

FLEXIBLE WORK SCHEDULES

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Flextime has made our work force more efficient and more focused while they are working. It is a step backwards to go back to rock solid hours. As long as an employee is getting the job done, they should be treated like an adult. (Hernreich, 2008)

Flexible work schedules, such as flextime, telework, or compressed workweeks, are examples of increasing variation in the timing and duration of work hours and the location of work. Although standard work schedules have traditionally been the norm in organizations, growing numbers of employers are experimenting with a wide range of flexible work schedules at the same time as they are transforming employment systems and work processes across time zones and cultures. The increasing proliferation of flexible and more varied work schedules for organizational members is a global employment phenomenon (Jacobs, Gerson, & Gornick, 2004). National country studies from the United States to Australia estimate that only about half of employees work a standard fixed daytime work schedule 5 days a week (Golden, 2001; Watson, Buchanan, Campbell, & Briggs, 2003). As the opening quotation suggests, when implemented with both employer and

employee interests in mind, flexible work schedules can increase efficiency and work focus and empower individuals to self-manage work time (Halpern, 2005; Kossek, 2005).

Flexible work schedules are an increasingly important issue for industrial and organizational (I/O) psychology because they reflect the adaptation of human resource practices to the changing nature of work, seen in a labor force increasingly diverse in work time availability and in dramatic changes in the design of work systems in response to a 24–7 global economy. Accordingly, many new challenges are created for I/O psychologists. For example, how can we rigorously assess the benefits of flexible work schedules for individuals and organizations? When and how should flexible work schedules be used to attract and retain an increasingly diverse workforce? What are strategies for managing and socializing talent when people are working many different schedules across different time zones with little face-to-face interaction? What are the best selection tools to identify individuals who will work well in jobs involving global teams with constant technological interaction over a 24–7 period? What is the optimal design of training programs to help supervisors coordinate and motivate employees who have many

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different schedules? How can high performance cultures be created and contributions accurately assessed when employees have less face time at work? What are effective coaching programs to reduce work-life conflicts for virtual workers who have simultaneous access to work and life demands? When are flexible work schedules effective as organizational development interventions to reduce job stress and improve productivity and when do they increase stress? These are just some of the pertinent questions regarding flexible work schedules that pose new issues for the field of I/O psychology to investigate.

What we found in our review is that scholars have been more successful in answering the first two research questions on the potential benefits of flexible work schedules, and who desires them, than in clarifying how to ensure successful implementation and adaptation of human resource systems and organizational cultures (Ryan & Kossek, 2008). Our chapter is organized as follows: (a) flexible work schedules overview; (b) relevant theories; (c) measurement challenges and cross-cutting characteristics of what makes a flexible schedule "flexible"; (d) individual and organizational outcomes; and (e) future research and directions.

FLEXIBLE WORK SCHEDULES OVERVIEW

In this section, we give a brief overview of the history, organizational rationale, and types of flexible work schedules.

History

Historically, prior to the U.S. industrialization period of the mid-1800s, most workers were either farmers or self-employed, thus determining their own work schedules (Ronen, 1981). Then standardized employer-set work schedules, with work carried out away from the home or a personal business, started appearing as large factories spread with industrialization. A traditional full-time schedule was assumed to be a 40-hour week during which employees worked an 8-hour day, 5 days a week, with fixed starting and stopping times (Avery & Zabel, 2001). Hunnicutt (1996) described an important historical development that occurred in December 1930. To create jobs for laid-off workers

during the Great Depression, the Kellogg Company, the largest manufacturer of cereal in the world, altered the standard of an 8-hour day conducted over three shifts, substituting four 6-hour shifts. Employee morale increased as a result of more leisure time, there were fewer accidents, and the price per unit of production declined as employees worked more productively (Avery & Zabel, 2001). The program was publicized as a national model, supported by many stakeholders from government to labor to business. Although the company briefly went back to offering only 8-hour shifts during the World War II exigencies, both 6-hour and 8-hour shifts were offered in the postwar decades. Hunnicutt (1996, p. 106) noted the "feminization of shorter hours," as women were the biggest supporters and users opting for the 6-hour day. Except for men near retirement or disabled workers, most men continued to work the 8-hour day. During an economic downturn in the 1980s, in order to reduce headcount and benefits costs, Kellogg ended the 6-hour day, but by then the notion of flexible work schedules had developed as a corporate experiment, primarily serving the needs of women and noncore workers. The 6-hour day initiative provides an important historical remnant for 21st century organizations, as flexible work scheduling has gradually become mainstream, allowing for growing employee discretion over at least some aspects of work scheduling.

Growth

From a macro-organizational perspective, labor market, cost, and environmental and technological forces are driving employers to implement flexible work schedules. Labor market demographic shifts reveal a workforce that increasingly needs and values flexibility. Statistics show an explosive growth in the number of individuals who must ensure that family responsibilities are managed while they are at work. Although we cite U.S. statistics here, these trends are mirrored around the world. Since 1975, the labor force participation of U.S. women with children under 18 years age has increased from 47% to 78% (Kossek, 2006). Nearly 40% of all professionals and managers who work at major U.S. companies are now women, many of whom simultaneously juggle caregiving and their jobs (Bond, Thompson, Galinsky, &

Prottas, 2003). The U.S. Census Bureau reported that 82% of U.S. families are dual earners or single parents with children under the age of 18 years at home (Bureau of Labor Statistics, 2009). A third of all workers (equally men and women) provide elder care (Bond et al., 2002). Fifty percent of all children will live in a single-parent family before reaching 18 years (Cohen, 2002). Fathers play a greater role in caregiving and value flexibility more than those of previous generations (Pleck, 1997). Millennials, the current generation of workers entering the workforce, take a more balanced approach to work than previous generations (Deal, 2007).

Product and labor cost savings are also driving growth of flexible work schedules. The adoption of contingent and part-time work schedules, as well as temporary extra shifts, allows employers to expand and contract workforce size and employment at will in response to variation in product demand, economic uncertainty, and new market developments in the global economy (see also chap. 18, this volume). Globalization and rising consumer demand, as well as the high costs of shutting down continuous processing manufacturing systems, mandate 24–7 operations, with production and service delivery around the clock for many firms. A cross-national sample of firms shows that the information technology sector is at the forefront of having a flexible, mobile, often off-shore workforce, which enables firms to quickly hire staff, form partnerships, and develop a customer base around the globe (Landry, Mahesh, & Hartman, 2005; MacEachen, Polzer, & Clarke, 2008).

Contingent work schedules reduce labor costs. Companies typically have a two-tiered workforce: a core group and a noncore group. One group consists of full-time employees who have better health care and pension benefits and some job security. The other is a contingent work group of workers with less favorable benefits and hours, who can be easily laid off to quickly reduce labor costs. This ability to reduce headcount through a contingent contract is especially critical in the European Union (EU), where it is increasingly difficult to lay off regular workers without legally mandated employment severance, which can take months to negotiate (Mery, 2009).

Telework reduces office costs by enabling more efficient facility management and space use (Karnowski & White, 2002). One review summarizing costs savings noted that IBM saved over \$75 million in annual real estate costs, whereas the U.S. General Services Administration (GSA) had major reductions in office energy costs (Kurkland & Bailey, 1999). A study by Robert and Börjesson (2006) found significant reductions in rental costs from introducing flexible offices and telecommuting at a Swedish telecom. Yet some scholars warn that the employer cost savings may be at worker expense, as shifting operations to workers' homes increases home office costs (Davenport & Pearlson, 1998).

Flexible schedules help employers support the environment and cut workers' fuel costs at the same time. After gas prices spiked to over \$4 a gallon in the United States, Oklahoma and Kentucky adopted state-sponsored telework and flextime programs specifically designed to help workers save on fuel. Utah mandated a 4-day workweek for 17,000 state employees, about 80% of the state workforce (Kossek, 2008). Teleworking and 4-day workweeks or delayed schedule starts reduce traffic congestion, fuel consumption, and air and noise pollution (Balepur, Varma, & Mokhtarian, 1998). Unproductive time spent in traffic is reduced by allowing individuals to commute during off-peak times. Empirical evidence of these effects is mixed. Studies by Bernardino and Ben-Akiva (1996) and Mokhtarian (1998) relying on mathematical models to simulate and estimate the favorable environmental impacts of teleworking found little or no positive effects of teleworking on air pollution reduction. Yet Henderson and Mokhtarian (1996) found that having neighborhood telework centers cut motor vehicle transmissions by half and also increased time spent working, improved performance, and enhanced job satisfaction.

