Berg, Kalleberg, & Applebaum, 2003; Jansen et al., 2004; Voydanoff, 2005).

Additionally, I control for sex because women typically take on disproportionately greater home responsibilities even when they are the family's primary breadwinner (Risman, 1998; Thompson & Walker, 1989). Although some scholarship cites similar experiences of work-to-family spillover between men and women (e.g., Frone, Russell, & Cooper, 1992), the majority of work/family scholars have found that women experience higher levels of negative work-to-family spillover than men (e.g., Duxbury & Higgins, 1994; Kirchmeyer, 1995). I am more interested in how these workplace conditions influence employees' overall work-to-family spillover than the difference in these effects by sex (although sex differences could provide a platform for a future research project). In addition, women have also reported greater levels of polychronicity (Manrai & Manrai, 1995), although this relationship is inconsistent across the literature (Bluedorn, 2002).

I also control for eldercare responsibilities and childcare responsibilities, because both responsibilities represent an increased cognitive toll on the employee which will affect the employee's work-to-family spillover. To assess the extent of these responsibilities, I asked, "Do you have eldercare responsibilities?" (responses are either yes or no) and "How many children under the age of 18 are living with you?" (responses range from "0" to "Greater than 3"). I also accounted for whether or not the employee was either married or cohabitating with someone (responses are either yes or no) because employees with who are married or cohabitating can affect the degree to which employees experience negative work-to-family spillover. For instance, an employee can experience relief from their work/family conflict if a spouse is able to help lessen the stress, pressure, or responsibilities of the home; however, that same spouse can introduce

greater work/family conflict because they can represent an additional source of stress, pressure, or responsibility.

Finally, I measured work-to-family spillover using a five-item measure derived from the 2003 National Study of the Changing Workforce (NSCW). Respondents were asked how often they have experienced aspects of work-to-family spillover over the past three months. Items include, "How often have you NOT had enough time for yourself because of your job?" and "How often have you NOT been able to get everything done at home each day because of your job?" Responses range from "Never" to "Very Often." All items can be found in the Appendix of this dissertation.

CHAPTER 4: RESULTS

After cleaning the data, I created composite variables for some of the constructs of interest. To do this, I calculated the mean of each set of items that were used to assess a construct. I then ran descriptive statistics on the relevant variables to assess aspects of each individual and composite variable's distribution. Specifically, I examined histograms, central tendency indicators, and variance indicators. Each variable and composite variable's descriptive statistics are listed in Table 1.

TABLE 1. Descriptive statistics of continuous variables

Variable	Mean	Standard Deviation
Time Urgency	3.76	0.922
Simultaneity	4.03	0.809
Fragmentation	3.11	1.033
Contamination	3.61	1.070
Constraint	3.91	0.939
Schedule Unpredictability	2.86	0.607
Synchronization	3.47	0.950
Pace Unpredictability	3.04	1.050
OOOC	2.32	1.685
Polychronicity	2.90	0.784
Teleworking	0.08	0.277
Autonomy	3.48	0.931
Departmental Formalization	3.09	0.428
Departmental Centralization	2.51	0.776
Age (years)	39.83	10.539
Hours Worked Per Week (hours)	42.04	6.283
Organizational Tenure (years)	9.31	7.580
Negative Work-to-Family Spillover	2.63	1.105

Note: All LTT variables, polychronicity, autonomy, departmental formalization, and departmental centralization are composite variables and are calculated along a 1-5 Likert scale; OOOC is measured along a 1-7 ordinal scale; teleworking is measured as a dichotomous variable in which 0 = "no" and 1 = "yes"; negative work-to-family spillover is a composite variable measured along a 1-5 Likert scale.

Additionally, I examined differences among these variables across different positions and departments, particularly with respect to how organizational structure, temporal structure, and OOOC vary among positions and departments, as well as whether or not substantial demographic differences existed across positions and departments. This was important because structural variables (organizational and temporal) will likely vary based on the team or function in which the employee works. We would expect some departments and positions to vary in how much or little they are characterized by centralization, formalization, LTT, and even OOOC.

To test this, I ran Analyses of Variance (ANOVAs) on the predictor variables across positions and departments[3]. Marketing, sales, and human resources employees were more polychronic than most other departments, whereas employees in claims, business and support services, and client services employees were less polychronic than most other departments. Claims, client services, and business and support services reported working fewer hours per week than employees in most departments, whereas information technology, marketing, and sales employees reported working more hours per week than employees in most departments. Also, business and support services and client services employees reported less autonomy than employees in other departments, and human resources employees reported more autonomy than employees in other departments. Claims and client services employees reported greater formalization within their department than employees in other departments, and information technology employees reported greater centralization within their department than employees in other departments. Claims and client services also reported less OOOC than employees in most other departments, whereas sales and marketing employees reported greater OOOC.

Business and support services, human resources, and financial services employees reported less time urgency than employees in most other departments, whereas claims and client services employees reported more time urgency than employees in other departments. Claims and client services employees also reported less fragmentation and contamination than employees in other departments. Facilities support employees reported less simultaneity than employees in most other departments, whereas marketing

[3] I do not report the specific statistics here due to the high number of analyses that I performed across departments. If you are curious about any comparisons in particular, please notify me and I would be glad to provide those specific results.

and sales employees reported more simultaneity than employees in other departments. Claims, client services, and facilities support employees reported less constraint than employees in other departments. Claims and client services employees reported less synchronization than employees in other departments, whereas information technology employees reported more synchronization. Accounting employees reported less pace unpredictability than employees in most other departments, whereas information technology employees reported more pace unpredictability. Finally, there were no significant differences among departments with respect to schedule unpredictability.

I also performed reliability analyses on each of the composite measures in the study, the results of which are presented in Table 2.

TABLE 2. Each composite variable and its respective reliability estimate.

Composite Variable	Cronbach's α
IPV	0.81
Time Urgency	0.56
Simultaneity	0.48
Fragmentation	0.58
Contamination	0.84
Constraint	0.79
Schedule Unpredictability	0.60
Synchronization	0.75
Pace Unpredictability	0.80
Autonomy	0.74
Departmental Formalization	0.57
Departmental Centralization	0.71
Negative Work-to-Family Spillover	0.94

Note: See Appendix for items that comprise each composite variable.

Most of the measures showed promising evidence of reliability; half of the LTT measures' Cronbach's α levels exceeded the traditionally accepted 0.70 level (Nunnally,

1978; Nunnally & Bernstein, 1994), and the other half approached the 0.70 level. These results are particularly promising given that I was forced to limit the length of most of the LTT measures to two items which can have a drastic effect on measure reliability. All of the remaining measures except for formalization exceeded the 0.70 level. To explore the content validity of the layered-task time measures, I also ran a confirmatory factor analysis using LISREL 8.08 (Jöreskog and Sörbom, 1989) to assess how well the seventeen items fit the model of eight predefined LTT components (all correlated in the model). I generated parameter estimates using Maximum Likelihood estimation; the model yielded promising fit statistics. The model's chi-square was not statistically significant (χ^2 [91] = 10.26), although chi-square is easily influenced by sample size and is subsequently not an ideal measure of fit (Bentler & Bonett, 1980). The model's goodness-of-fit index (GFI) was 0.95 which is above the traditionally accepted threshold of 0.90 (Bollen, 1989). Also, the root mean square error of approximation (RMSEA) was 0.06 which meets the traditionally accepted threshold of 0.06 (Hu and Bentler, 1999); additionally, the model's comparative fit index (CFI) was 0.97 which is above the traditionally accepted threshold of 0.90 (Bentler & Bonett, 1980). These results are promising in that the measures of LTT appear to conform to the model put forth by Agypt & Rubin (2012).

I also ran correlation analyses to explore the relationships among all of the variables within the study, the results of which are presented in Table 3.

TABLE 3. Intercorrelations of relevant variables.

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
1. Polychronicity										
2. Time Urgency	-.03									
3. Contamination	.04*	.44**								
4. Fragmentation	.16**	.22**	.42**							
5. Simultaneity	.14**	.47**	.57**	.35**						
6. Constraint	.13**	.37**	.54**	.51**	.51**					
7. Schedule Unpredictability	.00	.07**	-.03	.03	.01	.06**				
8. Synchronization	.17**	.26**	.42**	.48**	.43**	.61**	.05*			
9. Pace Unpredictability	-.11**	.18**	.18**	.02	.13**	.07**	-.08**	-.01		
10. Autonomy	.20**	-.16**	.13**	.32**	.05*	.24**	-.05*	.16**	-.12**	

Note: N = 2225; * indicates $p < .05$, ** indicates $p < .01$; polychronicity, all LTT variables, autonomy, departmental formalization, and departmental centralization are composite variables and are calculated along a 1-5 Likert scale; OOOC is measured along a 1-7 ordinal scale; negative work-to-family spillover is a composite variable measured along a 1-5 Likert scale; sex is coded as male=1, female=0; education is coded as an ordinal variable in which greater values signify more extensive education; childcare responsibilities is also coded as an ordinal variable in which greater values signify responsibility for more children; eldercare responsibilities is coded as a dichotomous variable in which 0=no eldercare responsibilities and 1=eldercare responsibilities; married is coded as 0=not currently married or living with someone and 1=married or cohabitating; teleworking is coded as 0=no and 1=yes.

TABLE 3 (continued). Intercorrelations of relevant variables.

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
11. Formalization	-.08**	.02	-.15**	-.18**	-.10**	-.12**	.04	-.06**	-.15**	-.24**
12. Centralization	-.06**	.13**	.10**	.02	.05*	.04	-.01	.08**	.04*	-.23**
13. Work/Family Spillover	-.05*	.46**	.35**	.15**	.31**	.24**	.08**	.20**	.26**	-.18**
14. Hours/Week	.14**	.15**	.24**	.26**	.20**	.26**	.06**	.28**	.21**	.19**
15. Age	-.02	-.07**	.06**	.07**	-.04*	.11**	.05*	.13**	.05*	.09**
16. Sex	.04	.01	.02	.11**	.03	.05*	.03	.17**	.12**	.03
17. Salary	.19**	.09**	.23**	.31**	.20**	.29**	.04*	.33**	.17**	.28**
18. Education	.08**	.08**	.09**	.10**	.10**	.14**	.02	.11**	.10**	.09**
19. Childcare Responsibilities	.05*	-.01	.02	.01	.04	.02	-.03	-.03	.00	.03
20. Eldercare Responsibilities	-.01	.03	.06**	.02	.01	.07**	-.01	.05*	.02	-.01
21. Married	.04	.05*	.08**	.08**	.08**	.11**	.02	.11**	.03	.07**
22. OOOC	.19**	.14**	.27**	.24**	.24**	.25**	.06**	.29**	.16**	.17**
23. Teleworking	-.13**	.04^	-.07**	-.14**	-.08**	-.04*	.00	-.12**	-.02	.03

Note: N = 2225; * indicates $p < .05$, ** indicates $p < .01$; polychronicity, all LTT variables, autonomy, departmental formalization, and departmental centralization are composite variables and are calculated along a 1-5 Likert scale; OOOC is measured along a 1-7 ordinal scale; negative work-to-family spillover is a composite variable measured along a 1-5 Likert scale; sex is coded as male=1, female=0; education is coded as an ordinal variable in which greater values signify more extensive education; childcare responsibilities is also coded as an ordinal variable in which greater values signify responsibility for more children; eldercare responsibilities is coded as a dichotomous variable in which 0=no eldercare responsibilities and 1=eldercare responsibilities; married is coded as 0=not currently married or living with someone and 1=married or cohabitating; teleworking is coded as 0=no and 1=yes.

TABLE 3 (continued). Intercorrelations of relevant variables.

	11	*12*	*13*	*14*	*15*	*16*	*17*	*18*	*19*	*20*	*21*	*22*
11. Formalization												
12. Centralization	.28**											
13. Work/Family Spillover	-.06**	.22**										
14. Hours/Week	-.19**	-.04	.26**									
15. Age	-.01	-.09**	-.10**	.17**								
16. Sex	-.12**	.02	.06**	.26**	.03							
17. Salary	-.21**	-.07**	.15**	.54**	.33**	.33**						
18. Education	-.10**	.00	.08**	.13**	-.01	.12**	.25**					
19. Childcare Responsibilities	-.01	-.00	.07**	-.01	-.20**	-.01	.06**	-.00				
20. Eldercare Responsibilities	-.01	.02	.05*	.06**	.19**	-.07**	.01	-.01	-.02			
21. Married	-.06*	-.03	.06**	.11**	.11**	.13**	.19**	.01	.17**	-.01		
22. OOOC	-.15**	.02	.23**	.45**	.07**	.23**	.45**	.14**	.06**	.02	.08**	
23. Teleworking	.06**	-.01	-.04^	-.08**	-.06**	-.10**	-.10**	-.04^	.07**	.00	.02	-.08**

Note: N = 2225; * indicates $p < .05$, ** indicates $p < .01$; polychronicity, all LTT variables, autonomy, departmental formalization, and departmental centralization are composite variables and are calculated along a 1-5 Likert scale; OOOC is measured along a 1-7 ordinal scale; negative work-to-family spillover is a composite variable measured along a 1-5 Likert scale; sex is coded as male=1, female=0; education is coded as an ordinal variable in which greater values signify more extensive education; childcare responsibilities is also coded as an ordinal variable in which greater values signify responsibility for more children; eldercare responsibilities is coded as a dichotomous variable in which 0=no eldercare responsibilities and 1=eldercare responsibilities; married is coded as 0=not currently married or living with someone and 1=married or cohabitating; teleworking is coded as 0=no and 1=yes.

OOOC was positively related to all of the LTT measures, as well as autonomy, age, sex, salary, education, childcare, hours worked per week, and work/family spillover. Salary was also positively related to each of the LTT variables as well as negative work-to-family spillover. Salary is a proxy for status and power in the organization, such that those with higher salaries typically are higher in the organization's hierarchy. It would therefore appear that as you move up in the organization, you will experience greater degrees of the various LTT components and, possibly as a result, greater negative work-to-family spillover.

Also, being married or cohabitating with someone was positively correlated with all of the LTT components except schedule unpredictability and pace unpredictability, and also had greater autonomy in their job. Additionally, those who are married/cohabitating are also more likely to work in less formalized departments, experience greater negative work-to-family spillover, work more hours per week, be older, be male, have higher salaries, and have greater childcare responsibilities.

The job-level LTT measures were each positively related to one another. The relationships among the organization-level LTT measures were less consistent; schedule unpredictability was positively related to synchronization but negatively related to pace unpredictability, and synchronization was unrelated to pace unpredictability. It is likely that greater schedule unpredictability occurs when one's job requires working with a great number of people; coworkers' performance can vary, forcing unpredictably shifting deadlines and schedules onto an employee. It is intriguing that pace unpredictability is negatively related to schedule predictability, however; one would expect that unpredictable changes in your work pace likely occur because of changes in schedules.

Additionally, one would expect the relationships among job-level temporal constructs to vary due to the inherent variability among jobs, whereas one would expect organization-level temporal constructs to relate more consistently to one another, especially within a single organization. This pattern of results supports the notion that temporal constructs are linked to the nature of employees' work; those temporal constructs that are most directly linked to the employee's work experience would therefore be more closely related to one another.

Synchronization was positively related to each of the job-level LTT variables, as was pace unpredictability (except for fragmentation). Schedule unpredictability was only positively related to time urgency and constraint, albeit weakly. Polychronicity was positively related to each LTT construct except for time urgency and schedule unpredictability, but negatively related to pace unpredictability. Autonomy was positively related to all of the LTT constructs except for time urgency and schedule unpredictability, to which autonomy was negatively related. This is unsurprising; those higher in the organization experience greater autonomy, and their work is characterized by higher levels of the LTT components. Greater autonomy, however, also allows one to schedule work with greater freedom, and employees can schedule their work to reduce temporal urgency. The increased temporal control one has over their work will also likely result in greater control over the schedules that are imposed on them. Autonomy was also negatively related to formalization and centralization, as well as hours worked per week, age, salary, education, and work/family spillover.

Formalization was negatively related to all of the LTT constructs except time urgency and schedule, whereas centralization was positively related to all of the LTT

constructs except fragmentation, constraint, and schedule unpredictability. Formalization was also positively related to centralization, but negatively related to autonomy, hours worked per week, sex, salary, education, and work/family spillover. Centralization was also negatively related to autonomy and age, and positively related to negative work/family spillover.