Technological changes in the way work is structured due to the growth in use of electronic computer and voice tools have made work more portable, facilitating employees' abilities to work anywhere, anytime. More employers have become comfortable with flexibility as technological tools enhance the ability to electronically monitor employee productivity (Venkatesh & Johnson (2002).

Types of Flexible Work Schedules: When, Where, How Much, and Continuity

Current descriptions of flexible work schedules all build on the concept of employee scheduling discretion, thus enabling employees to have some choice to determine how long, when, or where they are engaged in work for various time periods (e.g., days, weeks, seasons). This discretion affects how an individual experiences his or her working time in relation to nonworking time, such as time spent on leisure and domestic activities, from caregiving to household labor to relaxation (Fagan, 2001). Evans, Kunda, and Barley (2004) defined flexible work schedules as allowing employees to determine when they start and stop work hours, how many hours they work, which days or shifts they work, or where they work. Rau (2003) defined flexible work schedules as alternative work options enabling work to be conducted outside the temporal or spatial boundaries of a "standard" workday. Taken together, these definitions provide several organizing criteria.

Types of flexible work schedules can be organized into four design criteria: (a) flexibility in when one works, such as the timing of work; (b) flexibility in where one works, such as the location or place of work; (c) flexibility in how much one works, such as the amount of work or workload; and (d) flexibility in the continuity of work, such as short- and long-term breaks in work activity and time off. These design criteria can be overlapping and used in various combinations to create hybrid flexible work arrangements. Drawing on Kossek and Van Dyne (2008), Table 17.1 gives an overview of these schedule types, which are discussed below. Most of the I/O literature focuses on flexible work schedules chosen by employees, which have generally had a positive connotation for employee well-being, particularly when used to reduce work-life conflicts. We also note a related research stream in the sociology and poverty literatures on nonstandard schedules (cf. Presser, 2003), which generally have a negative connotation for worker well-being, particularly when used not by choice by lower wage or hourly workers (e.g., shift work), temporary workers (e.g., contingent work), or professionals feeling compelled to overwork (e.g., work excessive hours or during leisure time).

Flexibility in the Timing of Work

Most flexible work schedules relate to the timing of work. Flextime is the most common, followed by the compressed workweek, shift work, and contingent work.

Flextime. Flextime originated in Germany in the 1970s, and although it quickly spread across Western and Northern Europe, the United States was slower to adopt it, particularly in the private sector (Avery & Zabel, 2001). Under flextime, employees have the discretion to vary the times they arrive and leave work, within management parameters, to meet their personal needs (Avery & Zabel, 2001). Flextime schedules have a predetermined range of times in which employees can arrive (e.g., 6–10 a.m.) and leave (e.g., 3:00–7:00 p.m.), with a core band between work starting and stopping times when all employee must be present (e.g., 10:00 a.m.–3:00 p.m.). Having core hours helps managers with the coordination of meetings and supervision (Van Dyne, Kossek, & Lobel, 2007). Flextime policies sometimes incorporate daily carryover, where employees can vary their work schedules with regard to daily time spent at work, as long as they spend a predetermined set amount of weekly time at work (e.g., 40 hours per week). Though estimates vary, about one fourth (Golden, 2001) to nearly two fifths (Bond et al., 2003) of U.S. workers have access to flextime, up considerably from about 1 in 10 workers in 1985 (Golden, 2001). Professional and higher level employees are more likely to have access to flextime than are lower level employees. Direct service and manufacturing jobs offer less access to flextime than do jobs in other industries (Kossek & Distelberg, 2009).

Compressed workweek. Under a compressed workweek, an employee works a full-time schedule in fewer than 5 days. The most common compressed 40-hour workweek is a 4-day, 10-hour schedule with a Monday or Friday off (Pierce, Newstrom, Dunham, & Barber, 1989). Another concept is the 9-hour work day, with 1 additional hour added to the 8-hour day. Known as a 9–80 schedule, this compressed workweek occurs over a 2-week period. A key benefit of compressed workweeks is that

TABLE 17.1

Types and Examples of Flexible Work Schedules

Basic type and definition	Examples
Flexibility in the timing of work Definition: Flexibility in <i>when</i> work occurs	▪ Flextime ▪ Core days ▪ Results-based professional work ▪ Contingent work ▪ Rotating shifts ▪ Shift work ▪ 4-day workweek ▪ Compressed workweek ▪ Weekend, evening, night work
Flexibility in the location or place of work Definition: Flexibility in the location or place <i>where</i> work occurs	▪ Telework or flexplace satellite offices, neighborhood work centers ▪ Required travel or client office work ▪ Split locations ▪ Informal telework combined with nonstandard working time
Flexibility in amount of work (reduced workload and hours) Definition: Flexibility in the <i>amount</i> of work or workload	▪ Job sharing ▪ Reduced load or customized work ▪ Part-time work ▪ Temporary layoffs ▪ Temporary shutdown ▪ Required reduced or part-time hours ▪ Overtime mandates or limits ▪ Reduced hours ▪ Phased retirement ▪ Work-study or coops
Flexibility in work continuity (short-term breaks in employment or time off) Definition: Flexibility to allow for <i>employment breaks or time off</i>	▪ Short-term or long-term leaves (e.g., educational, travel, family, maternity, disability, military) ▪ Sabbaticals ▪ Extended or indefinite paid and unpaid leaves of absence ▪ Vacation ▪ Sick time or disability time off ▪ Part-year work ▪ Intermittent leave

employees can have a 3-day weekend every week (with four 10-hour days) or every other week (with eight 9-hour days). Compressed workweeks are more common in North America (especially Canada) than in other parts of the world (Avery & Zabel, 2001). About 15% of U.S. employees have access to the compressed workweek (Bond et al., 2003). It is more common for lower level than senior employees, and in police and nursing occupations more than in other job families.

Shift work. Although shift work is not always thought of as a flexible work schedule, it is a common form of nonstandard working time. It can involve

evening (e.g., 3 p.m.–11:00 p.m.), night (11:00 p.m.–7:00 a.m.), or weekend hours; rotating shifts (e.g., evenings one day, nights the next), or double shifts (e.g., 16 hours) when a worker is not relieved from 24–7 operations such as in hospitals, prisons, or factories. Sometimes an employee can have a regular but nonstandard schedule, such as a set 8-hour work schedule that always takes place at night (Barnett & Hall, 2007). Some workers do choose shift work, as it allows them to pursue other life pursuits, such as education or child care, during the day. About 15% of the U.S. labor force works nonstandard or irregular schedules, often in the service and technical industries (see the U.S.

Bureau of Labor Statistics [USBLS] National Compensation Survey results, <http://www.bls.gov/ncs/ebs/>). In France, about 10% of workers work nonstandard hours, compared with 20% in other EU countries, such as Greece and the United Kingdom (Presser, 2003).

Contingent work. Contingent work is defined as a flexible work arrangement in which an individual does not explicitly or implicitly contract for long-term employment or works minimum hours that vary irregularly (Polivka & Nardone, 1989). Examples of contingent workers include seasonal, temporary in-house, or freelance workers (Connelly & Gallagher, 2004). Under a contingent work schedule, the hiring of workers is based on a temporary fixed-term contract, unlike a traditional employment agreement, which has an expectation of an ongoing employment relationship. The three commonly used government measures of contingent work are (a) whether an employee does not expect a job to last more than a year; (b) whether the employee is self-employed or an independent contractor; and (c) whether the employee has worked in a job less than a year and is expecting it to end within the year. The USBLS estimated that contingent workers accounted for 1.8% to 4.1% of total U.S. employment in 2005. While usually the exception, some contingent workers prefer temporary work because it allows them to choose employers and work hours and take extended time off (Ashford, George, & Blatt, 2008).

Flexibility in the Location or Place of Work

Another common form of flexible work schedule relates to the location or place of work. Common arrangements are telework or flexplace, and informal teleworking often combined with nonstandard working time.