To test hypotheses 1-8, I ran two different sets of analyses. First, I ran a single multiple regression model in which I entered all control variables in the first step of the model, and entered all of the LTT components in the second step of the model; the results of this analysis are presented in Table 4. In doing so, the control variables accounted for a significant amount of variance in negative work-to-family spillover. As one might expect, hours worked per week positively predicted negative work-to-family spillover. Autonomy and formalization, on the other hand, negatively predicted negative work-to-family spillover. Centralization positively predicted negative work-to-family spillover, as did position. Those who worked in claims and marketing (although the effect was marginally significant) also experienced greater negative work-to-family spillover. Finally, eldercare responsibilities failed to predict negative work-to-family spillover, whereas childcare responsibilities positively predicted negative work-to-family spillover[4].

[4] Incorporating many control variables into a model can increase susceptibility to suppressor variables. Although there were not any significant jumps in variance accounted for based on any control variables' relationship with other predictors (and lack of relationship with the outcome variable) as well as no controls changing sign throughout the various stages in each model, I tested for suppressor variables through two methods. First, I compared each predictor's correlation with negative work-to-family spillover in tandem with each predictor's beta weight throughout the models. There were no anomalies, suggesting no suppressor effects. Second, I reran all multiple regression models but in reverse order (i.e., entered predictors of interest to my hypotheses first, then controls). Again, there was no indication of suppressor effects as no variables changed sign or had an inconsistently high or low beta compared to its correlation with negative work-to-family spillover. As a result, I am confident that no suppressor effects are affecting my models.

The addition of the eight LTT components significantly accounted for an incremental amount of variance in negative work-to-family spillover. Of the eight LTT components, only five significantly predicted the outcome; time urgency, contamination, schedule unpredictability, synchronization, and pace unpredictability each positively predicted negative work-to-family spillover. Simultaneity, fragmentation, and constraint, however, failed to reach significance. I did, however, find support for Hypothesis 9, which stated that polychronicity would be negatively related to negative work-to-family spillover. I also found support for Hypothesis 14, which stated that OOOC would be positively related to negative work-to-family spillover.

The simultaneous entry approach, however, is susceptible to the threat of multicollinearity. As a result, I chose to also run eight separate multiple regression models, an approach similar to that of Agypt & Rubin (2012); the resultant statistics are reported in Table 5. In each of these models, I entered the control variables in Step 1 and an LTT variable in Step 2. In support of Hypothesis 1, time urgency accounted for a significant amount of incremental variance in negative work-to-family spillover; those who work in more time urgent jobs experience greater negative work-to-family

TABLE 4. Regressing negative work-to-family spillover onto all eight LTT components

Model	*All Eight LTT Components*			
	b	*SE*	R^2	ΔR^2
Step 1			0.20**	0.20**
(Intercept)	0.94**	0.342		
Telework	-0.06	0.086		
Hours Per Week	0.05**	0.004		
Autonomy	-0.27**	0.027		
Sex	-0.09	0.054		
Formalization	-0.31**	0.058		
Centralization	0.32**	0.031		
Education	0.02	0.015		
Position	0.12**	0.029		
Accounting	0.16	0.225		
Actuarial	-0.03	0.284		
Business Support	0.10	0.178		
Claims	0.49**	0.181		
Client Services	0.32^	0.178		
Printing/Comm.	0.40^	0.218		
Compliance	0.17	0.213		
Facilities	0.01	0.211		
Financial Services	0.17	0.218		
IT	0.22	0.181		
Legal/HR	0.14	0.200		
Marketing	0.38^	0.206		
Sales	0.28	0.201		
Eldercare Responsibilities	0.08	0.064		
Childcare Responsibilities	0.09**	0.024		
Married	0.04	0.050		
Step 2			0.35**	0.15**
(Intercept)	-0.68	0.328		
Time Urgency	0.33**	0.028		
Simultaneity	0.04	0.034		
Fragmentation	-0.03	0.025		
Contamination	0.11**	0.026		
Constraint	-0.02	0.032		
Schedule Unpredictability	0.12**	0.035		
Synchronization	0.06*	0.030		
Pace Unpredictability	0.12**	0.022		
Polychronicity	-0.07*	0.028		
OOOC	0.05**	0.015		

Note: N = 1925; ** signifies $p < .01$, * signifies $p < .05$, ^ signifies $p < .06$; significance levels did not change for any variables in subsequent steps.

spillover. Similarly, in support of Hypothesis 2, simultaneity accounted for a significant amount of incremental variance in negative work-to-family spillover; those who work in jobs that require multitasking experience greater negative work-to-family spillover. Fragmentation also accounted for a significant amount of incremental variance in negative work-to-family spillover, supporting Hypothesis 3; those who work in jobs that require breaking up work into smaller pieces experience greater negative work-to-family spillover. In support of Hypothesis 4, contamination accounted for a significant amount of incremental variance in negative work-to-family spillover, such that those who work in jobs that require using various skillsets experience greater negative work-to-family spillover.

TABLE 5. Regressing negative work-to-family spillover onto LTT components

Model	*Time Urgency*				*Simultaneity*			
	b	*SE*	R^2	ΔR^2	*b*	*SE*	R^2	ΔR^2
Step 1			0.20**	0.20**			0.20**	0.20**
(Intercept)	0.95**	0.273			0.96**	0.334		
Telework	-0.08	0.082			-0.07	0.083		
Hours Per Week	0.05**	0.004			0.05**	0.004		
Autonomy	-0.26**	0.027			-0.26**	0.027		
Sex	-0.10*	0.053			-0.09	0.053		
Formalization	-0.30**	0.057			-0.29**	0.057		
Centralization	0.31**	0.031			0.31**	0.031		
Education	0.03	0.015			0.03	0.015		
Position	0.12**	0.028			0.12**	0.028		
Accounting	0.26	0.219			0.26	0.219		
Actuarial	-0.06	0.283			-0.06	0.284		
Business Support	0.09	0.174			0.09	0.175		
Claims	0.45*	0.176			0.45*	0.177		
Client Services	0.28	0.174			0.28	0.174		
Printing/Comm.	0.41	0.212			0.38	0.213		
Compliance	0.12	0.208			0.13	0.208		
Facilities	-0.03	0.206			-0.03	0.206		
Financial Services	0.13	0.214			0.13	0.213		
IT	0.20	0.177			0.19	0.177		
Legal/HR	0.10	0.196			0.10	0.196		
Marketing	0.32	0.201			0.36	0.202		
Sales	0.24	0.195			0.24	0.196		
Eldercare Responsibilities	0.06	0.063			0.05	0.063		
Childcare Responsibilities	0.10**	0.023			0.10**	0.023		
Married	0.06	0.049			0.06	0.049		

Note: N varies between 1925 and 2225 depending on the model due to missing data in some LTT variables; ** signifies $p < .01$, * signifies $p < .05$; significance levels did not change for any variables in subsequent steps.

TABLE 5 (continued). Regressing negative work-to-family spillover onto LTT components

Model	*Time Urgency*				*Simultaneity*			
	b	*SE*	R^2	ΔR^2	*b*	*SE*	R^2	ΔR^2
Step 2			0.32**	0.12**			0.25**	0.05**
(Intercept)	-0.15	0.312			-0.01	0.334		
LTT Variable (see column head)	0.44**	0.023			0.33**	0.028		

Note: N varies between 1925 and 2225 depending on the model due to missing data in some LTT variables; ** signifies $p < .01$, * signifies $p < .05$; significance levels did not change for any variables in subsequent steps.

TABLE 5 (continued). Regressing negative work-to-family spillover onto LTT components

Model	*Fragmentation*				*Contamination*			
	b	*SE*	R^2	ΔR^2	*b*	*SE*	R^2	ΔR^2
Step 1			0.20**	0.20**			0.20**	0.20**
(Intercept)	0.95**	0.334			0.93**	0.334		
Telework	-0.07	0.083			-0.08	0.083		
Hours Per Week	0.05**	0.004			0.05**	0.004		
Autonomy	-0.26**	0.027			-0.26**	0.027		
Sex	-0.09	0.053			-0.10	0.053		
Formalization	-0.29**	0.057			-0.29**	0.057		
Centralization	0.31**	0.031			0.31**	0.031		
Education	0.03	0.015			0.03	0.015		
Position	0.11	0.028			0.11**	0.028		
Accounting	0.23	0.222			0.30	0.221		
Actuarial	-0.06	0.284			-0.03	0.285		
Business Support	0.10	0.177			0.13	0.177		
Claims	0.44*	0.179			0.48**	0.179		
Client Services	0.28	0.176			0.32	0.176		
Printing/Comm.	0.41	0.214			0.42*	0.215		
Compliance	0.13	0.210			0.16	0.210		
Facilities	-0.03	0.208			0.01	0.209		
Financial Services	0.13	0.215			0.17	0.215		
IT	0.20	0.179			0.24	0.179		
Legal/HR	0.10	0.198			0.13	0.198		
Marketing	0.36	0.203			0.41*	0.204		
Sales	0.27	0.198			0.29	0.197		
Eldercare Responsibilities	0.07	0.063			0.06	0.063		
Childcare Responsibilities	0.10**	0.023			0.10**	0.023		
Married	0.06	0.049			0.06	0.049		

Note: N varies between 1925 and 2225 depending on the model due to missing data in some LTT variables; ** signifies $p < .01$, * signifies $p < .05$; significance levels did not change for any variables in subsequent steps.

TABLE 5 (continued). Regressing negative work-to-family spillover onto LTT components

Model	*Fragmentation*				*Contamination*			
	b	*SE*	R^2	ΔR^2	*b*	*SE*	R^2	ΔR^2
Step 2			0.21**	0.01**			0.27**	0.07**
(Intercept)	0.81*	0.333			0.31	0.322		
LTT Variable (see column head)	0.13**	0.024			0.30**	0.021		

Note: N varies between 1925 and 2225 depending on the model due to missing data in some LTT variables; ** signifies $p < .01$, * signifies $p < .05$; significance levels did not change for any variables in subsequent steps.

TABLE 5 (continued). Regressing negative work-to-family spillover onto LTT components

Model	*Constraint*				*Schedule Unpredictability*			
	b	*SE*	R^2	ΔR^2	*b*	*SE*	R^2	ΔR^2
Step 1			0.20**	0.20**			0.20**	0.20**
(Intercept)	0.98**	0.334			0.95**	0.333		
Telework	-0.08	0.083			-0.09	0.083		
Hours Per Week	0.05**	0.004			0.05**	0.004		
Autonomy	-0.26**	0.027			-0.26**	0.027		
Sex	-0.10	0.053			-0.09	0.053		
Formalization	-0.30**	0.057			-0.29**	0.057		
Centralization	0.31**	0.031			0.31**	0.031		
Education	0.03	0.015			0.03	0.015		
Position	0.11**	0.028			0.11**	0.028		
Accounting	0.21	0.220			0.26	0.219		
Actuarial	-0.06	0.283			-0.06	0.283		
Business Support	0.10	0.174			0.09	0.174		
Claims	0.45*	0.177			0.44*	0.176		
Client Services	0.28	0.174			0.28	0.174		
Printing/Comm.	0.42*	0.213			0.42*	0.213		
Compliance	0.14	0.209			0.14	0.208		
Facilities	-0.03	0.206			-0.03	0.206		
Financial Services	0.13	0.214			0.13	0.213		
IT	0.20	0.177			0.20	0.177		
Legal/HR	0.10	0.196			0.10	0.196		
Marketing	0.36	0.201			0.36	0.201		
Sales	0.25	0.195			0.26	0.196		
Eldercare Responsibilities	0.07	0.063			0.05	0.063		
Childcare Responsibilities	0.10**	0.023			0.10**	0.023		
Married	0.06	0.049			0.05	0.049		

Note: N varies between 1925 and 2225 depending on the model due to missing data in some LTT variables; ** signifies $p < .01$, * signifies $p < .05$; significance levels did not change for any variables in subsequent steps.

TABLE 5 (continued). Regressing negative work-to-family spillover onto LTT components

Model	*Constraint*				*Schedule Unpredictability*			
	b	*SE*	R^2	ΔR^2	*b*	*SE*	R^2	ΔR^2
Step 2			0.23**	0.03**			0.20**	0.01**
(Intercept)	0.55	0.330			0.62	0.346		
LTT Variable (see column head)	0.24**	0.026			0.12**	0.037		

Note: N varies between 1925 and 2225 depending on the model due to missing data in some LTT variables; ** signifies $p < .01$, * signifies $p < .05$; significance levels did not change for any variables in subsequent steps.

TABLE 5 (continued). Regressing negative work-to-family spillover onto LTT components

Model	*Synchronization*				*Pace Unpredictability*			
	b	*SE*	R^2	ΔR^2	*b*	*SE*	R^2	ΔR^2
Step 1			0.20**	0.20**			0.20**	0.20**
(Intercept)	0.96**	0.334			0.96**	0.332		
Telework	-0.06	0.084			-0.09	0.083		
Hours Per Week	0.05**	0.004			0.05**	0.004		
Autonomy	-0.26**	0.027			-0.26**	0.027		
Sex	-0.10	0.053			-0.10*	0.043		
Formalization	-0.29**	0.057			-0.30**	0.056		
Centralization	0.31**	0.031			0.31**	0.031		
Education	0.03	0.015			0.12	0.015		
Position	0.11**	0.028			0.26**	0.028		
Accounting	0.26	0.219			-0.06	0.219		
Actuarial	-0.06	0.283			0.10	0.283		
Business Support	0.10	0.175			0.45*	0.174		
Claims	0.44*	0.177			0.29	0.176		
Client Services	0.28	0.174			0.29	0.174		
Printing/Comm.	0.41	0.213			0.41	0.212		
Compliance	0.13	0.208			0.13	0.208		
Facilities	-0.03	0.206			-0.03	0.206		
Financial Services	0.13	0.213			0.13	0.213		
IT	0.20	0.177			0.20	0.177		
Legal/HR	0.11	0.196			0.10	0.196		
Marketing	0.36	0.202			0.39	0.201		
Sales	0.25	0.195			0.25	0.195		
Eldercare Responsibilities	0.06	0.063			0.06	0.062		
Childcare Responsibilities	0.10**	0.023			0.10**	0.023		
Married	.06	.049			.05	.049		

Note: N varies between 1925 and 2225 depending on the model due to missing data in some LTT variables; ** signifies $p < .01$, * signifies $p < .05$; significance levels did not change for any variables in subsequent steps.

TABLE 5 (continued). Regressing negative work-to-family spillover onto LTT components

Model	*Synchronization*				*Pace Unpredictability*			
	b	*SE*	R^2	ΔR^2	*b*	*SE*	R^2	ΔR^2
Step 2			0.22**	0.02**			0.22**	0.02**
(Intercept)	0.75*	0.331			0.42	0.335		
LTT Variable (see column head)	0.18**	0.025			0.17**	0.022		

Note: N varies between 1925 and 2225 depending on the model due to missing data in some LTT variables; ** signifies $p < .01$, * signifies $p < .05$; significance levels did not change for any variables in subsequent steps.

In support of Hypothesis 5, constraint accounted for a significant amount of incremental variance in negative work-to-family spillover; those whose jobs require they work to deadlines experience greater negative work-to-family spillover. Schedule unpredictability also accounted for a significant amount of incremental variance in negative work-to-family spillover, supporting Hypothesis 6 which states that those who work against unpredictably changing schedules, deadlines, and meetings experience greater negative work-to-family spillover. Hypothesis 7 states that those who work in organizations that require synchronizing temporal markers across departmental boundaries will experience greater negative work-to-family spillover; in support of this hypothesis, synchronization accounted for a significant amount of incremental variance in negative work-to-family spillover. Finally, in support of Hypothesis 8, pace unpredictability accounted for a significant amount of incremental variance in negative work-to-family spillover, such that those who work in organizations that experience unpredictable changes in the pace of work report greater negative work-to-family spillover.