Telework or flexplace. Under a telework or flexplace schedule, employees work from a location outside of their physical organizational setting. Telework or flexplace is defined as a flexible work arrangement that allows employees to access labor activities from many varied locations, typically using technologies transmitting communication and information (Pérez, Sánchez, & de Luis Carnicer, 2003). Although there are many forms of telework or flexplace, four defin-

ing types capture most of them: (a) telecommuting, (b) satellite offices, (c) neighborhood work centers, and (d) mobile workers (Kurkland & Bailey, 1999). Telecommuters work from home on a regular basis and may or may not use technology in their work. Employees at satellite and neighborhood work offices work outside the home and organization. However, employees at satellite offices are from a single organization, whereas employees at neighborhood work centers can be from multiple organizations but share office space in a local suburban area rather than commuting to a downtown center. Such opportunities allow employees to engage in regular interactions with work colleagues (e.g., conference calls via video feeds) while reducing the length of the commute and the need to purchase urban office space. Mobile workers are transient and typically work from multiple locations that vary depending on the customer being served. These employees are sometimes referred to as "road warriors." They generally face more cognitive complexity, fatigue, and mobility than do teleworkers who work virtually from a regular location (Kossek & Lautsch, 2008). Of U.S. employees, 15% telework at least 1 day a week (see USBLS National Compensation Survey results, <http://www.bls.gov/ncs/ebs/>).

Informal Teleworking Combined With Nonstandard Working Time

Besides a growth in use of formal human resource policies supporting flexible work schedules, informal flexible work schedules are a rising trend that needs to be considered when referring to teleworking. The nature of many jobs has changed to be increasingly virtual, flexible, and self-regulated with growing access to portable e-work, defined as electronic work from BlackBerrys, cell phones, or laptops (Kossek & Lautsch, 2008). Work is increasingly being diffused over all hours of the day or week, extending later into the night and starting earlier in the morning and also spreading into vacations and weekends (Hamermesh, 1999). It has also spread from employer locations to our homes and to many third places, as from cybercafés to our cell phones and BlackBerrys while commuting. More and more individuals are casually teleworking in planes, trains, and automobiles or in public places like coffee shops and restaurants.

Nevertheless, from a formal human resource policy perspective, casual teleworkers such as these would not necessarily be viewed as working on a flexible schedule. Yet this growth in informal flexible scheduling practice needs to be noted in I/O studies. For example, the expansion of casual telework makes studying the effects of formal telework use challenging. One quasi-experimental study found contamination of a control group, identified by the HR department as non-teleworkers, because many of them were often informally telecommuting before or after work or on weekends to handle rising workloads (Kossek, Lautsch, & Eaton, 2006). Pure telework control groups can be difficult to create because telework and nonstandard work hours often occur together. As Golden (2001) reported, use of telework is positively related to an employee's acknowledging access to flextime regarding the start or end of work during the day. This exemplifies how different types of flexibility may be used in bundles.

It is also important to understand the reasons for informal flexible work schedule use, particularly for boundary blurring practices, as some support non-work demands while others support work demands. As examples of each, a supervisor may regularly allow an employee to work from home unofficially every Friday to accommodate day care constraints for a newborn infant who sleeps most of the day while the parent works. Or an employee who uses e-mail, texting, or cell phones on his or her job habitually is expected to take work phone calls and check e-mail during unofficial working time from home (sometimes referred to as *overwork*).

Flexibility in Amount of Work (Workload and Hours)

A third form of flexible work schedule, part-time work, relates to the amount of work (lower workload or hours). After describing part-time work generally, we discuss two growing subtypes: job sharing and reduced-load work.

Part-time work. Under a part-time work schedule, employees work fewer than 35 hours per week (see USBLS National Compensation Survey results, <http://www.bls.gov/ncs/ebs/>). One of the most common flexible work schedules in the world, part-time

work grew after World War II to accommodate employers' needs to cut labor costs and the demographic shifts that had brought more women into the labor force (Tilly, 1996). There are several subtypes of part-time work, such as job sharing, in which two people share a job for a reduced workload, or customized work arrangements by which an individual's workload is reduced in return for less pay or hours. Sometimes health benefits and pensions are not offered with these arrangements unless workers work a minimum number of hours, usually at least 50% or 75% of full-time hours, and even then benefits may be prorated. Nearly one in five U.S. workers is a permanent part-time employee. In the EU, this figure ranges from 5% in Greece to 39% in the Netherlands, with an average of 16% (Avery & Zabel, 2001).

There are two main types of part-time jobs: retention part-time jobs, in which workers negotiate part-time as a retention strategy (such as job sharing and reduced-load work); and secondary labor market part-time jobs, in which employees who prefer full-time work take these jobs as a way to enter the labor force (Tilly, 1996).

Job sharing. Under a job sharing schedule, two employees voluntarily share work responsibilities where each works less than full-time (Christensen & Staines, 1990). Sometimes job sharers have complementary skills, with each performing a different aspect of a full-time job, such as one person focusing on the human resource aspects and the other on the financial duties (Kossek & Lee, 2005). In other cases, the job sharers split parts of a single full-time job and operate as one. Here there must be considerable trust and coordination between employees. Sometimes these jobs are designed to have some overlap of a few extra hours or a common day to ensure tradeoffs are done smoothly. In still other cases, the job sharers might perform two completely different part-time jobs, but together their work hours add up to a single full-time employee equivalent of work hours (Pierce, Newstrom, Dunham, & Barber, 1989).

Customized or reduced-load work. U.S. companies have tremendous latitude to decide what are expected weekly hours for exempt professionals (Kossek & Distelberg, 2009). The U.S. Fair Labor

Standards Act (FLSA) regulates only overtime pay for nonexempt workers who work more than 40 hours per week. Consequently, professionals and managers habitually can work much longer hours than what the FLSA considers to be a full-time week for nonexempt workers. With work hours increasing, terms such as *part-time* and *full-time* have shifted in meaning to be more loosely linked to actual work hours, particularly for professional exempt workers who can work up to 60 or 70 hours a week with no overtime paid (Williams & Calvert, 2002).

One reason for the growing work hours of exempt employees is that professionals are being socialized to work "as long as it takes to get the job done." Working long hours and spending face time at work is construed as commitment and a performance proxy (Jacobs & Winslow, 2004). With recent layoffs and staffing reductions, professionals face rising workloads and may fear job loss if they work less. Given lengthening time demands for professional work, reduced-load or customized work has arisen as a new variant of part-time work developed for professional and managerial jobs. Growing numbers of individuals want to work in a profession but not the 50- or 60-hour workweek that many full-time professionals are socialized to work (Hill, Martinson, Ferris & Baker, 2004). Under reduced-load schedules, employees undergo a reduction in work hours or load and take a pay cut. For example, if the normal load for a research scientist at a pharmaceutical company is four research projects, an individual working 75% load would be assigned three projects instead of four and take a 25% pay cut (Kossek & Lee, 2008). Most reduced-load work arrangements are unique in design and based on an agreement between a specific supervisor and employee to reduce hours or workload. One study of nearly 80 reduced-load workers found professionals customized their working time to an average of 31.9 hours per week, with a range of 20 to 55 hours (Lee, MacDermid, & Buck, 2000). Even though working 55 hours may seem excessive, for some professional jobs—for example, those at the vice president or director level of a major corporation—it can still be socially and practically viewed as involving a workload reduction. Finally, phased retirement is another example of reduced-load work, in which

full-time employees are allowed to gradually reduce their workloads and hours before retirement.

Flexibility to Allow for Short-Term Breaks in Employment or Time Off

Receiving considerably less attention than other flexible work schedules are sabbaticals, vacations, leaves, and part-year work. These flexible work arrangements allow for short-term breaks in employment without losing one's job. These are increasingly important flexible work schedule forms because they enable individuals to maintain their relationships with their employers, yet have a break from work responsibilities. Such breaks help individuals to engage in renewal, undergo new skill development, travel, conduct military service, attend to caregiving or health demands, or prevent burnout.