Hypotheses 10-13 stated that polychronicity would buffer the effect of four of the LTT components – namely, simultaneity, fragmentation, contamination, and schedule unpredictability – on work-to-family spillover. To test these hypotheses, I ran four separate multiple regression analyses in which I entered the previously mentioned control variables in the first step, polychronicity and each LTT variable (each mean-centered) in the second step, and the cross-product of the mean-centered polychronicity variable and respective mean-centered LTT variable in the third step.

There was no support for Hypothesis 10 which stated that polychronicity would moderate the relationship between simultaneity and negative work-to-family spillover; the simultaneity-polychronicity interaction term failed to account for a significant amount of incremental variance in negative work-to-family spillover. Conversely, I did find support for Hypothesis 11 which stated that polychronicity would moderate the relationship between fragmentation and negative work-to-family spillover such that those who are more polychronic will experience less negative work-to-family spillover than those who are more monochronic in jobs characterized by high fragmentation (see Table 6 and Figure 1).

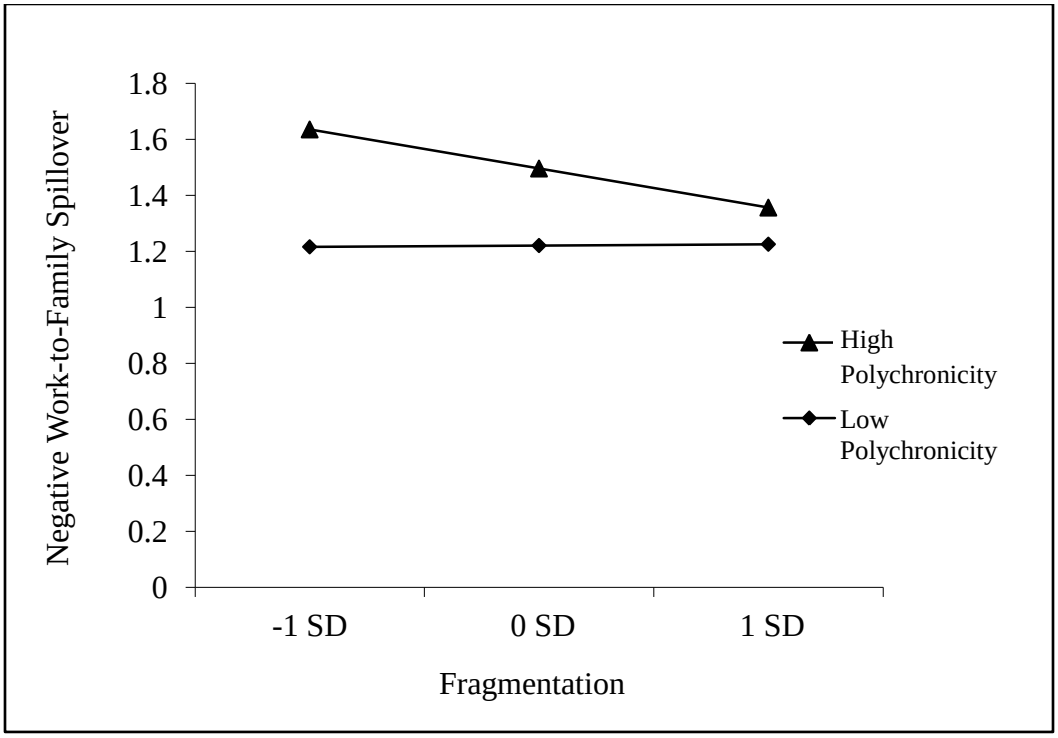

FIGURE 1: The fragmentation-polychronicity interaction and negative work-to-family spillover.

TABLE 6. Regressing negative work-to-family spillover onto the fragmentation x polychronicity interaction

Model	*Fragmentation x Polychronicity*			
	b	*SE*	R^2	ΔR^2
Step 1			0.20**	0.20**
(Intercept)	0.92**	0.341		
Telework	-0.06	0.086		
Hours Per Week	0.05**	0.004		
Autonomy	-0.27**	0.027		
Sex	-0.08	0.054		
Formalization	-0.31**	0.058		
Centralization	0.32**	0.031		
Education	0.02	0.015		
Position	0.12**	0.028		
Accounting	0.16	0.224		
Actuarial	-0.03	0.284		
Business Support	0.11	0.176		
Claims	0.44*	0.179		
Client Services	0.27	0.176		
Printing/Comm.	0.40	0.214		
Compliance	0.13	0.210		
Facilities	0.00	0.211		
Financial Services	0.17	0.218		
IT	0.22	0.181		
Legal/HR	0.14	0.200		
Marketing	0.38^	0.206		
Sales	0.28	0.201		
Eldercare Responsibilities	0.09	0.064		
Childcare Responsibilities	0.09**	0.024		
Married	0.04	0.050		
Step 2			0.35**	0.15**
(Intercept)	1.62**	0.316		
Time Urgency	0.33**	0.028		
Simultaneity	0.04	0.034		
Fragmentation	-0.03	0.025		
Contamination	0.12**	0.026		
Constraint	-0.02	0.032		
Schedule Unpredictability	0.13**	0.035		
Synchronization	0.07*	0.030		
Pace Unpredictability	0.13**	0.022		
Polychronicity	-0.06*	0.028		
Step 3			0.36**	0.01**
(Intercept)	1.61**	0.316		
Fragmentation x Polychronicity	-0.05*	0.024		

Note: N = 1925; ** signifies $p < .01$, * signifies $p < .05$, ^ signifies $p < .10$; significance levels did not change for any variables in subsequent steps.

I failed to find support for Hypotheses 12 and 13 which stated that polychronicity would moderate the relationship that negative work-to-family spillover shares with contamination and schedule unpredictability, respectively. Each interaction term failed to account for significant amount of incremental variance in negative work-to-family spillover.

I also tested the role of OOOC as it moderates the relationship between each LTT variable and negative work-to-family spillover. To do so, I followed the same approach by entering control variables in Step 1, mean-centered OOOC and each mean-centered LTT variable at Step 2, and the cross-product of mean-centered OOOC and the respective mean-centered LTT variable in Step 3. Hypothesis 15 states that OOOC will moderate the relationship between time urgency and negative work-to-family spillover, such that those who are contacted more outside of the office will experience greater negative work-to-family spillover than those who are contacted less outside of the office in jobs high in time urgency. I found support for this hypothesis, the results of which are presented in Table 7 and Figure 2.

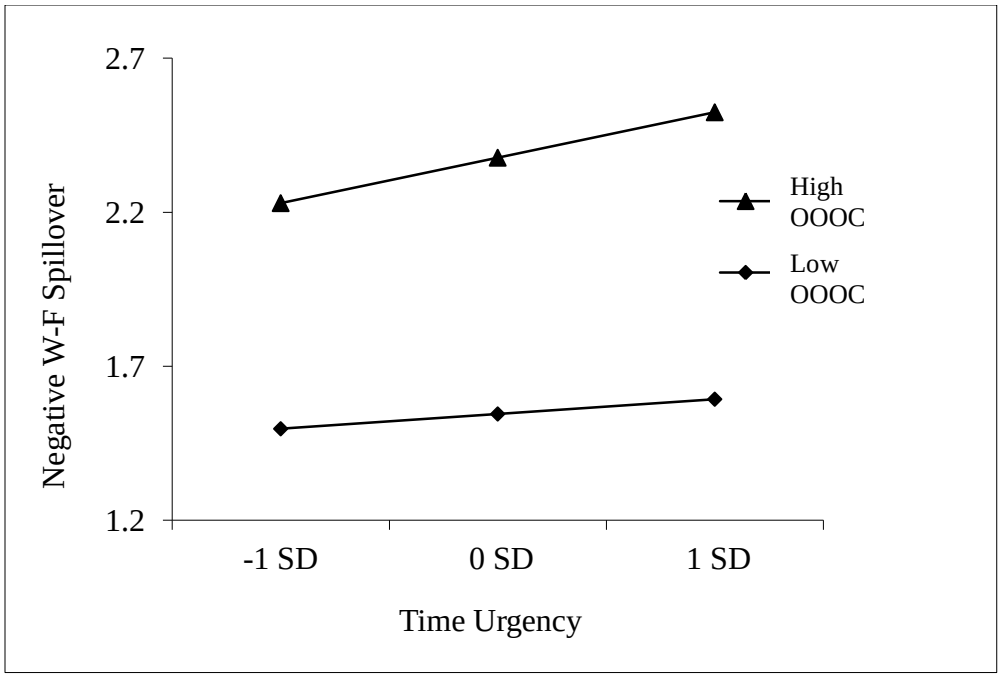

FIGURE 2: The OOOC-time urgency interaction and negative work-to-family spillover.

Hypothesis 16 stated that OOOC would moderate the relationship between simultaneity and negative work-to-family spillover, such that those who are contacted more outside of the office will experience greater negative work-to-family spillover than those who are contacted outside of the office less in jobs high in simultaneity. The results also support this hypothesis (see Table 7); Figure 3 displays this relationship in detail.

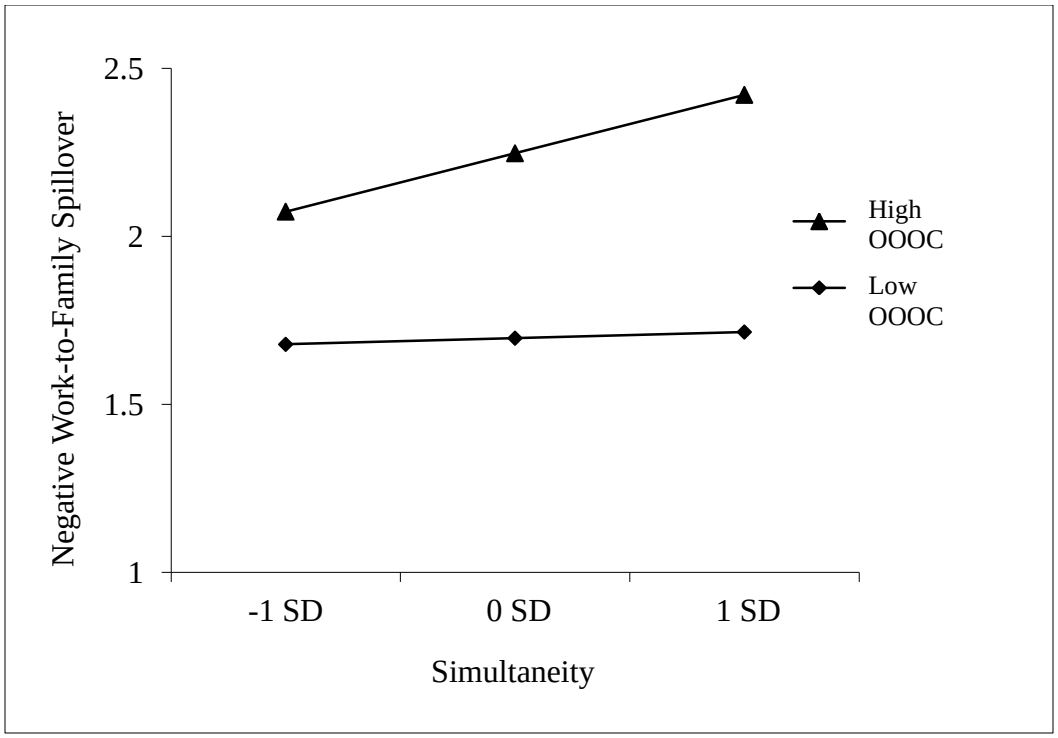

FIGURE 3: The OOOC-simultaneity interaction and negative work-to-family spillover.

TABLE 7. Regressing negative work-to-family spillover onto LTT components x OOOC interactions

Model	*Time Urgency x OOOC*				*Simultaneity x OOOC*			
	b	*SE*	R^2	ΔR^2	*b*	*SE*	R^2	ΔR^2
Step 1			0.20**	0.20**			0.20**	0.20**
(Intercept)	0.91**	0.342			0.91**	0.342		
Telework	-0.07	0.086			-0.07	0.086		
Hours Per Week	0.05**	0.004			0.05**	0.004		
Autonomy	-0.27**	0.027			-0.27**	0.027		
Sex	-0.10	0.054			-0.10	0.054		
Formalization	-0.31**	0.058			-0.31**	0.058		
Centralization	0.32**	0.031			0.32**	0.031		
Education	0.02	0.015			0.02	0.015		
Position	0.12**	0.029			0.12**	0.029		
Accounting	0.21	0.224			0.21	0.224		
Actuarial	-0.03	0.284			-0.03	0.284		
Business Support	0.12	0.179			0.12	0.179		
Claims	0.48**	0.181			0.48**	0.181		
Client Services	0.33^	0.178			0.33^	0.178		
Printing/Comm.	0.40^	0.218			0.40^	0.218		
Compliance	0.18	0.213			0.18	0.213		
Facilities	0.01	0.210			0.01	0.210		
Financial Services	0.18	0.218			0.18	0.218		
IT	0.22	0.181			0.22	0.181		
Legal/HR	0.14	0.201			0.14	0.201		
Marketing	0.39*	0.194			0.39*	0.194		
Sales	0.29	0.200			0.29	0.200		
Eldercare Responsibilities	0.07	0.064			0.07	0.064		
Childcare Responsibilities	0.09**	0.024			0.09**	0.024		
Married	0.04	0.050			0.04	0.050		

Note: N = 1925; ** signifies $p < .01$, * signifies $p < .05$; significance levels did not change for any variables in subsequent steps.

TABLE 7 (continued). Regressing negative work-to-family spillover onto LTT components x OOOC interactions

Model	*Time Urgency x OOOC*				*Simultaneity x OOOC*			
	b	*SE*	R^2	ΔR^2	*b*	*SE*	R^2	ΔR^2
Step 2			0.35**	0.15**			0.35**	0.15**
(Intercept)	1.79**	0.398			1.79**	0.398		
Time Urgency	0.32**	0.028			0.32**	0.028		
Simultaneity	0.03	0.034			0.03	0.034		
Fragmentation	-0.03	0.025			-0.03	0.025		
Contamination	0.12**	0.026			0.12**	0.026		
Constraint	-0.02	0.032			-0.02	0.032		
Schedule Unpredictability	0.12**	0.035			0.12**	0.035		
Synchronization	0.06^	0.030			0.06^	0.030		
Pace Unpredictability	0.12**	0.021			0.12**	0.021		
OOOC	0.04**	0.015			0.04**	0.015		
Step 3			0.36**	0.01**			0.36**	0.01**
(Intercept)	1.82**	0.318			1.84**	0.318		
LTT Component x OOOC	0.03*	0.015			0.05**	0.017		

Note: N = 1925; ** signifies $p < .01$, * signifies $p < .05$; significance levels did not change for any variables in subsequent steps.

Hypothesis 17 stated that OOOC would moderate the relationship between fragmentation and negative work-to-family spillover, such that those who are contacted more outside of the office will experience greater negative work-to-family spillover than those who are contacted less outside of the office in jobs high in fragmentation. The results of my analyses, however, fail to support this hypothesis. Hypothesis 18 stated that OOOC would moderate the relationship between contamination and negative work-to-family spillover, such that those who are contacted outside of the office more will experience greater negative work-to-family spillover than those who are contacted outside of the office less in jobs high in contamination. The results provide evidence in support of this hypothesis, albeit marginally (see Table 8 and Figure 4).