Sabbaticals. Under a flexible work arrangement that allows sabbaticals, employees take a prolonged paid time away from work and expect to return to their same jobs at the end of the sabbatical (Etzion, 2003; University of Illinois Office of the Vice President for Academic Affairs [UIOVPA], 1996). Sabbaticals are traditionally linked to universities and academic positions as a means to allow for skill enhancement or renewal after heavy teaching loads or administrative work. Although less available in the private sector and often distributed on a case-by-case basis to higher-performing employees, sabbaticals have increasingly been adopted by many Fortune 1000 corporations such as Apple, McDonald's, Segal, American Express, and Du Pont (UIOVPA, 1996).

Leaves, vacation, and flex-leaves. Under a flexible work arrangement that allows for leaves of absence, employees are allowed to be absent from work or work duty for a set period of time to handle domestic or personal needs. This absence can range from a few minutes (e.g., intermittent leave) or hours off during the workday to several weeks, months, or longer (Ivanovic & Collin, 2006). Leaves can be paid or unpaid and granted for many reasons, including military or religious demands, training for a marathon, adoption, short-term disability, maternity, paternity, foster care, caring for a sick child or relative, or educational purposes (Galinsky et al., 2004).

One of the most common leaves is maternity leave. The United States is somewhat unique among industrialized countries in that it does not offer mandated publicly paid leave. Employers have no legal obligation to offer paid leaves, specifically for maternity or child care (Stebbins, 2001). Consequently, less than 50% of employed women in the United States receive paid leave during the first 12 weeks after the birth of a child. Only 7% of employers provide paid paternity leave of any duration (U.S. Office of Personnel Management, 2001). In contrast, in Canada, employees may take job-protected maternity leave with full or partial pay for up to 1 year. In the EU, mothers are provided 14 weeks paid leave, which can be extended with additional partial paid parental leave if fathers also use the leave to share in caregiving (Kelly, 2006).

The United States does have the Family and Medical Leave Act (FMLA). The FMLA is defined by the U.S. Department of Labor (1993) as a federally mandated law requiring employers with 50 or more part- or full-time employees to provide unpaid leave and time off from work up to 12 weeks in any 12-month period for the birth or adoption of a child, for an employee's serious health condition, or to enable the employee to care for a spouse, parent, minor, or disabled child who has a serious health condition. The FMLA requires employers to continue employee health care insurance coverage during the leave and, when the employee returns, to provide the same or an equivalent position that the employee held before the leave. Studies show some employers do not publicize the FMLA very effectively and often resist implementation (Baum, 2006).

Increasingly, companies are combining vacation time with leaves and sick time to create a paid-time-off leave bank, where employees can use the time off in increments in whatever combination of time off they would like. Unfortunately, this approach can sometimes mean that employees use their leave time for domestic and caregiving needs and end up not having time left to take vacation to provide for personal leisure, work recovery, or their own illness. Some employees, particularly professionals with heavy workloads and long hours, typically do not take all of their vacation they could officially take under the policy and lose these days off. Many com-

panies have adopted a "use it or lose it" policy whereby firms deny employees carryover of paid vacation as a way to minimize future labor cost liability, without reducing workloads to allow employees to actually use all their vacation days. Even with a use it or lose it penalty, in a bad economy where layoffs are occurring and time at work is viewed as commitment, workers are reluctant to use all of their vacation. In contrast, in EU countries, at least a month of annual vacation is common.

Part-year work. Under a part-year work arrangement, workers are typically employed to fulfill seasonal or short-term needs. This enables organizations to maintain flexible and short-term staffing (Druker, White, Hegewisch, & Mayne, 1996). Some professions attract high-level talent by offering seasonal flexibility in annual scheduling, such as academic, teaching, and tourism jobs. Other industries hire seasonal migrant workers, for example, in construction and agricultural jobs, or offer part-year employment to handle variations in customer seasonal demand (e.g., holiday retail jobs, tax accounting firms, ski resorts).

Section Summary

As noted in the preceding review, a flexible work schedule allows employee flexibility in one or more of the design criteria: when, where, how much, or the continuity of work. While these design features of different types of flexibility are a good start, most studies are very descriptive, which makes studying flexible work schedules in an integrative and theoretical manner not as easy as it first appears.

THEORIES RELEVANT TO FLEXIBLE WORK SCHEDULES

In this section, we review several emerging theoretical perspectives relevant to the study of flexible work schedules. They are psychological control, motivation, and work-family conflict perspectives, of which boundary theory is a subset. A growing body of research has shown that using flexible work schedules leads to greater perceptions of control, lower work-family conflict, and lower turnover or intention to leave. Seminal research is also being done on the motivational and boundary management

literature on the effects of flexibility work schedule use. Some of the ideas that follow are speculative where noted.

Psychological Job Control Theory

Researchers (e.g., Deci & Ryan, 1995; Karasek & Theorell, 1990) have long pointed to the importance of employees' having high perceptions of job control and support for their individual well-being. Key constructs pertinent to flexible work schedules based on job control theory include perceptions of job control over work hours and perceived job autonomy. A key assumption of the literature on flexible work schedules is that using them relates positively to employee perceptions of job control over scheduling and increased job autonomy in job design. However, not all studies assess whether use of flexible work schedules does indeed relate to greater perceptions of control and autonomy. Control is a concept from the demand-control model of work stress. It is defined as the decision latitude employees have over their job tasks (Karasek, 1979). The demand-control model posits positive relationships between workers' job demands and their ability to control how and when they perform a job, such as when and how they carry out tasks (Karasek & Theorell, 1990). It is assumed that a job with high demands and low control will lead to stress; however, an individual in the same high-demand job who perceives high control will experience lower strain (Grönlund, 2007). Flexible work schedules are an intervention that could enable greater control by providing tangible and psychological resources to enhance well-being.

Although *job control* traditionally refers to employees' perceptions of control over how work is done (Karasek, 1979; Karasek & Theorell, 1990), more recently, Kelly and Moen (2007) and Kossek, Lautsch, and Eaton (2006) extended the notion of job control to refer to control over when and where people work, in addition to control over how work is done. Although Kelly and Moen found that perceptions of increased control over the timing and place of work among professionals who work at a corporate headquarters was related to decreased work-family conflict; Kossek and colleagues' study of teleworkers did not find that use of flexibility necessarily led to more control or lower work-

family conflict. An explanation for the lack of positive results for teleworkers may be that they were stigmatized for working in a different way. An additional explanation is that their workloads and pace of work were excessive, and therefore mere use of flexibility did not lead to greater control. It is likely that the type of flexible schedule used may differentially relate to control perceptions, which in turn may moderate individual and organizational outcomes. Nearly all the studies reviewed in this section measured employee perceptions of schedule control and not actual or nonsame source assessment of control over schedules.

Implications of Flexibility Over Timing of Work for Control

Employee use of flextime and compressed workweeks allows workers more control over their ability to integrate personal role demands with work role demands. For example, by being able to control the timing of the starting or stopping of work schedules, an employee on flextime can restructure work hours at the end of each day to deal with nonwork demands, such as a late babysitter or the need to attend a school conference, get a car fixed, or go to the doctor, without having to miss an entire day of work. In the case of a compressed workweek (e.g., 4 days of 10 hours each), control over the timing of nonwork demands is increased because an employee can schedule appointments and other nonwork activities during the regularly scheduled fifth day off. Absenteeism is lowered for users of both flextime and compressed workweek because of this ability to cluster personal appointments during employee-controlled nonworking time.

Reviews of shift work suggest its effects are less positive for control (cf. Presser, 2003). Studies show that working a night shift, and especially rotating shifts or a swing shift, even when by choice, is generally bad for health because it disrupts sleep patterns. Often there is less control over the ability to develop an established sleep schedule. One reason for this is that even if night-shift workers always have a regular time off during the day to (hypothetically) sleep, that time may be when other members of the household (e.g., spouses or children) may be awake. The employee often does not get a full period

of rest because he or she may sacrifice sleep in order to be involved in daytime domestic life. It is important to note that shift work, in relation to population census representation, tends to be disproportionately delegated to low-income and minority workers (Presser, 1999). Despite these concerns, particularly for night work, shift work allows some employees to have greater control over their ability to participate in other meaningful nonwork roles, such as child care, attending school events, or volunteering, or earning a pay differential.