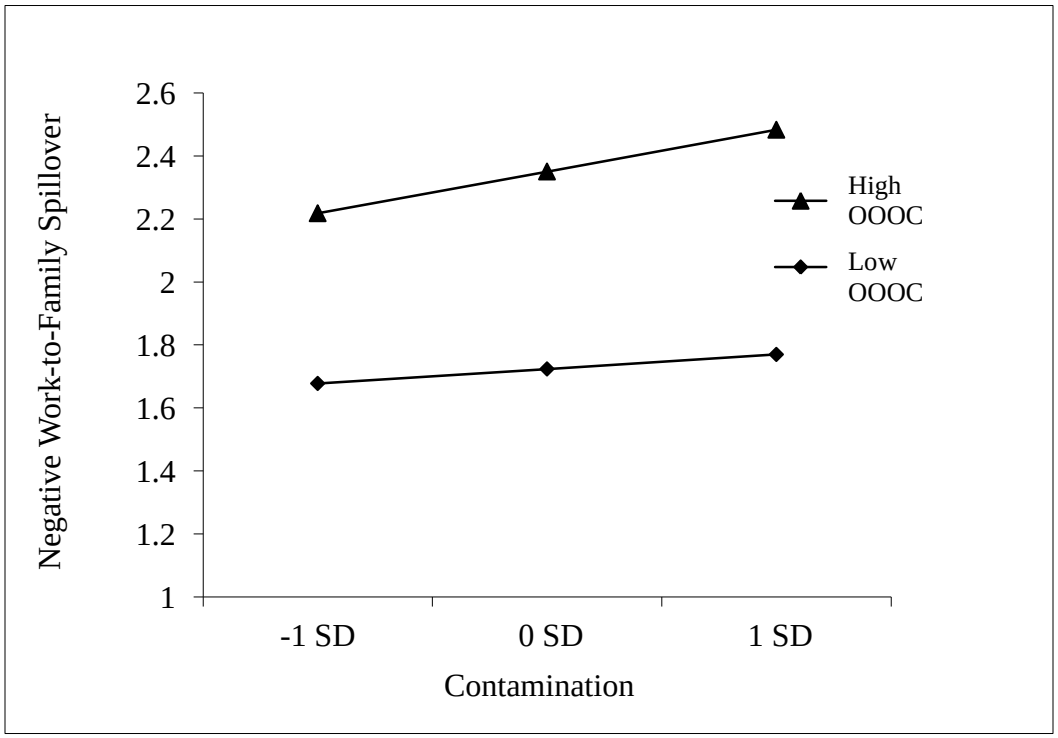

FIGURE 4: The OOOC-contamination interaction and negative work-to-family spillover.

Hypothesis 19 states that OOOC will moderate the relationship between constraint and negative work-to-family spillover such that those who are contacted outside of the office more will experience more negative work-to-family spillover than those who are contacted outside of the office less in jobs high in constraint. As shown in Figure 5, I found tentative support for this hypothesis due to a marginally significant interaction term (see Table 8).

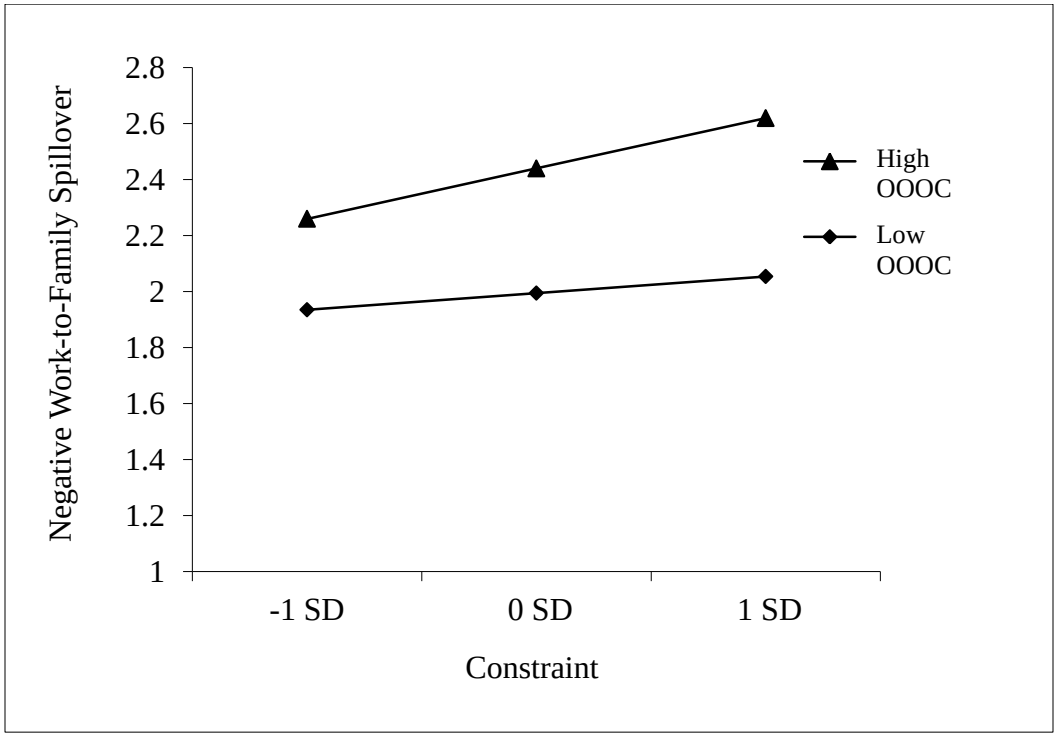

FIGURE 5: The OOOC-constraint interaction and negative work-to-family spillover.

TABLE 8. Regressing negative work-to-family spillover onto LTT component x OOOC interactions

Model	*Contamination x OOOC*				*Constraint x OOOC*			
	b	*SE*	R^2	ΔR^2	*b*	*SE*	R^2	ΔR^2
Step 1			0.20**	0.20**			0.20**	0.20**
(Intercept)	0.91**	0.342			0.91**	0.342		
Telework	-0.07	0.086			-0.07	0.086		
Hours Per Week	0.05**	0.004			0.05**	0.004		
Autonomy	-0.27**	0.027			-0.27**	0.027		
Sex	-0.10	0.054			-0.10	0.054		
Formalization	-0.31**	0.058			-0.31**	0.058		
Centralization	0.32**	0.031			0.32**	0.031		
Education	0.02	0.015			0.02	0.015		
Position	0.12**	0.029			0.12**	0.029		
Accounting	0.21	0.224			0.21	0.224		
Actuarial	-0.03	0.284			-0.03	0.284		
Business Support	0.12	0.179			0.12	0.179		
Claims	0.48**	0.181			0.48**	0.181		
Client Services	0.33^	0.178			0.33^	0.178		
Printing/Comm.	0.40^	0.218			0.40^	0.218		
Compliance	0.18	0.213			0.18	0.213		
Facilities	0.01	0.210			0.01	0.210		
Financial Services	0.18	0.218			0.18	0.218		
IT	0.22	0.181			0.22	0.181		
Legal/HR	0.14	0.201			0.14	0.201		
Marketing	0.39*	0.194			0.39*	0.194		
Sales	0.29	0.200			0.29	0.200		
Eldercare Responsibilities	0.07	0.064			0.07	0.064		
Childcare Responsibilities	0.09**	0.024			0.09**	0.024		
Married	0.04	0.050			0.04	0.050		

Note: N = 2225; ** signifies $p < .01$, * signifies $p < .05$, ^ signifies $p < .10$; significance levels did not change for any variables in subsequent steps.

TABLE 8 (continued) . Regressing negative work-to-family spillover onto LTT component x OOOC interactions

Model	*Contamination x OOOC*				*Constraint x OOOC*			
	b	*SE*	R^2	ΔR^2	*b*	*SE*	R^2	ΔR^2
Step 2			0.35**	0.15**			0.35**	0.15**
(Intercept)	1.79**	0.398			1.79**	0.398		
Time Urgency	0.32**	0.028			0.32**	0.028		
Simultaneity	0.03	0.034			0.03	0.034		
Fragmentation	-0.03	0.025			-0.03	0.025		
Contamination	0.12**	0.026			0.12**	0.026		
Constraint	-0.02	0.032			-0.02	0.032		
Schedule Unpredictability	0.12**	0.035			0.12**	0.035		
Synchronization	0.06^	0.030			0.06^	0.030		
Pace Unpredictability	0.12**	0.021			0.12**	0.021		
OOOC	0.04**	0.015			0.04**	0.015		
Step 3			0.35**	0.00^			0.35**	0.00^
(Intercept)	1.81**	0.319			1.83**	0.319		
LTT Component x OOOC	0.01^	0.013			0.02^	0.016		

Note: N = 2225; ** signifies $p < .01$, * signifies $p < .05$, ^ signifies $p < .10$; significance levels did not change for any variables in subsequent steps.

Hypothesis 20 states that OOOC will moderate the relationship between schedule unpredictability and negative work-to-family spillover, such that those who are contacted outside of the office more will experience more negative work-to-family spillover than those who are contacted outside of the office less in jobs high in schedule unpredictability. The estimated multiple regression model for this relationship failed to provide any support. Hypothesis 21 stated that OOOC will moderate the relationship between synchronization and negative work-to-family spillover, such that those who are contacted outside of the office more will experience greater negative work-to-family spillover than those who are contacted less outside of the office in jobs high in synchronization. I found marginally significant support for this hypothesis (see Table 9 and Figure 6).

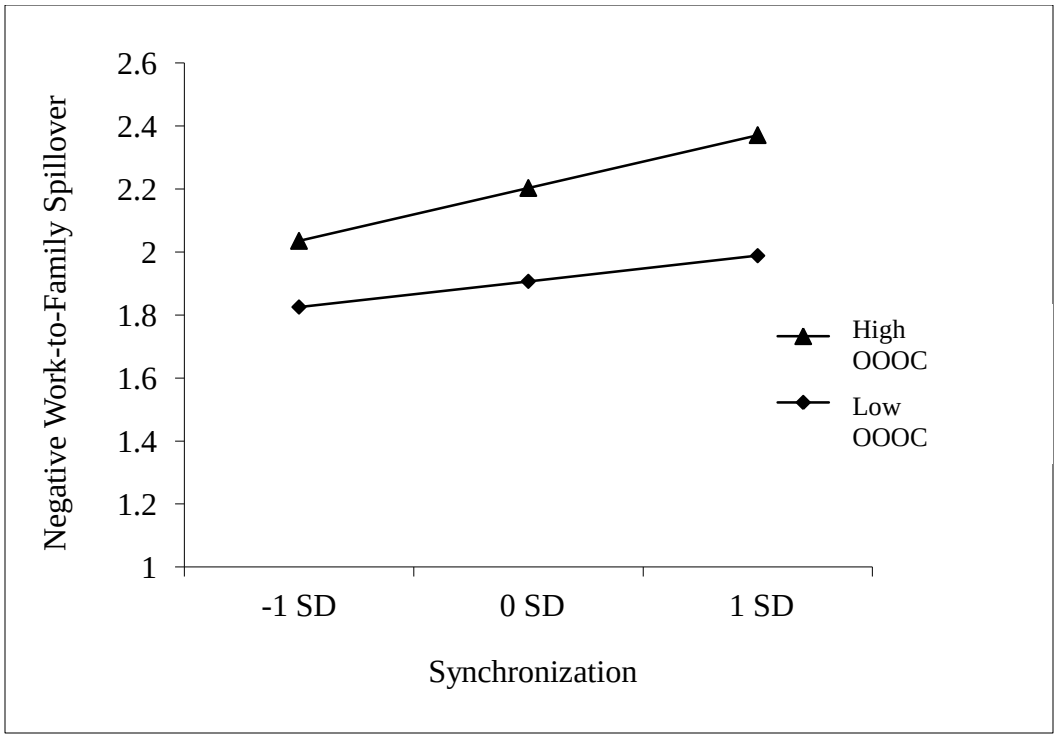

FIGURE 6: The OOOC-synchronization interaction and negative work-to-family spillover

TABLE 9. Regressing negative work-to-family spillover onto the synchronization x OOOC interaction

Model	*Synchronization x OOOC*			
	b	*SE*	R^2	ΔR^2
Step 1			0.20**	0.20**
(Intercept)	0.91**	0.342		
Telework	-0.07	0.086		
Hours Per Week	0.05**	0.004		
Autonomy	-0.27**	0.027		
Sex	-0.10	0.054		
Formalization	-0.31**	0.058		
Centralization	0.32**	0.031		
Education	0.02	0.015		
Position	0.12**	0.029		
Accounting	0.21	0.224		
Actuarial	-0.03	0.284		
Business Support	0.12	0.179		
Claims	0.48**	0.181		
Client Services	0.33^	0.178		
Printing/Comm.	0.40^	0.218		
Compliance	0.18	0.213		
Facilities	0.01	0.210		
Financial Services	0.18	0.218		
IT	0.22	0.181		
Legal/HR	0.14	0.201		
Marketing	0.39*	0.194		
Sales	0.29	0.200		
Eldercare Responsibilities	0.07	0.064		
Childcare Responsibilities	0.09**	0.024		
Married	0.04	0.050		

Note: N = 1925; ** signifies $p < .01$, * signifies $p < .05$, ^ signifies $p < .10$; significance levels did not change for any variables in subsequent steps

TABLE 9 (continued). Regressing negative work-to-family spillover onto the synchronization x OOOC interaction

Model	*Synchronization x OOOC*			
	b	*SE*	R^2	ΔR^2
Step 2			0.35**	0.15**
(Intercept)	1.79**	0.398		
Time Urgency	0.32**	0.028		
Simultaneity	0.03	0.034		
Fragmentation	-0.03	0.025		
Contamination	0.12**	0.026		
Constraint	-0.02	0.032		
Schedule Unpredictability	0.12**	0.035		
Synchronization	0.06^	0.030		
Pace Unpredictability	0.12**	0.021		
OOOC	0.04**	0.015		
Step 3			0.35**	0.00**
(Intercept)	1.80**	0.320		
Synchronization x OOOC	0.01^	0.004		

Note: N = 1925; ** signifies $p < .01$, * signifies $p < .05$, ^ signifies $p < .10$; significance levels did not change for any variables in subsequent steps.

Hypothesis 22 predicted that OOOC will moderate the relationship between pace unpredictability and negative work-to-family spillover, such that those who are contacted outside of the office more will experience greater negative work-to-family spillover than those who are contacted outside of the office less in jobs high in pace unpredictability. I failed to find any support for this hypothesis.

I then modeled the three-way interactions detailed in Hypotheses 23-26 using multiple regression wherein I hierarchically entered the control variables in the first step, the mean-centered first order variables (each respective LTT variable, polychronicity, and OOOC) in the next step, each second order interaction in the third step (calculated as the product of each possible two-way interaction of the centered variables – e.g., polychronicity x time urgency, polychronicity x OOOC, and time urgency x OOOC), and finally the three-way interaction in the third step (calculated as the product of all three mean-centered variables in the model).

Hypothesis 23 stated that simultaneity, OOOC, and polychronicity will interact such that at high levels of simultaneity, polychronicity will moderate the relationship between OOOC and negative work-to-family spillover; those who are more polychronic will experience less negative work-to-family spillover in jobs characterized by high simultaneity and high OOOC frequency. In support of this hypothesis, the three-way interaction term did account for a significant amount of incremental variance – albeit marginally significant – in negative work-to-family spillover (Table 10). Further analyses reveal that, when OOOC is high and in jobs characterized by greater simultaneity, those who are more polychronic experience less negative work-to-family spillover than those who are less polychronic (see Figure 7). Additionally, in jobs

characterized by less OOOC and more simultaneity, those who are more polychronic experience less negative work-to-family spillover than those who are more polychronic (see Figure 8).

TABLE 10. Three-way interaction among simultaneity, OOOC, and polychronicity

Model	*Simultaneity x OOOC x Polychronicity*			
	b	*SE*	R^2	ΔR^2
Step 1			0.20**	0.20**
(Intercept)	0.94 **	0.342		
Telework	-0.06	0.086		
Hours Per Week	0.05**	0.004		
Autonomy	-0.27**	0.027		
Sex	-0.09	0.055		
Formalization	-0.31**	0.058		
Centralization	0.32**	0.031		
Education	0.02	0.015		
Position	0.12**	0.029		
Accounting	0.16	0.225		
Actuarial	-0.03	0.284		
Business Support	0.10	0.178		
Claims	0.49**	0.181		
Client Services	0.32	0.178		
Printing/Comm.	0.40	0.218		
Compliance	0.17	0.213		
Facilities	0.01	0.211		
Financial Services	0.17	0.218		
IT	0.22	0.181		
Legal/HR	0.14	0.200		
Marketing	0.38	0.206		
Sales	0.28	0.201		
Eldercare Responsibilities	0.08	0.064		
Childcare Responsibilities	0.09**	0.024		
Married	0.04	0.050		
Step 2			0.35**	0.15**
(Intercept)	1.77**	0.318		
Time Urgency	0.32**	0.028		
Simultaneity	0.04	0.034		
Fragmentation	-0.03	0.025		
Contamination	0.11**	0.026		
Constraint	-0.02	0.032		
Schedule Unpredictability	0.12**	0.035		
Synchronization	0.06^	0.030		
Pace Unpredictability	0.12**	0.022		
OOOC	0.05**	0.015		
Polychronicity	-0.08**	0.028		

Note: N = 1927; ** signifies $p < .01$, * signifies $p < .05$, ^ signifies $p < .10$; significance levels did not change for any variables in subsequent steps.

TABLE 10 (continued). Three-way interaction among simultaneity, OOOC, and polychronicity

Model	*Simultaneity x OOOC x Polychronicity*			
	b	*SE*	R^2	ΔR^2
Step 3			0.36**	0.01**
(Intercept)	1.80**	0.318		
Simultaneity x OOOC	0.06**	0.018		
Simultaneity x Polychronicity	0.00	0.032		
Polychronicity x OOOC	-0.03^	0.016		
Step 4			0.36**	0.00^
(Intercept)	1.79**	0.318		
Simultaneity x OOOC x Polychronicity	0.04^	0.021		

Note: N = 1906; ** signifies $p < .01$, * signifies $p < .05$, ^ signifies $p < .10$; significance levels did not change for any variables in subsequent steps.

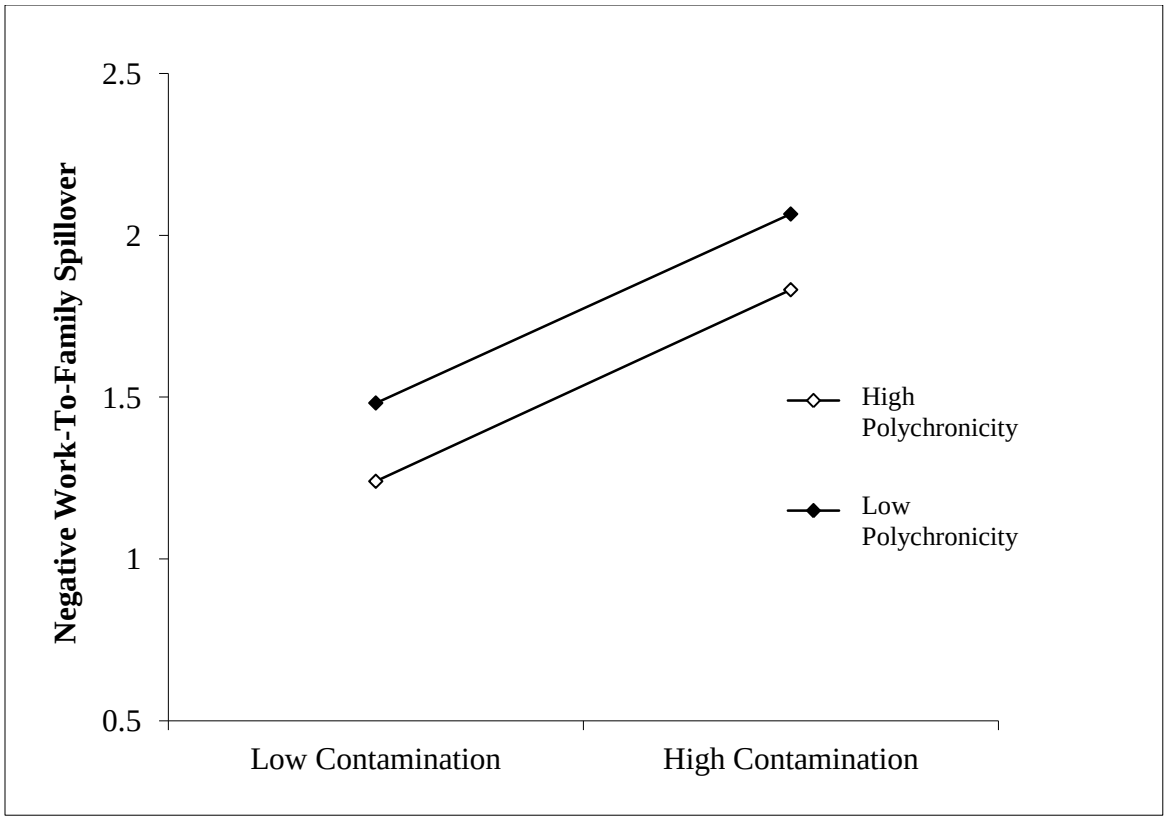

FIGURE 7: Polychronicity's moderating effect on the simultaneity-negative work-to-family spillover relationship when OOOC is **high**.

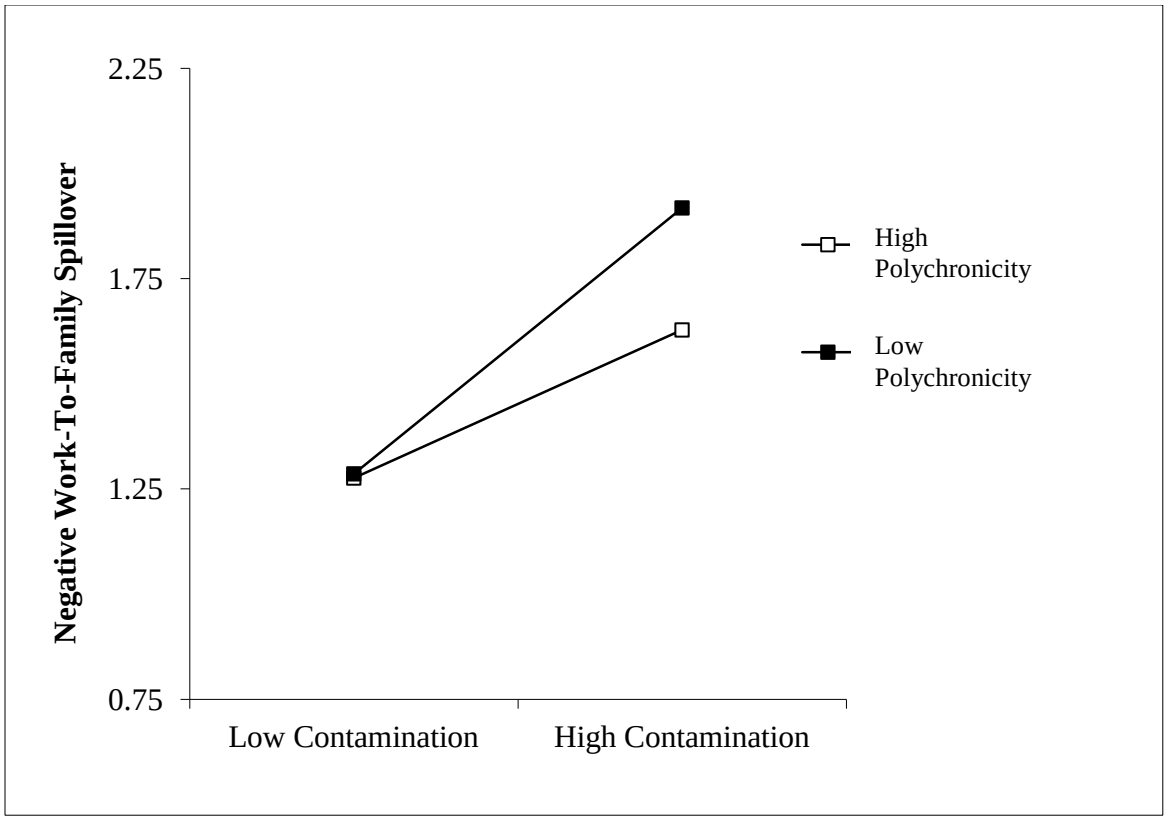

FIGURE 8: Polychronicity's moderating effect on the simultaneity-negative work-to-family spillover relationship when OOOC is **low**.

I also found support for Hypothesis 24 which states that fragmentation, OOOC, and polychronicity will interact such that at high levels of fragmentation, polychronicity will moderate the relationship between OOOC and negative work-to-family spillover; those who are more polychronic will experience less negative work-to-family spillover in jobs characterized by high fragmentation and high OOOC frequency. As Figure 9 shows, in jobs with high levels of fragmentation that are characterized by high levels of OOOC, those who are more polychronic experience less negative work-to-family spillover compared to those who are less polychronic.

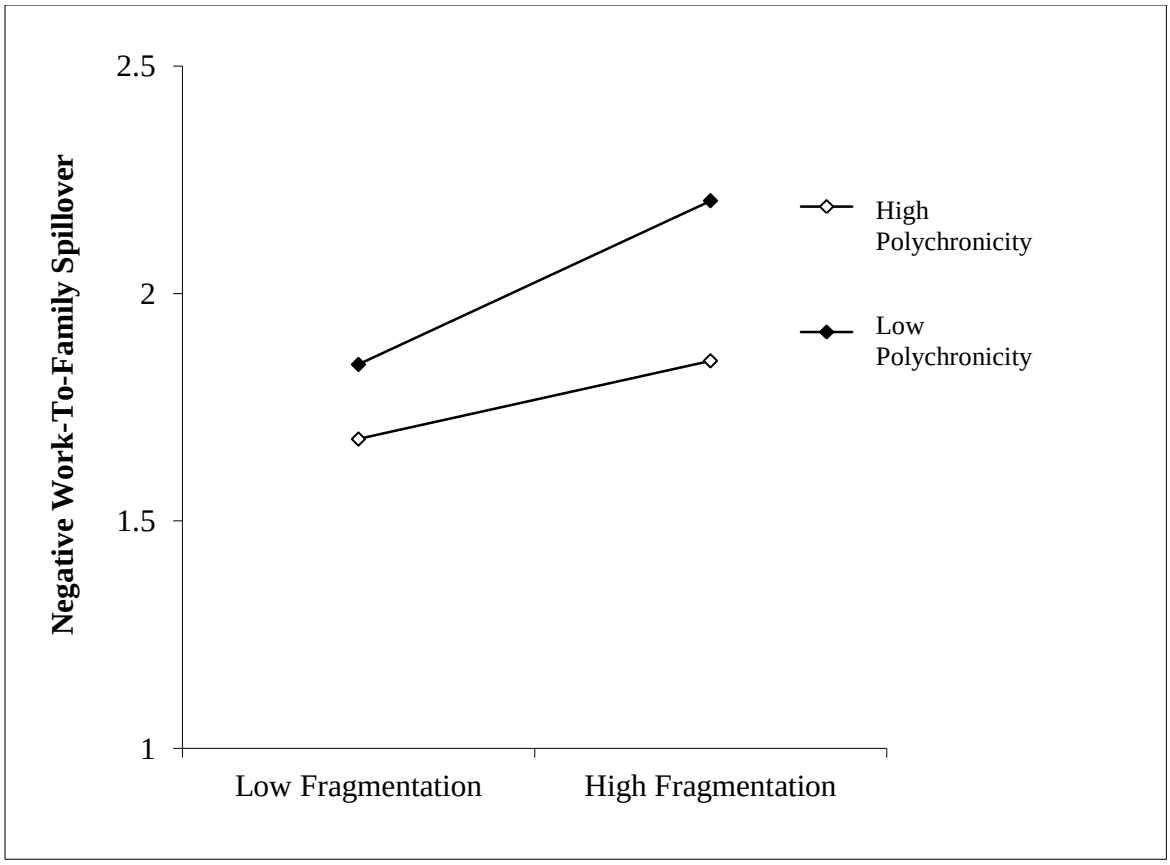

FIGURE 9: Polychronicity's moderating effect on the fragmentation-negative work-to-family spillover relationship when OOOC is **high**.

Additional analyses also revealed that those who are less polychronic in jobs characterized by high fragmentation and *low* OOOC experience greater negative work-to-family spillover than those who are more polychronic in similar situations (see Figure 10). In other words, polychronicity buffers the positive influence of fragmentation on negative work-to-family spillover in jobs wherein employees experience less OOOC.

TABLE 11. Three-way interaction among fragmentation, OOOC, and polychronicity

Model	*Fragmentation x OOOC x Polychronicity*			
	b	*SE*	R^2	ΔR^2
Step 1			0.20**	0.20**
(Intercept)	0.94 **	0.342		
Telework	-0.06	0.086		
Hours Per Week	0.05**	0.004		
Autonomy	-0.27**	0.027		
Sex	-0.09	0.055		
Formalization	-0.31**	0.058		
Centralization	0.32**	0.031		
Education	0.02	0.015		
Position	0.12**	0.029		
Accounting	0.16	0.225		
Actuarial	-0.03	0.284		
Business Support	0.10	0.178		
Claims	0.49**	0.181		
Client Services	0.32	0.178		
Printing/Comm.	0.40	0.218		
Compliance	0.17	0.213		
Facilities	0.01	0.211		
Financial Services	0.17	0.218		
IT	0.22	0.181		
Legal/HR	0.14	0.200		
Marketing	0.38	0.206		
Sales	0.28	0.201		
Eldercare Responsibilities	0.08	0.064		
Childcare Responsibilities	0.09**	0.024		
Married	0.04	0.050		
Step 2			0.35**	0.15**
(Intercept)	1.77**	0.318		
Time Urgency	0.32**	0.028		
Simultaneity	0.04	0.034		
Fragmentation	-0.03	0.025		
Contamination	0.11**	0.026		
Constraint	-0.02	0.032		
Schedule Unpredictability	0.12**	0.035		
Synchronization	0.06^	0.030		
Pace Unpredictability	0.12**	0.022		
OOOC	0.05**	0.015		
Polychronicity	-0.08**	0.028		

Note: N = 1906; ** signifies $p < .01$, * signifies $p < .05$, ^ signifies $p < .10$; significance levels did not change for any variables in subsequent steps.

TABLE 11 (continued). Three-way interaction among fragmentation, OOOC, and polychronicity

Model	*Fragmentation x OOOC x Polychronicity*			
	b	*SE*	R^2	ΔR^2
Step 3			0.36**	0.01^
(Intercept)	1.76**	0.318		
Fragmentation x OOOC	0.01	0.013		
Fragmentation x Polychronicity	-0.05*	0.025		
Polychronicity x OOOC	-0.01	0.016		
Step 4			0.36**	0.00*
(Intercept)	1.73**	0.318		
Fragmentation x OOOC x Polychronicity	0.03*	0.016		

Note: N = 1906; ** signifies $p < .01$, * signifies $p < .05$, ^ signifies $p < .10$; significance levels did not change for any variables in subsequent steps.

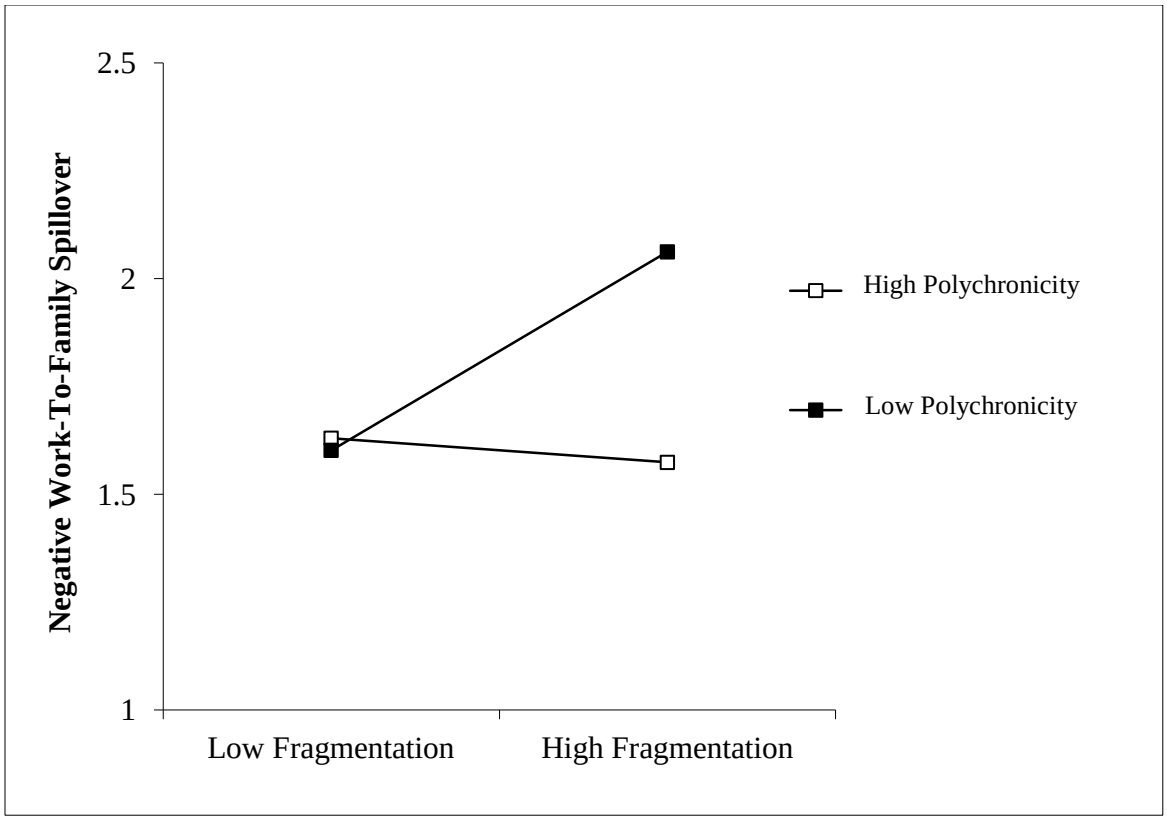

FIGURE 10: Polychronicity's moderating effect on the fragmentation-negative work-to-family spillover relationship when OOOC is **low**.