Regarding control linkages to contingent work, individuals working a contingent schedule have a means to be able to control which days or times of the year they will work to enable them to take breaks from work when needed, such as to attend school or care for a sick child (e.g., a substitute teacher, an on-call per diem nurse). But many contingent workers work a contingent schedule as a first step to garnering full-time employment. In this case, working a contingent schedule may not increase perceptions of control—quite the opposite, as the employee often experiences job insecurity or underemployment. For use to lead to greater control, one must assess whether an individual prefers contingent work.

Implications of Flexibility Over Place of Work for Control

In a nationwide sample of several hundred salaried professional workers and managers in the financial services and computer industries, Kossek and Lautsch (2009) found that being a formal user of a corporate telework policy was correlated with significantly higher perceptions of personal job control ($r = .31$), but higher schedule irregularity ($r = .12$). They also found that individuals who reported that they had a higher volume of “portable E work,” defined as work that was portable electronic work that could be performed away from the main office, reported significantly higher place mobility ($r = .22$). These individuals were more likely to be working in multiple places, such as one day on an airplane and with customers the next. Thus, use of telework has the trade-offs of increased control over location, but less control over hours.

Implications of Part-Time Work for Control

When individuals use part-time work schedules, they will have increased perceptions of control coupled with decreased demands, since workload is reduced. Karasek and Theorell (1990) would argue that this type of situation leads to the most beneficial outcomes for workers. However, when the opportunity is not presented as an option, such as the case with involuntary part-time work (when the worker prefers full-time hours and pay), the sense of control is diminished. While many high-income workers wish to cut back hours and can often afford to do so, low-income workers may face underemployment or forced part-time work, which they may not desire because they need the income and health care benefits. Research suggests that part-time workers are sometimes less likely to get promoted, while women and older people are more likely to work in part-time jobs that permit caregiving and meeting other life demands (Hammer & Barbera, 1997). In some EU countries, there is a concern that part-time work is leading to lower control because hours of pay are being cut, though workloads are not. This phenomenon is referred to as *work-intensification* where individuals are working fewer hours yet expected to complete the same amount of work in less time.

Implications of Short-Term Breaks for Control

Research on work recovery substantiates the importance of giving workers autonomy to control when they may take breaks from work for mental and physical health (Sonnentag, 2001). Control over time away from work counteracts job stress and helps to maintain a person's well-being. Totterdell, Spelten, Smith, Barton, and Folkard (1995) demonstrated that worker well-being significantly increased with each additional day off from work. Psychological detachment theory suggests that resources necessary for work can then be regained during off-job time so that recovery can occur (Sonnentag, 2001). In one unpublished cross-national study (Davidson, Eden, & Westman, 2004), 16 faculty members reported their level of job stress prior to and after sabbatical, compared with a larger matched control group who were

not on leave during the same time period. Those who were on sabbatical reported very small effect size improvements in perceptions of control, positive affect, and life satisfaction.

Regarding the effects of vacations, there is very little rigorous research (e.g., studies using quasi-experimental repeated measures). However, in one meta-analysis of only seven studies, findings suggest that although vacation has positive effects on health and well-being, the effects were modest, $d = 0.43$, and soon fade out after work resumes ($d = -0.38$; de Bloom et al., 2009).

MOTIVATION AND WORK-FAMILY PERSPECTIVES

Vroom's (1964) expectancy theory holds that individuals are more likely to be motivated to exert effort to perform for valued goals they think they can achieve. Under a motivation theoretical perspective, flexible work schedule users are assumed to be more likely to exhibit higher performance because they would have greater resources (e.g., more time, more support), which would enable them to perceive greater expectancy that they can perform both work and family roles well (Kossek & Misra, 2008; see also Vol. 3, chaps. 3 and 11, this handbook). A key issue to measure is the degree to which perceptions of effort to perform are increased because of use of flexible work schedules. Studies would also measure the degree to which individuals perceive reduced constraints to performing well and increased expectancy to stay in the labor force because of the increased access and use to flexible work schedules.

Workers who are able to access and use flexible work schedule supports they value, therefore, may be more likely to have higher effort-performance linkages because they will be more likely to believe they can perform both work and family roles well. Research does indeed show that workers individuals may engage in higher extra-role performance when flexibility is available. Lambert (2000) found that employees with access to work-family benefits were more likely to exhibit higher organizational citizenship behaviors.

Work-Family and Boundary Linkages

A work-family perspective on flexible work scheduling theorizes that these schedules would reduce work-family conflict, defined as when one role interferes with the performance of another role. Use of flexible schedules could also have the potential to increase work-family enrichment, the degree to which resources or skills or knowledge in one role (e.g., work) enhance the other (e.g., family), since users would have greater involvement in both work and family roles. Regarding the latter, Greenhaus and Powell (2006) suggested that resources in one domain will extend to and impact resources in another domain, leading to positive spillover. They believed that increased flexibility will have a positive impact not only in the work role but also in the family role, via positive spillover. For example, by using a flexible work schedule, a worker will have more positive well-being on the job and at home because he or she will experience fewer conflicts. This increased positive mood in each domain, in turn, will cross-transfer, and enhance the overall quality of accumulated role experiences at work and home.

Studies are beginning to investigate how use of different types of flexibility may lead to lower work-family conflict or higher enrichment. For example, use of some types of work schedule flexibility (e.g., part-time work) may lead to lower work-family conflict than others (e.g., telework). The latter flexible work schedule simply reshuffles work tasks in location from work to home but does not reduce workload. For example, although Kossek, Lautsch, and Eaton (2006) reported a positive relationship ($r = .31$) between being a teleworker and perceptions of flexible job control, they found no relationship between being a teleworker and lower work-to-family conflict. After controlling for marital status, gender, and having dependents, the study found that the more teleworkers perceived higher job control, the lower family-to-work conflict ($\beta = -.27$) as long as they engaged in a boundary management strategy that discouraged multitasking or managing family activities while working.

This finding leads us to discussion of boundary theory, which relates to work-family spillover theories. Boundary theory is based on the idea that individuals construct mental, physical, and emotional

fences between roles, such as work and family (Ashforth, 2001). Some individuals prefer to segment work and family roles, whereas others do not care whether work crosses into home and are integrators (Nippert-Eng, 1996). Flexible work schedules affect employee perceived ability to control boundaries between work and home, such as the degree to which the timing and location of work or family roles are flexible and permeable (Kossek, Lautsch, & Eaton, 2005). They can facilitate a boundary management strategy enabling individuals to manage work–family role synthesis in ways that fit with personal values regarding segmentation and integration and role investments (Kossek, Noe, & DeMarr, 1999). It is important for researchers to consider how variation in preferences for segmentation to integration of work–nonwork boundaries, also known as *flexstyles*, moderate attraction to and the effects of using different types of flexible schedules (Kossek & Lautsch, 2008). For example, a study by Rothbard, Phillips, and Dumas, (2005) found that key job attitudes were moderated by the degree of congruence between an individual's values for segmentation and the availability of flextime policies enabling restructuring of work and family roles to support segmentation. Individuals who more strongly valued work–family segmentation were more committed to their jobs to the extent that they had access to flextime, compared with those who more strongly valued role integration, even after controlling for many key demographics (e.g., gender).

It is clear that the effect on boundaries of using a flexible work schedule varies by schedule type. Telework, for example, is the flexible schedule that most heavily blurs the physical boundary between work and home. Teleworkers, by definition, are more likely to integrate work–family roles and experience higher work–family conflict than other flexibility forms such as part-time work, which allows for a boundary management strategy characterized by more work–family separation. Learning to separate work and family roles requires new socialization of work and family task enactment for teleworkers. There is often growing job and family creep—seepage of the responsibilities of one role into the other (Kossek & Lautsch, 2008). Golden (2001) reported that individuals using technological tools such as

laptops and cell phones tend to have longer work days. They also report more difficulty with escaping or breaking away from work psychologically. They also may have more role transitions, switching more frequently between work tasks and home tasks; leading to switching cost and process losses. (Kossek & Lautsch, 2008). Consequently, while users of telework may hold positive perceptions of higher psychological control over schedule flexibility, this benefit may be offset by teleworkers' lesser ability to separate boundaries. Weaker work–family boundary separation leads to a greater propensity to take on additional work (e.g., substituting commuting time for job tasks) or nonwork responsibilities (e.g., trying to do the laundry at the same time as working), resulting in an increase in total life workload and work–family conflict (Kossek & Lautsch, 2008).