Hypothesis 25 stated that contamination, OOOC, and polychronicity would interact such that at high levels of contamination, polychronicity would moderate the relationship between OOOC and negative work-to-family spillover; indeed, the three-way interaction model supported this hypothesis. As Figure 11 demonstrates, those who are more polychronic experience less negative work-to-family spillover than those who are more polychronic in jobs characterized by greater contamination and a high need for OOOC. Also, as one would expect, Figure 12 demonstrates that those who are more polychronic experience less negative work-to-family spillover than those who are more polychronic in jobs that are high in contamination and require low OOOC behavior.

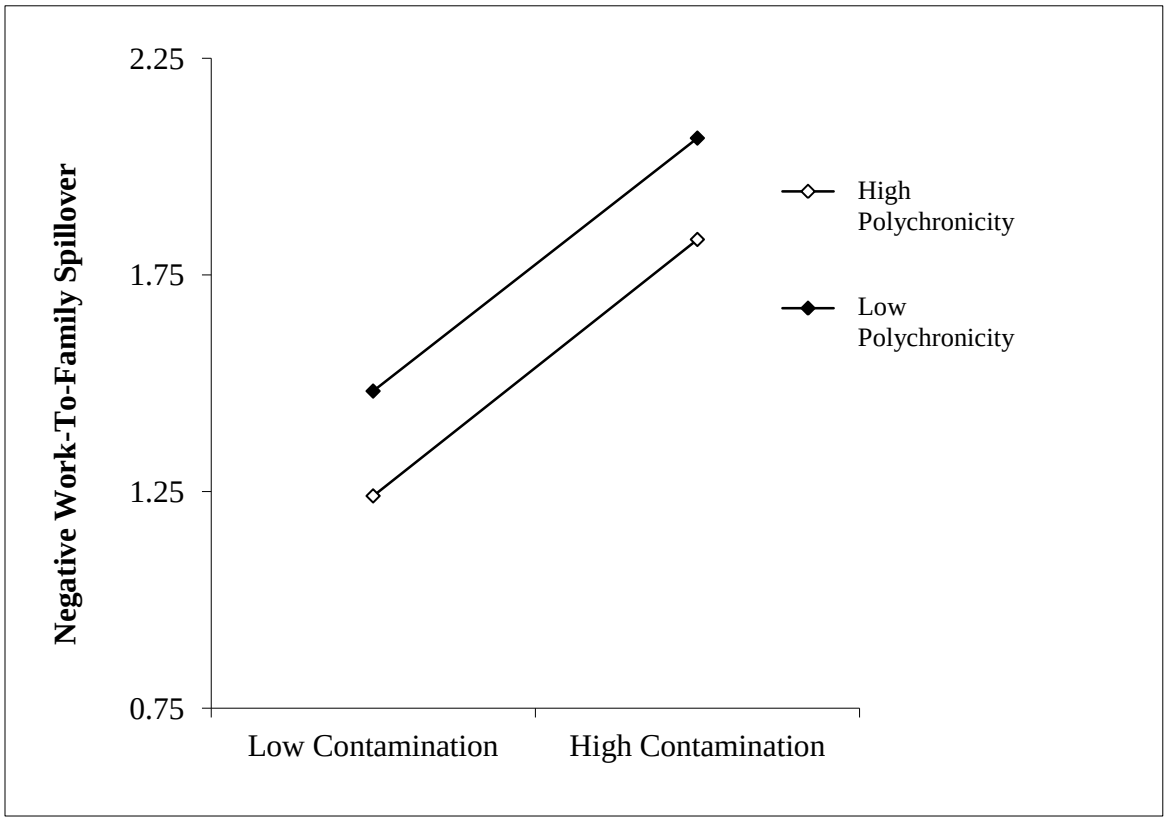

FIGURE 11: Polychronicity's moderating effect on the contamination-negative work-to-family spillover relationship when OOOC is **high**.

Finally, Hypothesis 26 stated that schedule unpredictability, OOOC, and polychronicity would interact such that at high levels of schedule unpredictability, polychronicity moderated the relationship between OOOC and negative work-to-family spillover; however, the three-way interaction model failed to support this hypothesis.

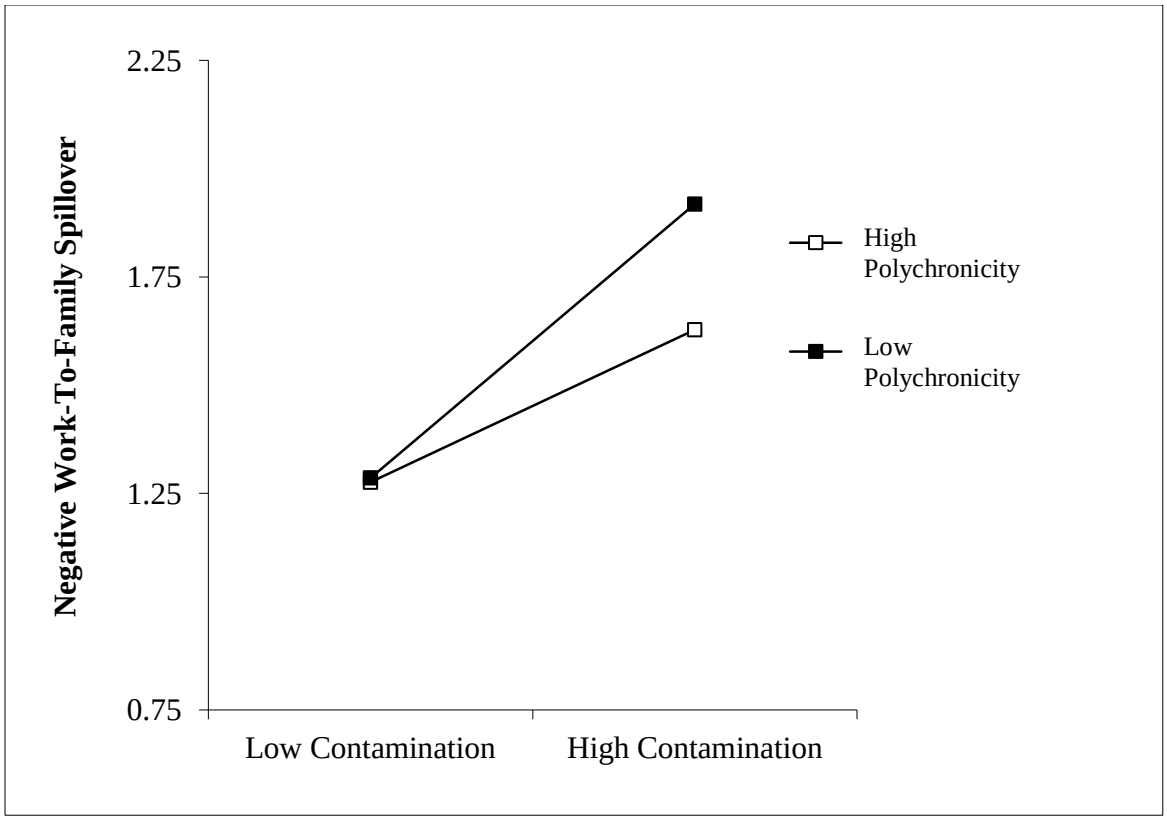

FIGURE 12: Polychronicity's moderating effect on the contamination-negative work-to-family spillover relationship when OOOC is **low**.

TABLE 12. Three-way interaction among contamination, OOOC, and polychronicity

Model	*Contamination x OOOC x Polychronicity*			
	b	*SE*	R^2	ΔR^2
Step 1			0.20**	0.20**
(Intercept)	0.94 **	0.342		
Telework	-0.06	0.086		
Hours Per Week	0.05**	0.004		
Autonomy	-0.27**	0.027		
Sex	-0.09	0.055		
Formalization	-0.31**	0.058		
Centralization	0.32**	0.031		
Education	0.02	0.015		
Position	0.12**	0.029		
Accounting	0.16	0.225		
Actuarial	-0.03	0.284		
Business Support	0.10	0.178		
Claims	0.49**	0.181		
Client Services	0.32	0.178		
Printing/Comm.	0.40	0.218		
Compliance	0.17	0.213		
Facilities	0.01	0.211		
Financial Services	0.17	0.218		
IT	0.22	0.181		
Legal/HR	0.14	0.200		
Marketing	0.38	0.206		
Sales	0.28	0.201		
Eldercare Responsibilities	0.08	0.064		
Childcare Responsibilities	0.09**	0.024		
Married	0.04	0.050		
Step 2			0.35**	0.15**
(Intercept)	1.77**	0.318		
Time Urgency	0.32**	0.028		
Simultaneity	0.04	0.034		
Fragmentation	-0.03	0.025		
Contamination	0.11**	0.026		
Constraint	-0.02	0.032		
Schedule Unpredictability	0.12**	0.035		
Synchronization	0.06^	0.030		
Pace Unpredictability	0.12**	0.022		
OOOC	0.05**	0.015		
Polychronicity	-0.08**	0.028		

Note: N = 1927; ** signifies $p < .01$, * signifies $p < .05$, ^ signifies $p < .10$; significance levels did not change for any variables in subsequent steps

TABLE 12 (continued). Three-way interaction among contamination, OOOC, and polychronicity

Model	*Contamination x OOOC x Polychronicity*			
	b	*SE*	R^2	ΔR^2
Step 3			0.35**	0.00
(Intercept)	1.77**	0.319		
Contamination x OOOC	0.02	0.014		
Contamination x Polychronicity	-0.02	0.025		
Polychronicity x OOOC	-0.02	0.016		
Step 4			0.36**	0.01*
(Intercept)	1.79**	0.319		
Contamination x OOOC x Polychronicity	0.04*	0.017		

Note: N = 1927; ** signifies $p < .01$, * signifies $p < .05$, ^ signifies $p < .10$; significance levels did not change for any variables in subsequent steps

CHAPTER 5: DISCUSSION OF RESULTS, IMPLICATIONS, AND STUDY LIMITATIONS

Overall, the results of this study are promising; I found support for nineteen of the twenty six hypotheses based on the multiple regression analyses (see Table 13). As predicted, the eight components of layered-task time each predicted a positive increase in negative work-to-family spillover – supporting Hypotheses 1-8. Time as a variable in the work/family interface is not new to work/family scholarship; scholars have long explored how time spent in one domain versus another influences one's work/family experience. Time as it is operationalized in this work, however – namely, as the temporal norms and processes inherent in both the home and work domains – has gone underexplored in work/family scholarship. Given the inherent fragmentation, contamination, simultaneity, and unpredictability in today's modern work environment, this research extends work/family scholarship to better identify and describe how the work and nonwork domains interface with one another through the temporal lens of emergent temporal structures in the new economy. These new temporalities are engrained in employees' work experience, and as a result directly influence employees' work/family conflict.

The first analysis in which I simultaneously entered each LTT variable into the model accounted for a significant amount of incremental variance in negative work-to-family spillover. Time urgency, contamination, schedule unpredictability, synchronization, and pace unpredictability each significantly predicted negative work-to-

family spillover; fragmentation, simultaneity, and constraint, however, failed to reach significance. This is likely due to the relationship that these three components of LTT share with the other LTT variables; for instance, each of these three variables is strongly related to synchronization. To further explore the relative effect of each of the LTT components on negative work-to-family spillover, I also ran eight separate analyses for each component.

The five job-level LTT components each independently predicted negative work-to-family spillover and in the predicted direction. Specifically, time urgency positively predicted negative work-to-family spillover, likely due to the negative implications of temporal pressure on one's personal well-being (Carlson, 1999). Greater exertion to cope with temporal pressure can in turn lead to greater negative work-to-family spillover. Similarly, simultaneity positively predicted negative work-to-family spillover. When working in a job that requires extensive multi-tasking, an employee must exert greater cognitive resources (Wickens, 2008); as a result, the employee can become overloaded and experience greater stress (Kirmeyer, 1988) which leads to greater work/family conflict. It therefore follows that simultaneity results in greater negative work-to-family spillover.

TABLE 13: Hypotheses and corresponding analysis results

Hypothesis	*Result*
1. Time urgency will be positively related to negative work-to-family spillover.	Supported
2. Simultaneity will be positively related to negative work-to-family spillover.	Supported
3. Fragmentation will be positively related to negative work-to-family spillover	Supported
4. Contamination will be positively related to negative work-to-family spillover.	Supported
5. Constraint will be positively related to negative work-to-family spillover.	Supported
6. Schedule unpredictability will be positively related to negative work-to-family spillover.	Supported
7. Synchronization will be positively related to negative work-to-family spillover.	Supported
8. Pace unpredictability will be positively related to negative work-to-family spillover.	Supported
9. Polychronicity will be negatively related to negative work-to-family spillover.	Supported
10. Polychronicity will moderate the relationship between simultaneity and negative work-to-family spillover such that those who are more polychronic will experience less negative work-to-family spillover than those who are more monochronic in jobs characterized by high simultaneity	Not Supported
11. Polychronicity will moderate the relationship between fragmentation and negative work-to-family spillover such that those who are more polychronic will experience less negative work-to-family spillover than those who are more monochronic in jobs characterized by high fragmentation	Supported
12. Polychronicity will moderate the relationship between contamination and negative work-to-family spillover such that those who are more polychronic will experience less negative work-to-family spillover than those who are more monochronic in jobs characterized by high contamination	Not Supported

TABLE 13 (continued): Hypotheses and corresponding analysis results

Hypothesis	*Result*
13. Polychronicity will moderate the relationship between schedule unpredictability and negative work-to-family spillover such that those who are more polychronic will experience less negative work-to-family spillover than those who are monochronic in jobs high in schedule unpredictability.	Not Supported
14. OOOC will be positively related to negative work-to-family spillover.	Supported
15. OOOC will moderate the relationship between time urgency and negative work-to-family spillover such that those who are contacted more outside of the workplace will experience more negative work-to-family spillover than those who are contacted less outside of the workplace in jobs high in time urgency	Supported
16. OOOC will moderate the relationship between simultaneity and negative work-to-family spillover such that those who are contacted more outside of the workplace will experience more negative work-to-family spillover than those who are contacted less outside of the workplace in jobs high in simultaneity.	Supported
17. OOOC will moderate the relationship between fragmentation and negative work-to-family spillover such that those who are contacted more outside of the workplace will experience more negative work-to-family spillover than those who are contacted less outside of the workplace in jobs high in fragmentation.	Not Supported
18. OOOC will moderate the relationship between contamination and negative work-to-family spillover such that those who are contacted more outside of the workplace will experience more negative work-to-family spillover than those who are contacted less outside of the workplace in jobs high in contamination.	Supported
19. OOOC will moderate the relationship between constraint and negative work-to-family spillover such that those who are contacted more outside of the workplace will experience more negative work-to-family spillover than those who are contacted less outside of the workplace in jobs high in constraint.	Supported

TABLE 13 (continued): Hypotheses and corresponding analysis results

Hypothesis	*Result*
20. OOOC will moderate the relationship between schedule unpredictability and negative work-to-family spillover such that those who are contacted more outside of the workplace will experience more negative work-to-family spillover than those who are contacted less outside of the workplace in jobs high in schedule unpredictability.	Not Supported
21. OOOC will moderate the relationship between synchronization and negative work-to-family spillover such that those who are contacted more outside of the workplace will experience more negative work-to-family spillover than those who are contacted less outside of the workplace in jobs high in synchronization.	Supported
22. A OOOC will moderate the relationship between pace unpredictability and negative work-to-family spillover such that those who are contacted more outside of the workplace will experience more negative work-to-family spillover than those who are contacted less outside of the workplace in jobs high in pace unpredictability.	Not Supported
23. Simultaneity, OOOC, and polychronicity will interact such that at high levels of simultaneity, polychronicity will moderate the relationship between OOOC and negative work-to-family spillover; those who are more polychronic will experience less negative work-to-family spillover in jobs characterized by high simultaneity and high OOOC frequency	Supported
24. Fragmentation, OOOC, and polychronicity will interact such that at high levels of fragmentation, polychronicity will moderate the relationship between OOOC and negative work-to-family spillover; those who are more polychronic will experience less negative work-to-family spillover in jobs characterized by high fragmentation and high OOOC frequency.	Supported
25. Contamination, OOOC, and polychronicity will interact such that at high levels of contamination, polychronicity will moderate the relationship between OOOC and negative work-to-family spillover; those who are more polychronic will experience less negative work-to-family spillover in jobs characterized by high contamination and high OOOC frequency.	Supported

TABLE 13 (continued): Hypotheses and corresponding analysis results

Hypothesis	*Result*
26. Schedule unpredictability, OOOC, and polychronicity will interact such that at high levels of schedule unpredictability, polychronicity will moderate the relationship between OOOC and negative work-to-family spillover; those who are more polychronic will experience less negative work-to-family spillover in jobs characterized by high schedule unpredictability and high OOOC frequency	Not Supported

Fragmentation and contamination also positively predicted negative work-to-family spillover, such that working on multiple tasks that require differential skills results in greater negative work-to-family spillover. Employees who work in an environment in which their workflow is constantly interrupted often have difficulty completing work tasks in the standard workday, and are subsequently forced to bring their work home with them. Additionally, switching tasks and activities requires greater cognitive expenditure, and as a result employees can experience increased stress and pressure that lead to greater negative work-to-family spillover. Constraint also positively predicted negative work-to-family spillover, an unsurprising conclusion if one considers the pressure and stress that one experiences when working in a deadline-laden environment. If one struggles to complete work prior to a deadline, that person is more likely to go beyond their traditional work space and hours to complete the task that often results in employees working during nonwork hours and in the nonwork domain, resulting in greater negative work-to-family spillover.