Section Summary

The preceding section has shown that use and availability of flexible work schedules relate to perceptions of job control, motivation, and perceptions of work–family conflict and boundary-blurring. In the next section, we review key measurement challenges, which we integrate with this discussion of relevant theoretical constructs to identify cross-cutting characteristics across schedules.

PERSISTENT MEASUREMENT CHALLENGES

Our review has identified the need to (a) differentiate between measures of formal flexibility policies and flexibility in job design and (b) clarify measurement of availability and use and level and degree of diffusion within the firm, to better compare prevalence, take-up, and impact.

Formal Policy or Informal Job Characteristic?

The literature ranges from being very fragmented, as in studies that examine flexible work schedules separately and use no common theoretical thread or dimensions comparing their design (Rau, 2003), to very general, as in studies of employees' or employers' responses to an index listing a wide number of programs available. For example, researchers in the

latter class might ask a general question, such as whether one had access to a flexible schedule or workplace flexibility, without specifying the type of flexible schedule. This vagueness is problematic as it is difficult to know if the worker had access to flexibility in, for example, timing or workload reduction or to a formal program versus a flexible job design tailored to individual circumstances.

This ambiguity leads to a bifurcation in the flexible work schedule literature. One stream mainly conceives of flexible work schedules as a job design feature that refers to an individual's perceived level of job autonomy over work schedule flexibility (e.g., Richman, Civian, Shannon, Hill, & Brennan, 2008). Flexibility control is seen as a job characteristic. Respondents typically use Likert scales to assess the degree of perceived flexibility control concerning the timing and time of their work (cf. Anderson, Coffey, & Byerly, 2002). Scholars refer to this construct as *perceived flexibility control* or *control over work time* (Kelly et al., 2008; Kossek et al., 2006).

The main other research stream views flexible work schedules as involving a formal human resource policy or informal supervisory approved work practice. Typically, measurement is conducted in dichotomous terms. A job was defined as either flexible or not, on the basis of a policy or practice. If an individual was a user of a flexible schedule, it was assumed he or she had autonomy, regardless of whether the use of the policy or practice actually led to increased flexibility control or effectiveness. (For a review, see Kelly et al., 2008.)

Clarifying Flexibility Use and Access Within and Across Firms

Many studies also confound policy availability and actual use, whether the flexible schedule is a formal human resource (HR) policy available across the firm or an idiosyncratic and informal supervisor practice. Clarifying these issues is very important in studying relationships between antecedents and outcomes. For example, should a firm be considered as offering flexible work schedules if it is offered to only one employee (any employee) on an exception basis, or only to some employee groups such as high-talent professionals but not lower wage workers?

Clarifying levels of analysis in measurement within the firm is also confusing. For example, a firm can be listed in a national survey as having a flexibility policy, but there can be wide variation within the firm at the business-unit or work-unit level in the degree to which a practice is available, depending on an employee's supervisor or occupation. Given these trends, it is not surprising that reports on flexible schedules significantly differ between employees and employers. Employers typically focus on policy adoption and overstate availability. Employees, on the other hand, often focus on perceived barriers to use, such as lack of communication and cultural and supervisor support (Kossek & Distelberg, 2009). If flexible schedules are available on paper but go underused because the organizational culture does not support them, so that users are afraid that they may not be promoted or, worse, could lose their jobs, does a firm really offer flexible work schedules? We will draw on these gaps in measurement accuracy and the previous review of relevant theoretical constructs in order to identify common characteristics that differentiate offerings of flexible work schedules. We identify key themes that must be assessed when evaluating flexible work schedules to ensure they are flexible more than just in name only, in order to improve measurement of antecedents and outcomes across types.

Definition and Cross-Cutting Themes: What Makes a Flexible Work Schedule "Flexible"?

Assuming that the flexible work schedule policy involves flexibility related to one of the four main work schedule types—timing, location, workload amount, or continuity of employment hours—we drew on the preceding review of relevant theory and measurement challenges to identify the following five criteria that should be used in any study to assess flexible work schedules.

1. *To what extent does the flexible work schedule involve (a) a recognized human resource policy or practice sanctioning work schedule flexibility; and (b) job design characteristics fostering greater perceived job control over work scheduling?* The first criterion is that the flexible work schedule

should involve both a human resource policy or practice and some link to job design characteristics fostering high perceptions of increased autonomy over continuity of work and when, where, and how much of it is done. Ideally, a formal flexible policy always would be well-linked and supported by informal supervisory practice. However, policy and practice are not always tightly coupled. If the policy just exists on paper and only in principle, use may be restricted. Under this situation, the schedule will not be experienced by an employee as increasing perceptions of job autonomy or control over the work schedule. To be considered a flexible work schedule, the schedule must enable employees to have some perceived autonomy to control or customize one or more of these schedule criteria to meet personal preferences.

2. *To what extent does the culture support use of flexible work schedules, so that there is a relatively low gap between availability and use by those who desire a flexible work schedule?* The second point is that the organizational culture must support a majority of workers and managers in perceiving that the schedule as readily available. If the schedule is only an informal practice that individual workers request on a case-by-case basis from supervisors who may vary in support, there may be wide variation in equity in how the schedule is administered and implications for whether positive outcomes occur. We do not believe that a firm should be considered as having adopted flexible work schedules if it is not a recognized practice that many workers can request. In some firms, managers permit access only to select higher-performing workers and try to keep the schedule from being known as a work option. Ad hoc "secret" deal-making between individual employee and employer, or I-Deals, on exceptional basis (cf. Rousseau, 2007) can occur; such arrangements would be outside the scope of this review.
3. *To what extent is use employee initiated and perceived as voluntary?* The third attribute is that the use of the flexible schedule must be employee initiated and enable the workers to have some choice as to whether to use the schedule. This

distinction is important, because voluntary flexibility may be more likely to be psychologically beneficial for the worker (as in perceptions of increased job control and well-being) than would involuntary flexibility, forced by the employer. Measuring "voluntariness" can be tricky, because many professionals are socialized to work long hours and highly identify with the work role; they may use flexibility to work long hours, even if their employer does not require them to do so.

4. *To what extent is use of flexible work schedules determined by mutuality in the employment relationship to benefit both employees and employers?* The fourth criterion is that flexible schedule use emanates from some mutuality between employer and employee in the power to influence the scheduling of working hours. This criterion helps distinguish a flexible worker from the growing numbers of self-employed workers. Although self-employed workers could be considered as having a flexible schedule, they are outside the boundaries of this review, which focuses on individuals who regularly work for an employer and are considered to be employees. The assumption that use of the flexible work schedule leads to positive outcomes for both employee and employer is an important indicator of mutuality in the power relationship and of a balance in accrued benefits from flexible work schedules.
5. *To what extent is the schedule socially constructed as "psychologically different" from a standard schedule in terms of boundary blurring?* In this fifth criterion, the work schedule is viewed as being psychologically different from a standard work schedule, particularly in terms of what are considered "standard" norms for the number of hours spent at work or continuity of employment or "normal" relationships regarding the degree of boundary blurring or separation of work and nonwork relationships. This criterion is based on growing evidence that the definition of the term *flexible work schedules* has a social construction component. Those working on a flexible work schedule are seen as working something other than a regular schedule that a majority of workers use (Ashford et al., 2008; Cappelli, 1999).

Given this social or normative aspect of flexibility, the meaning of flexible work schedules may shift over time in societal culture and across firms, as they become more prevalent. What is considered a flexible work schedule may vary by organizational and national culture, type of job, or the prevailing work rules of the employer. For example, teleworking may be the standard for an information technology (IT) firm but unusual in a manufacturing firm. Flexibility may not only refer to the schedule of work hours, but may take on social meaning as an attribute ascribed to an employee working in a nonnormative manner. The individual is labeled a *flexible worker*.

FLEXIBLE WORK SCHEDULE OUTCOMES

Any summary of outcomes of flexible schedules must be introduced with the caveat that more research needs to be done to isolate the specific effects of various types of flexible schedules with better measures that address the measurement and definitional issues noted in the previous sections. Drawing on selected studies, Table 17.2 shows a summary of main outcomes with effect sizes for selected citations. We summarize here the general trends shown in Table 17.2.