Also, as predicted in hypotheses 6-8, each of the organization-level LTT components positively predicted negative work-to-family spillover. Employees who work against temporal markers that change unpredictably may have difficulty completing their tasks. As a result, they may bring their work home with them to complete their work or spend greater time in the workplace to complete their tasks, leading to greater negative work-to-family spillover. Additionally, Pato is an insurance organization, and as a result, employees must work consistently with one another, often across departmental boundaries. Sales employees, for instance, must work with account managers, who must coordinate with claims managers when customers need service. Due to the

interdepartmental variations in temporal norms and processes, it is often difficult for employees to coordinate their work efforts in an efficient manner. Employees often have to extend their work hours or extend their work efforts into the nonwork domain, resulting in increased negative work-to-family spillover. Finally, when Pato employees' work pace changes unpredictably, it is often difficult for the employees to cope with the workload in their allotted work time. In order to complete their tasks on schedule, they often have to work more hours or complete their work outside of the work domain which leads to greater negative work-to-family spillover.

These hypotheses, however, rely heavily on traditional work/family conflict theory in which the work and nonwork domains are theoretically mutually exclusive. This was once accurate; work was once primarily driven by production and manufacturing, and employees could leave their work roles at the factory, plant, or field in which they were employed. Today, however, work is primarily service- and knowledge-oriented (especially for an insurance organization); as such, one can accomplish much of this work from any place and at any time.

The opportunity to work at any time and place has reshaped the work/family interface, and our understanding of that shift requires exploration. Specifically, given the increased capabilities and overall role of information technologies in the economy, employees can use computers, the internet, and telephones to conduct a variety of work tasks from almost anywhere. Although this shift outside of the workplace provides obvious theoretical benefits for the employee (e.g., less commuting, more autonomy, more time with family), employers also recognized that they can now influence employees' time *outside* of the workplace in addition to *within* the workplace. In other

words, although the added capability of working beyond the traditionally defined work space/time increases the opportunity for employees to conduct work outside of the workplace, it also increases the opportunity for employers to oblige employees to complete work in/during traditionally defined nonwork space/time.

In order to better understand the conflict that arises from this shifting paradigm of the work/family interface, it is integral to incorporate the degree to which employees are contacted outside of the workplace into empirical work/family scholarship. In this study, I also examine how increased out-of-office contact (OOOC) interacts with the temporal aspects of work to produce negative work-to-family spillover. Time is an apt lens to apply to work/family scholarship, particularly given that traditional work/family scholarship framed time as a resource that is expended in one domain or another. Time, however, has been framed in other manners; in addition to the linear, objective, clock-based notion of time, time can also be viewed subjectively, and as a result can occur in a nonlinear, event-based manner.

As time is intrinsically linked to the workflow in which employees engage, variations in how we understand time offer a more diverse perspective on how the modern work/family interface is experienced and understood. More specifically, as the work and nonwork domains become increasingly intertwined with one another through increased OOOC, the temporal norms, routines, and processes inherent in each domain become blended with one another; workplace temporalities therefore have an increasingly strong influence on one's work/family interface.

By incorporating the extent to which employees are contacted outside of the workplace about work-related issues, we are able to shed some light on an oft-ignored

phenomenon that can impact one's work/family conflict – namely, that the work and nonwork domains do not simply influence one another, but rather interact with one another. This view extends the theoretical foundation upon which organizational behavior and industrial/ organizational psychology scholars have long built their research: role conflict theory (Eby, Casper, Lockwood, Bordeaux, & Brindley, 2005). The role conflict view is a resource-based, zero-sum approach to characterizing the work/family interface. Resources are gained and lost when switching from one domain to another. This commoditized perspective can be fitting in some situations, but in others wherein the work and nonwork domains are more dynamic and fluid, this approach can be limiting. Given the nature of work at Pato and the fairly regular frequency by which employees can and often are contacted outside of the traditionally defined work time/space, it is fitting that we explore theoretical contributions beyond role conflict theory. This is by no means a revolutionary statement; others, for instance, have extended – and in some cases replaced – role conflict theory in various ways.

Organizational communication scholars, for instance, have moved away from role conflict theory; for instance, Kirby, Golden, Medved, Jorgenson, & Buzzanell (2003) called for greater diversity in the study of work/family issues, and Edley, Hylmo, & Newsom (2004) called for more research on the nontraditional gender constructs that have emerged in today's modern society. Organizational communication scholars have focused particularly on the interactions that employees have in discerning and communicating their perspectives and experiences as both family members and employees. For instance, Kirby (2006) conducted a case study in which she studied a man who was expecting twins with his wife and the dilemma he faced as he negotiated

his wife's wish for him to take leave from his job after the twins' birth and his coworkers disposition toward taking leave as something that only women do.

Organizational communication scholars have also regularly employed discourse, or the organized systems of meaning that emerge through the concepts, terms, and expressions that actors use to frame and understand specific themes or issues (Burr, 1995), to explore employees' experiences of the work/family interface. For example, Kirby (2000) studied the construction of perceptions on the work/family program at an organization called "Regulatory Alliance" by reviewing documented organizational material, facilitating focus groups, and conducting interviews, and found that the organization's supervisors presented mixed messaging about work/family policy usage. For instance, supervisors often encouraged the use of work/family policies, but simultaneously expected employees to work toward frequent deadlines and in collaborative teams. In some situations, the supervisors were forced to subjectively judge when employees could use work/family policies and when it was frowned upon. This was particularly true for male employees, who felt especially pressured to not use work/family policies due to the adverse effect it would likely have on their careers (Rapoport & Bailyn, 1996).

In tandem with organizational communication scholars, organizational sociologists have moved away from role conflict theory of late, and have instead employed a more gender-centric perspective on employees' work/family experiences. For instance, organizational sociologists often apply the framework of separate spheres, or the traditionally accepted structure of work in which men are the breadwinners and women are the homemakers (Hochschild, 1999; Williams, 2000). Despite women having

an increasing presence in the workforce, the separate spheres framework assumes that men belong in the workforce more than women. When working under this social framework, employees are deemed ideal when devoting themselves entirely to their work instead of their family obligations. This can disadvantage working women because they are also expected to perform the majority of the housework and childcare duties. Due in part to their greater responsibilities outside of the workplace, working women may find it difficult to be evaluated favorably and receive promotions or pay increases. Alternatively, women who do not work may also be disadvantaged because husbands who choose to work longer hours will likely contribute less in terms of household duties (Cha, 2010).

In this study, men were more likely to report negative work-to-family spillover than women; that relationship, however, actually reversed when sex was factored into some of the multiple regression models. Specifically, women were more likely to experience negative work-to-family spillover when working in jobs that are characterized by high time urgency and schedule unpredictability. Additionally, women were more likely to experience negative work-to-family spillover when more frequently contacted outside of the workplace in jobs characterized by high constraint and synchronization. This effect may have emerged due in part to an expectation that may exist in some women employees' homes that they should manage the household duties *in addition to* working at Pato, resulting in greater negative work-to-family spillover. Although one could expect that increased OOOC frequency might actually ease the increased pressure that these women might feel due to a closer proximity between the work and home domains, this was not the case. In fact, the opposite occurred under conditions of

constraint and synchronization. In other words, being contacted on work-related matters more frequently at home did not alleviate the pressures that women experience to manage both "spheres;" rather, it actually intensified their negative work-to-family spillover.

Examining OOOC frequency across employees provides empirical insight into the blending of the work and nonwork domains, and provided support for the hypothesis that greater OOOC would result in increased work-to-family spillover. This is likely due to the influence that working from home has on employees' relationships and interactions with family members. Spending more time on work-related activities directly translates to less time to engage in family-related activities. In addition, those who are constantly contacted outside of the office can never truly divorce themselves from their work responsibilities; work tasks are perpetually weighing on their minds, and they are constantly reminded of what they must do. Rather than focus on their relationships and interactions with family members, they instead are distracted by their work responsibilities.

This effect is exacerbated when viewed through the interaction of OOOC frequency with the components of LTT. Specifically, OOOC frequency interacted with time urgency, simultaneity, contamination, constraint, and synchronization such that, when their work is characterized by high levels of time urgency, simultaneity, contamination, constraint, and synchronization, those who are contacted more outside of the workplace experience greater negative work-to-family spillover. In other words, the blending of these temporal constructs with one's nonwork temporal regime results in greater work/family conflict. Interestingly, however, fragmentation, schedule

unpredictability, and pace unpredictability each failed to interact with OOOC frequency to predict negative work-to-family spillover.

Fragmentation reflects the degree to which one's workflow is frequently interrupted, forcing the employee to complete work in a disjointed manner. Fragmentation directly predicted negative work-to-family spillover; however, it appears that the degree to which one is contacted outside of the office does not play a role in strengthening that relationship. The home itself, however, is a fragmented environment (Tietze & Musson, 2002). It is possible that the fragmented nature of the home and the fragmented nature of work share the variance that accounts for the influence of fragmented work on negative work-to-family spillover – namely, interruptions. In this situation, the addition of an interaction term would not account for any incremental variance in negative work-to-family spillover.

Schedule unpredictability reflects the degree to which one works to unpredictably changing schedules, deadlines, and meetings. It appears that being contacted more or less outside of the workplace has no impact on the positive relationship between schedule unpredictability and negative work-to-family spillover. This hypothesis was predicated on the notion that time is a limited resource, and that greater schedule unpredictability would result in employees working later in the office or working more out of the office. If the employee already works outside of the office due to the increased schedule unpredictability, however, then it would follow that greater OOOC would only share variance with schedule unpredictability in affecting negative work-to-family spillover.

The same can explanation can apply to Hypothesis 20 that stated that pace unpredictability, or the degree to which one's work pace changes unpredictably, will

interact with OOOC to influence negative work-to-family spillover such that those who are contacted more frequently outside of the office in organizations that are characterized by high pace unpredictability will experience increased negative work-to-family spillover than their counterparts who are contacted less outside of the office. This hypothesis was also based on the assumption that unpredictable changes in the pace of work would force the employee to work later or outside of the workplace to complete work tasks. If an employee regularly works outside of the office due to greater pace unpredictability, then the effect of OOOC is again already accounted for by the pace unpredictability-negative work-to-family spillover relationship. In other words, when working under conditions of high pace or schedule unpredictability (Hypotheses 6 and 8, each of which were supported), employees will likely be working more outside of the office anyway, and the effect of increased contact outside of the workplace will be negligible.

These results are particularly interesting when viewed in the context of Pato. Pato is commonly deemed an "excellent employer" and is constantly acknowledged for its "family-friendly culture." None recognize this acknowledgement more than Pato leadership; it is a badge of honor that is commonly stressed throughout the organization's headquarters, policies, website, and internal communications. In fact, the organization cites its exemplary family-friendly culture as one of the main reasons it implemented its highly touted teleworking policy. Interestingly, however, teleworking was unrelated to work-to-family spillover in all models; in other words, despite its explicit intention of lessening work/family conflict, participating in the teleworking program actually has no effect on work/family conflict. That is not to say that the teleworking policy is ill-advised; on the contrary, it may be beneficial to employees for other reasons, like less

commuting, more time at home, and greater work flexibility. Pato leadership must recognize, however, that some aspects of the work in the insurance company – for teleworkers and traditional employees alike – adversely leads to increased negative work-to-family spillover.

It is especially interesting that the OOOC-related hypotheses that relied more heavily on the theoretical foundation of time as an economic and limited resource failed to find support in this study. Traditional role conflict theory states that time spent in one domain should detract from time spent in another domain, resulting in an increase in work/family conflict. When these two domains are not sharply defined because increased OOOC frequency forces the work and nonwork temporal domains to blend, however, role conflict theory begins to break down in its explanatory power. Time spent in one domain versus another is not clearly defined, and, as a result, the implications of time spent on work or nonwork activities in each of these domains are poorly understood. Thus, rather than strictly consider the work and nonwork domains as two separate, mutually exclusive spheres in which one works according to a specific form of organization in order to navigate that domain successfully, one can instead consider the interaction of these two experiences in light of the nature by which the modern work environment has recast the time-space relationship (Giddens, 1991).

Tietze & Musson (2005), for instance, qualitatively explored the use of discourse to better understand how working outside of the traditionally defined workplace has recast the work/family interface by focusing primarily on telecommuters. Applying discourse analysis informs a more subjective characterization of the work/family relationship whereby the process by which people frame, understand, and act upon

experiences is the primary focus rather than taking on a strictly domain-based perspective. Additionally, this reframing dissolves the economic, resource-focused notion of time as a currency that is bought, traded, and sold through the employer-employee relationship. Instead, time can be lived, made, or generated in relation to employees' experiences (Adam, 1995).

In accordance with Rubin's (2007) description of LTT, the nature of work, particularly the temporal aspects of the lived work experience, may be a more beneficial perspective through which we explore the work/family interface. This is particularly apt because the blending of the work and nonwork domains has not occurred in a reciprocal manner; rather, it seems that the work domain has impeded on the nonwork domain more so than the alternative. As such, the nature of work plays a more significant role in defining and explaining an employee's work/family conflict than the nature of the home. By exploring the nature of work irrespective of time spent in each domain, we are more capable of understanding how experiences in one domain/role will influence experiences in another domain/role. For instance, as the results of this study show, greater simultaneity, fragmentation, contamination and constraint predict greater negative work-to-family spillover; in other words, the temporal conditions that have emerged in today's knowledge-based economy – characteristics that are married to the experience of work itself – result in greater negative experiences for employees' nonwork experiences. However, if we are to accept that the work and nonwork domains have become intertwined, it is imperative that we also accept that conditions characteristic of the nature of work have implications for not just the nonwork role/domain, but for the employee's life as it is defined and understood holistically.