GENERAL EMPLOYER OUTCOMES

The I/O literature suggests there are two main benefit categories from flexible work schedules for the organization. The first is increased workforce attraction and retention, effort, quality, and productivity, all of which lead to higher job satisfaction, engagement, extra role effort, commitment, higher workforce quality from a larger applicant pool, and lower turnover of talent. The second main employer benefit is cost savings from the ability to attract and retain a motivated workforce, as well as a lowering of rates of dysfunctional employee behaviors, such as absenteeism, turnover, or accidents (Halpern, 2005; Kelly et al., 2009; Kossek, 2006; Kossek & Hammer, 2008). Employers may also have savings in compensation costs, because some employees may be willing to trade off wages for more leisure time off from work.

Given these trends, employers who offer flexible work scheduling to accommodate work-life conflicts may have a competitive advantage in external recruitment and internal retention. Evidence does suggest that having flexibility policies does increase the size and quality of the applicant pool (Clifton & Shepard, 2004). Some workers with unique skills, such as high-talent professionals or workers in jobs with higher turnover (e.g., nursing, service jobs) can exert workforce leverage to entice employers to offer flexible schedules or impose preferred administrative structures (e.g., flexible hours) on their organization (Barringer & Milkovich, 1998). Flexible work schedules also enable the development of internal labor markets to retain workers, by making it more unattractive for employees to leave the firm, as it raises opportunity costs of looking for similar alternative employment (Davis & Kalleberg, 2006). This has potential cost savings for employers, because resources and time are not devoted to constantly recruiting and training new workers, who are not likely to be as productive immediately as experienced workers.

From the employer perspective, besides the positive productivity effects noted, there are possible countervailing negative effects that simultaneously must be taken into account in more studies. Such effects may include increased administrative costs and the complexity of having to manage what can be increasingly varied schedules to ensure coverage and coordination for client interactions (Van Dyne et al., 2007). Costs also may be incurred if investments are not made to train supervisors to learn new ways to supervise, communicate with, manage, and measure the performance of a workforce that is more dispersed in time at work. Cross-training and better teamwork also may be needed to encourage workers to learn each others' jobs and self-coordinate schedules to implement flexible work schedules in ways that consider implications for work group efficiency, as opposed to only individual self-interest.

Measuring cost reductions is also tricky, as they may occur indirectly, particularly through variables that are important pathways for employee well-being. For example, the relationship between flexible work schedules, turnover, and absenteeism may be mediated via lower job stress, work-family conflict, or

TABLE 17.2

Summary of Prevalence and Sample Outcomes From Flexible Work Arrangements

Type of work schedule	Definition	Use and availability	Impact on employee and employers
Flexibility in the timing of work			
Flextime	A flexible work schedule that allows employees to vary their work hours, within certain parameters, to better suit their needs (Ronen, 1981)	Used by 29 million workers (28%) in the United States (USBLS) ^a 56% of employers offer flextime (Burke, 2005)	Decrease in negative affect levels for women caregivers (Chesley & Moen, 2006) Higher productivity ($r = .22$; Baltes, Briggs, Huff, Wright, & Neuman, 1999; see also Pierce & Newstrom, 1983) Higher satisfaction with schedule (Baltes et al., 1999) Lower absenteeism ($r = .42$; Baltes et al., 1999; see also Dalton & Mesch, 1990) Lower driver stress and time urgency (Lucas & Heady, 2002) Higher job satisfaction ($r = .16$; Baltes et al., 1999; see also Orpen, 1981) Decreased turnover (Allenspach, 1975; Ralston, 1989; Ronen, 1981; Stavrou, 2005) Lower work-to-family conflict ($p = -.30$; Byron, 2005) and lower family-to-work conflict ($p = -.30$; Byron, 2005) Greater family supportive organizational perceptions and supervisor support, lower turnover intentions ($r = -.11$), higher organizational commitment ($r = .16$) and job satisfaction ($r = .13$; Allen, 2001)
Compressed workweek	A work schedule that allows an employee to work a full week (e.g., 40 hours) in fewer than 5 days (Pierce, Newstrom, Dunham, & Barber, 1989)	33% of employers offer compressed workweeks (Burke, 2005)	Higher supervisor rated performance ($r = .21$), higher job satisfaction ($r = .28$), and higher satisfaction with schedule ($r = .19$; Baltes, Briggs, Huff, Wright, & Neuman, 1999) Lower absenteeism (Goodale, & Aagaard, 1975; Nord & Costigan, 1973) Lower work-family conflict (Dunham, Pierce, & Castaneda, 1987; Allen, 2001) Greater family supportive organizational perceptions and supervisor support, lower turnover intentions, higher organizational commitment and job satisfaction (Allen, 2001)
Shift work	Any organization of working hours that differs from the traditional diurnal work period: work days, evenings, nights, or some form of rotating schedule (Costa, 2003)		Higher work-family conflict (Jansen, Kant, Nijhuis, Swaen, & Kristensen, 2004)

(continued)

TABLE 17.2 (Continued)

Summary of Prevalence and Sample Outcomes From Flexible Work Arrangements

Type of work schedule	Definition	Use and availability	Impact on employee and employers
Contingent work	Any job in which an individual does not have an explicit or implicit contract for long-term employment (Polivka & Nardone, 1989, p. 11)	10.7% of workers in the US (consisting of independent contractors, on-call workers, temporary help agency workers, and workers provided by contract firms; USBLS) ^a	Mixed: Reports of low (Van Dyne & Ang, 1998), neutral (Pearce, 1993), and high organizational commitment (McDonald & Makin, 2000) Mixed: Reports of low (Bergman, 2002) and high job satisfaction (Galup, Saunders, Nelson, & Cerveney, 1997; McDonald & Makin, 2000) Mixed: Low (Van Dyne & Ang, 1998) and high organizational citizenship behaviors (Pearce, 1993) Higher levels of subjective health problems (Martens, Nijhuis, Van Boxtel, & Knottnerus, 1999) Lower job performance (Ang & Slaughter, 2001) Higher job-induced tension (Bernhard-Oettel, Sverke, & De Witte, 2005)
Flexibility in the location or place of work			
Telework or flexplace	A way of flexible working that enables workers to get access to their labor activities from different locations by the use of information and communication technologies (Pérez, Sánchez, & de Luis Carnicer, 2002, p. 733)	37% of employers offer telecommuting (Burke, 2005) 44.4 million American users who performed any kind of work from home (Dieringer Research Group, 2004) 24.1 million of American users who worked at home during business hours at least 1 day per month (Dieringer, 2004)	Increase in personal growth for male caregivers (Chesley & Moen, 2006; Marks, 1998) Lower time-based family-to-work conflict (Lapierre & Allen, 2006) Lower work-to-family conflict and higher family-to-work conflict (Golden, Veiga, & Simsek, 2006) Greater family supportive organizational perceptions and supervisor support, lower work-family conflict and turnover intentions, higher organizational commitment and job satisfaction (Allen, 2001) Lower absenteeism (Stavrou, 2005) Organizational performance (Martínez-Sánchez, A., Pérez-Pérez, M., Vela-Jiménez, M. J., & de-Luis-Carnicer, 2007; Stavrou, 2005)
Flexibility in the amount of work (workload and hours)			
Part-time work	Employees who work fewer than 35 hours per week (USBLS) ^a	A main type of flexible work arrangement in smaller businesses (Maxwell, Rankine, Bell, & MacVicar, 2007) Unskilled, poor pay, little career possibilities, low security (Barnett, 1998; Kahne, 1985)	Lower role overload and work-to-family conflict ($\beta = .18$; Rijswijk, Bekker, Rutte, & Croon, 2004; see also Higgins, Duxbury, & Johnson, 2000) Greater family supportive organizational perceptions and supervisor support, lower work-family conflict and turnover intentions, higher organizational commitment and job satisfaction (Allen, 2001) Lower annual staff turnover (Stavrou, 2005) No difference in job satisfaction (Lee & Johnson, 1991; McGinnis & Morrow, 1990)

TABLE 17.2 (Continued)