Although each of the LTT components positively predicted negative work-to-family spillover, I predicted that polychronicity would also moderate the effect of four of these components, such that polychronicity would buffer the negative relationship between those four components and negative work-to-family spillover. I also hypothesized that polychronicity would be negatively related to negative work-to-family spillover, such that those who are more polychronic will experience less negative work-to-family spillover than those who are more monochronic due to their preference for multitasking and increased comfort in uncertain, unpredictable environments. Polychronicity did in fact negatively predict negative work-to-family spillover. Interestingly, however, polychronicity's role as a moderator did not find the same amount of support.

Although I found support for the interaction hypothesis with respect to fragmentation's effect on negative work-to-family spillover, I found no support for polychronicity's moderating influence on the relationship between simultaneity, contamination, or schedule unpredictability and negative work-to-family spillover. Simultaneity reflects the degree to which one must multitask in one's job, so it is surprising that a preference for multitasking would not lessen the positive influence that simultaneity has on negative work-to-family spillover. A preference for multitasking, however, would not necessarily influence one's ability to cope with multiple tasks. In fact, König, Bühner, & Mürling (2005) previously found no relationship between polychronicity and multitasking. In other words, simply preferring multitasking does not necessarily result in multitasking *well*, and as a result, polychronicity would not

necessarily negate the positive influence that simultaneity has on negative work-to-family spillover.

Polychronicity also failed to moderate the relationship between contamination and negative work-to-family spillover. Contamination reflects the degree to which one must use variable skills or skillsets on different tasks in one's work. Although being required to work on various activities that require different skills is taxing on employees, polychronicity would not necessarily negate this effect because a preference for multitasking does not necessarily result in more effective or efficient multitasking (König, Bühner, & Mürling, 2005) which might lessen the negative work-to-family spillover that one experiences when working in a job high in contamination. Rather, the polychronic individual may simply think or feel better about activity-switching; however, the negative implications of that frequent activity-switching would still be realized.

Finally, polychronicity failed to moderate the relationship between schedule unpredictability and negative work-to-family spillover. Polychronic individuals are generally more comfortable in environments defined by unpredictability; polychronicity, however, will likely only have implications for the employee's on-the-job experiences. Although polychronicity may make the employee more comfortable and satisfied in an environment fraught with unpredictability (Agypt & Rubin, 2012), the transition of these positive implications may be too far removed from the employee's work/family balance, resulting in a negligible effect on the schedule unpredictability-negative work-to-family spillover relationship.

Interestingly, however, polychronicity *did* play a role in a three-way interaction among negative work-to-family spillover, OOOC frequency, and three different LTT

variables: simultaneity, fragmentation, and contamination. When OOOC frequency is high, those who are more polychronic experience less negative work-to-family spillover in jobs characterized by high levels of simultaneity, fragmentation, and contamination. In the case of these three LTT components, polychronicity buffers the positive effect of each component on negative work-to-family spillover, but this primarily occurs when OOOC frequency is high rather than low. In this case, due to the closer proximity of the work experience to the home experience, polychronicity's positive benefits in light of work that is high in certain aspects of LTT is realized in the form of less negative work-to-family spillover. For instance, the home is a fragmented place (Tietze & Musson, 2002); combining fragmented work with an already fragmented environment will generate a disjointed work experience for employees. Those who are more polychronic are more capable of working in environments fraught with interruptions (Kaufman-Scarborough & Lindquist, 1999), and they should therefore experience less of the negative work-to-family spillover that emerges in highly fragmented jobs.

The three-way interaction predicted in Hypothesis 24, however, failed to reach significance. Specifically, polychronicity failed to moderate the interaction between schedule unpredictability and OOOC to influence negative work-to-family spillover. It appears that polychronicity does not interact with unpredictable changes in schedules, deadlines, and meetings – an organization-level temporality – regardless of the degree to which one is contacted outside of the office. This lack of significant effect could be due to the organization-level temporal structure being too high-level to interact with the individual-level polychronicity. Additionally, working more in the home domain can result in great uncertainty due to nonwork factors (e.g., unpredictable interruptions by

family; Ross & Hill, 2004). Resultantly, polychronic and monochronic employees alike may face constant unpredictability; although polychronic people may be more comfortable in these environments, they may still be incapable of effectively managing the unpredictable shifts in schedules and deadlines and as a result become overwhelmed (much like monochronic employees) and experience increased negative work-to-family spillover. In other words, a preference for multitasking may not be strong enough to mitigate negative work-to-family spillover under conditions of both greater schedule unpredictability and greater OOOC; rather, the actual *ability* to multitask may play a more substantial role in driving down negative work-to-family spillover.

Like any study, this dissertation has its flaws. First of all, I was forced to use two-item measures when assessing some of the components of LTT; this was an unfortunate but necessary concession, as Pato's leadership required that we shorten the survey. As a result, I was forced to shorten many measures, some of which were shortened to two items. Additionally, and possibly as a result of shortening the measures, some of the measures of LTT had lower than ideal reliability estimates[5]. Although this is a shortcoming, the overall fit statistics for the LTT model met the traditionally accepted thresholds. Thus, although the evidence of reliability in some of the LTT measures is not as strong as I would otherwise prefer, there is support for the content validity of the LTT measures.

An additional limitation in this study is my inability to generalize the findings beyond Pato. Although Pato is typical of the knowledge-based organization that is

[5] I also used the Spearman-Brown prophecy formula to explore how additional items would benefit my reliability measures (assuming the additional items share the same properties as the items already used). All two- and three-item measures would have exceeded the 0.70 threshold if I had used 4 items per measure.

prominent in the modern economy, I am unable to generalize the findings beyond the organization, industry, and geographic region in which the organization operates (Yin, 2003). Additionally, studying a single organization can limit the variance in responses which can limit the reliability of my measures as well as the results of my analyses (Yin, 1994). Ideally, one would also identify and study alternately structured or situated organizations; comparing cases along organizational phenomena illuminates the factors that differentially influence the phenomena (Feagin, Orum, & Sjoberg, 1991; Yin, 2003). For instance, in addition to Pato, I would like to also examine temporal processes in a smaller, more decentralized, team-based firm, in order to determine whether or not the organization's overall structure is related to the existence of these temporal structures as well as explore how the relationship between LTT and work-to-family spillover is different across types of organizations. Due to the limited scope of my sample, however, I was only able to explore this issue by comparing interdepartmental differences.

On a related note, this dissertation would have been stronger had I been able to collect qualitative data in addition to the policies provided by Pato leadership. In order to more comprehensively understand the temporal experiences of employees, one must employ a qualitative methodology that appreciates the subjective and social experience of actors in the workplace. Although I believe that the results of this study are substantial, they would have been strengthened through a more multi-method research approach.

It is also a shortcoming of this study that I failed to incorporate a measure of an employee's spouse's job, including their salary, benefits, hours worked, and position in the organization. Doing so would have allowed for me to examine in greater detail how

Pato employees experience work/family conflict as part of a family; instead, I was forced to try to control for cohabitation – an unfortunate limitation of this study.

Finally, this research was cross-sectional in nature and used a single-method approach which can introduce some vulnerability to common method variance (Spector, 2006); however, fourteen of the twenty-four hypotheses in this study examined interactions, and interactions are less susceptible to common method bias (Evans, 1985). For instance, Cummins (1972) claimed that common method bias should not play a role in interaction analyses because method specificity should not influence the cross-product of variables[6].

This study has both theoretical and practical implications. First, this study contributes to our understanding and framing of the work/family interface. Traditional work/family theory has relied heavily on the domain-specific, economic approach of role conflict theory; however, I argue in this dissertation that the work and nonwork spheres have become more blended with one another in today's economy. As a result, it is important to consider how to accommodate such changes in our work/family theory. This study extends role conflict theory by exploring the influence that the nature of work – namely, the temporal structures inherent in one's job and organization – has on employees in light of work and nonwork time and space being less objectively and rigidly defined. By exploring OOOC frequency as a moderating variable, we can explore the potential drivers of negative work-to-family spillover across varying levels of OOOC frequency. Future scholarship can push to incorporate OOOC frequency as a moderating

[6] I also tested for common method variance using Podsakoff et al.'s (2003) suggested approach of modeling a single-method factor into the model to determine if a single method accounts for a significant amount of variance. The single factor resulted in a significant reduction of χ^2. This indicates that the threat of common method variance is negligible.

variable to better comprehend how the continually merging work and nonwork spheres contribute to different experiences of work/family conflict.

More importantly, further scholarship should incorporate the integrated, blended nature in which work and family routines, norms, processes, and expectations interact. This scholarship sheds some light on the need to expand how we consider work and nonwork domain interaction, but fails to do so holistically because I did not account for the nonwork experiences of employees. By exploring the temporal norms, processes, and structures inherent in the nonwork domain, one can facilitate a deeper and more comprehensive understanding of exactly how the work/family interface has been redefined. This is particularly appropriate considering how the temporal conditions inherent in layered-task time are likely prominent in the home (Rubin, 2007). Future research that does examine both domains in great depth would be well-served to apply a qualitative methodology. Doing so would allow one to better understand the precise mechanisms by which negative work-to-family spillover occurs when the home and work domains interact with one another.

This research has extensive applied implications as well. Specifically, this research supports hypotheses that the temporal characteristics of modern work – namely greater simultaneity, fragmentation, contamination, and constraint – have consequences for employees beyond the workplace. Employees working in environments characterized by the components of LTT will experience increased negative work-to-family spillover. As a result, negative experiences at home can also have implications for the employee's experiences at work, also known as negative *family-to-work* spillover (Crouter, 1984). In other words, the negative experiences in one domain can result in negative experiences in

the other domain, and the cycle of negative spillover will continue until an intervention occurs. Furthermore, this relationship is exacerbated by employees being contacted more frequently outside of the office.

Managers should therefore be wary of encouraging or expecting out-of-office contact from their employees, especially if their employees are working in jobs fraught with high levels of the various LTT components. Managers should assess the degree to which their employees' work is characterized by high levels of LTT, and should be cognizant of the incremental effect on negative work-to-family spillover that contacting workers outside of the predefined work space and time can have. If necessary, managers can generate and enforce policies around work and nonwork expectations, but informal culture plays a substantial role in driving negative work-to-family spillover as well (Mennino, Rubin, & Brayfield, 2005); subsequently, efforts should be made to inform the work/family-friendly culture within organizations. Doing so can diminish the negative implications of the workplace conditions for employees' work/family balance, and resultantly demonstrates that the organizational leaders value the health and happiness of their employees.

If managers fail to either account for these relationships or design some sort of mechanism to lessen the conflict that employees can experience, they risk contributing to increases in adverse physical health symptoms, including depression, health complaints, hypertension, and increased alcohol consumption (Eby, Casper, Lockwood, Bordeaux, & Brindley, 2005), increased psychological distress, anxiety, mood disorders, and substance abuse disorders (Frone, 2000), stress (Kelloway et al., 1999), decreased life satisfaction (Perrewe, Hochwarter, & Kiewitz, 1999), decreased job satisfaction, increased turnover

intentions, lower perceived career success, and less career satisfaction, and lower family satisfaction (Eby, Casper, Lockwood, Bordeaux, & Brindley, 2005). Employees and employers alike should clearly try to avert negative work-to-family spillover when possible.

This study employed organizational temporalities to understand the influence of temporal workplace conditions on employees' negative work-to-family spillover in the modern economy. Furthermore, this research extended role conflict theory by incorporating OOOC frequency as a moderating variable to demonstrate the effect of domain integration and its potentially interactive effect on the work/family interface. As a result, we know that blending the work and nonwork domains through increased OOOC has a compound negative influence on one's work/family conflict. In today's modern, knowledge-based economy, it is integral that we consider the negative implications that the nature of work, as well as the moderating influence of OOOC, has on our personal well-being.

More importantly, this research also reflects an interdisciplinary study of the work/family interface. As evidenced by the great variation in work/family scholarship, our framing and understanding of the work/family interface has primarily depended on the authors' disciplinary (and subsequently theoretical) approach. In this study, I've pulled from multiple disciplines to consider structural, idiosyncratic, and even interpersonal constructs and their relationship with negative work-to-family spillover – particularly as they interact with one another. As a result, we are able to obtain a more holistic and integrated understanding of the work/family interface and the various aspects of the work experience that can influence one's work/family experience.

Finally, this research represents an initial step toward further situating work/family theory and research in the modern economy. Future scholarship can extend on this research to further explore how the work and nonwork domains have interacted to create a new, integrated domain. Doing so will help scholars operationalize the specific facets that have emerged as a result of the increased integration of the work and nonwork domains, and explore how these facets uniquely influence employees' work/family conflict.

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APPENDIX: ALL MEASURES AND ITEMS

Note: All items are scaled using a five-point Likert scale, ranging from "Strongly Disagree" to "Strongly Agree," unless otherwise noted.

Independent Variables

1. Job-level LTT
    a. Time urgency
        i. My job requires that I work fast.
        ii. I feel pressured by time at my job.
    b. Simultaneity
        i. I am forced to do various tasks at the same time at my job.
        ii. The ability to multi-task is necessary to effectively do my job.
    c. Fragmentation
        i. My job requires that I break up my work over small periods of time
        ii. At my job, I typically have to work on tasks for a little bit of time, take a break from that task, and then work on it again later.
    d. Contamination
        i. When I'm working on one task at my job, I often get interrupted by a task that requires different skills.
        ii. When I find myself 'in the zone' at work, I tend to get interrupted by a different task that requires a different skill.
    e. Constraint
    f.

i. Deadlines dictate the beginning and end of my work tasks.
ii. I often am trying to meet multiple deadlines in my job.
iii. My job often requires that I work to deadlines.

2. Organization-level LTT
    a. Schedule Unpredictability
        i. Pato has predictable schedules of work. (reverse-coded)

           Pato has predictable schedules of deadlines. (reverse-coded)
    b. Synchronization
        i. Pato requires that I synchronize my work activities with others in the company.
        ii. My job requires that I coordinate my work tasks with the schedules of others at Pato.
        iii. I have to work closely with my colleagues' schedules to do my work properly.
    c. Pace Unpredictability
        i. The amount of work that I get increases and decreases in a predictable manner. (reverse-coded)
        ii. The speed at which I must work increases and decreases in a predictable manner. (reverse-coded)
3. Out of Office Contact (OOOC)
    a. How often do coworkers, supervisors, managers, customers or clients contact you about employment-related matters outside of normal work

hours? Include telephone, cell phone, beeper, and pager calls as well as faxes and e-mail that you have to respond to.

i. Possible Responses:

1. Never
2. Less than once a week
3. About once a week
4. Several times a weak
5. About once a day
6. Several times a day
7. Many times a day

4. Polychronicity

a. I like to juggle several activities at the same time.

b. I believe it is best for people to be given several tasks and assignments to perform.

c. I believe people do their best work when they have many tasks to complete.

d. I prefer to do one thing at a time.

e. I believe people should try to do many things at once.

f. I would rather complete parts of several projects every day than complete an entire project.

Controls

1. Autonomy

a. It is basically my own responsibility to determine how my job gets done.

b. I have a lot of say about what happens for my job.

c. I have the freedom to choose which tasks I work on at any given time at my job.

d. I decide when I take breaks on my job.

2. Departmental structure

    a. Centralization

        i. There can be little action taken at Pato until a supervisor approves a decision.

        ii. Even small matters have to be referred to someone higher up for a final answer.

    b. Formalization

        i. We are to follow strict operating procedures at all times at Pato.

        ii. We have procedures at Pato for every situation.

        iii. Whatever situation arises, we have procedures to follow in dealing with it.

3. Employee's position: Are you hourly or salaried?

4. Average amount of hours that the employee works per week

5. Teleworkers: Do you participate in Pato's telework program?

6. Employee sex: Are you male or female?

7. Eldercare responsibilities: Do you have eldercare responsibilities?

8. Childcare responsibilities: How many children under the age of 18 are living with you? (responses range from "0" to "Greater than 3").

Dependent Variable

1. Negative work-to-family spillover (responses range from “Never” to “Very Often,” and are made based on the past few months)
    a. How often have you NOT had enough time for yourself because of your job?
    b. How often have you NOT been able to get everything done at home each day because of your job?
    c. How often have you NOT had enough time for your family or other important people in your life because of your job?
    d. How often have you NOT had the energy to do things with your family or other important people in your life because of your job?
    e. How often have you NOT been in as good a mood as you would like to be at home because of your job?