Summary of Prevalence and Sample Outcomes From Flexible Work Arrangements

Type of work schedule	Definition	Use and availability	Impact on employee and employers
			Higher turnover for part-time workers and those who have temporary position (Cohen & Gadon, 1978; Feldman & Doeringhaus, 1992; Granrose & Appelbaum, 1986) Greater flexibility in scheduling but less continuity in workflow (Olmsted & Smith, 1989) Lower job-induced tension (Bernhard-Oettel, Sverke, & De Witte, 2005)
Job sharing	A work schedule that allows two employees voluntarily share the work responsibilities of one full-time position, where each works less than full-time (Christensen & Staines, 1990)	19% of employers offer job sharing programs (Burke, 2005)	No difference in job satisfaction (Lee & Johnson, 1991; McGinnis & Morrow, 1990) Higher turnover for part-time workers and those who have temporary position (Cohen & Gadon, 1978; Feldman & Doeringhaus, 1992; Granrose & Appelbaum, 1986) Greater flexibility in scheduling but less continuity in workflow (Olmsted & Smith, 1989) Lower annual staff turnover (Stavrou, 2005)
Customized or reduced-load work	A work schedule where employees lessen their workloads through the reduction of work hours or tasks and being paid less accordingly (Meiksins & Whalley, 2002)	A main type of flexible work arrangement in smaller businesses (Maxwell, Rankine, Bell, & MacVicar, 2007) Mothers working in professional occupations (Hill, Märtinson, Ferris, & Baker, 2004) Managers and professionals (Lee, MacDermid, Williams, Buck, and Leiba-O'Sullivan, 2002)	Heightened levels of work-family balance (Hill, Märtinson, Ferris, & Baker, 2004; Lee, MacDermid, Williams, Buck, & Leiba-O'Sullivan, 2002) No impact on career opportunity (Hill, Märtinson, Ferris, & Baker, 2004) Increased general well-being, positive effects on children and parent-child relationship, higher job satisfaction and performance, satisfaction with career implications (Lee, MacDermid, Williams, Buck, & Leiba-O'Sullivan, 2002) Managers perceive it as maintaining or enhancing work performance, recruitment, and retention (Lee, MacDermid, Williams, Buck, & Leiba-O'Sullivan, 2002)
Flexibility to allow for short-term breaks in employment or time off			
Sabbaticals	A work schedule that allows employees take a prolonged paid time away from work and expect to return to their same jobs at the end of the sabbatical (UIOV-PAA, 1996)	14–24% of American corporations have established sabbatical programs (UIOV-PAA, 1996)	Lower burnout (Duetschman, 1994) Approximately 60% of academic faculty reported new research and skill development after sabbatical (UIOV-PAA, 1996) Employees enjoy their sabbaticals and feel better when they are done, some employees improve their skills or perform acts of social worth (Kramer, 2001) Avoid technological obsolescence (Bachler, 1995) Employees return to work with a new viewpoint and with new vigor, hiring substitutes to fill in for those on sabbatical could reduce unemployment, and having a sabbatical policy gives an organization a competitive edge (Kramer, 2001)

(continued)

TABLE 17.2 (Continued)

Summary of Prevalence and Sample Outcomes From Flexible Work Arrangements

Type of work schedule	Definition	Use and availability	Impact on employee and employers
Leaves, vacation, and flex-leaves	A work schedule that allows employees to be absent from work or work duty (Ivanovic & Collin, 2006)	British survey estimated 35% have parental leave (Cully, O'Reilly, & Millward, 1998) British survey estimated 56% have paid leave (Cully et al., 1998)	Greater family supportive organizational perceptions and supervisor support, lower work-family conflict and turnover intentions, higher organizational commitment and job satisfaction (Allen, 2001)
Part-year work	A work arrangement where workers are generally employed to fulfill seasonal or short-term needs	Seasonal work and ad hoc industries (cf. Lockyer & Scholarios, 2007) Developing countries, and increasingly more common in developed countries (Houseman & Osawa, 2003) Predominately public administration, education, and health workers (Local Government Management Board, 1998)	Disproportionately marginalized groups (i.e., women and minority ethnic groups; Conley, 2003) Devalued treatment and stigmatization (Boyce, Ryan, Imus, & Morgeson, 2007) Recruitment difficulties and skill shortages (Lockyer & Scholarios, 2007) Increased flexibility and reduced costs (Boyce, Ryan, Imus, & Morgeson, 2007)

Note. USBLS = U.S. Bureau of Labor Statistics; UIOVPA = University of Illinois Office of the Vice President for Academic Affairs.

*See USBLS National Compensation Survey results (<http://www.bls.gov/ncs/ebs/>).

higher work engagement. Nevertheless, the effect sizes shown in Table 17.2 help one conclude that there is a positive relationship between the availability of flexible work schedules and organizational attachment. For example, Allen (2001) found modest positive relationships with organization commitment, job satisfaction, and turnover intentions. Lowering job stress also can positively affect health care costs by lowering blood pressure and reducing negative health behaviors such as alcohol or drug abuse or overeating (cf. Harris & Fennell, 1988). Yet the effects of flexible work schedule use may be lagged, as it may take several months or years before these effects show up on the bottom line.

EMPLOYEE OUTCOMES

For the individual, a main benefit of using flexible work schedules or having greater access to schedule flexibility relates to increased well-being, lower

stress, and health. A second main benefit is better focus, satisfaction, and role quality experiences both in job and nonwork roles. One likely pathway between flexible schedule use and higher levels of well-being, assuming workload is held constant, is lower work-family conflict, which in turn relates to lower job and life satisfaction (Kossek & Ozeki, 1998). Better person-job fit may also ensue, as restructuring work schedules to better fit nonwork demands allows an individual more time to devote to other roles outside of work, such as exercise, seeing friends, or being involved in the community.

Assessing benefits from flexible work schedule use for work and family roles is likely to be reciprocal and iterative and can operate via many complex pathways. An example comes from a study that, although it did not examine formal flexible schedules, did research workload perceptions over time. Higher negative work affect related to negative home

affect ($\beta = .15$), and higher job workload related to negative home affect ($\beta = .04$; Ilies et al., 2007). Thus, more positive relationships between work and family roles also may occur in part because better role quality experiences may ensue at work and at home, making the individual feel that those roles are more complementary and not always at odds. Individuals also may be able to perform better at both work and family roles because of positive capitalization of affect and mood transfer between both domains (Ilies et al., 2007) and increased ability to focus on each role.

Just as with employer outcomes, when assessing individual outcomes, some countervailing factors must be considered before concluding that the overall effects of work schedule flexibility are positive. For example, if employees are not able to use flexible work schedules that best meet their personal time demands, or if they experience career penalties from using flexibility, the benefits of these schedules will be lessened at best or, worse yet, could become negative. We have noted that in many firms, although flexibility is officially allowed, users are sometimes seen and stigmatized by the organizational culture as being less committed to the firm, or as not being mainstream workers (Kossek & Lee, 2005). They may face a backlash such as lower raises, fewer promotions, or being first to be laid off in a downturn (Golden, 2008). Few studies have actually quantified these costs and linked them to actual flexible work schedule use.

Individuals also may experience increased cognitive complexity from using some flexible work schedule types such as telecommuting. This results in more switching cost from increased frequency of role transitions and in higher process losses (Kossek & Lautsch, 2008). For example, individuals can be constantly moving between work roles (e.g., working on a laptop) to multitasking on domestic roles (e.g., supervising a child's homework while doing the laundry). Telecommuters also face the temptation of overwork and increased work-family conflict, burnout, and role overload from having work or domestic chores constantly available to them all the time. Telecommuters may then be tempted to simply try to take on more work and home tasks simultaneously. Negative mood transfers from work

may also be brought into the home more easily, as well as the reverse.

Many of the outcomes of using flexible work schedules may be moderated by the employee's demographic, psychological, or job background. For example, if access to flexible work schedules is viewed as varying the place of work, it will most benefit individuals who are most in need of flexible schedules as help or support. Thus, workers with extremely long commutes may be more likely to benefit from teleworking than those who live close to the office. Or employees who have higher work-family conflict, such as those with young children, may receive more benefit from flextime to enable them to take them to doctor or school appointments than would someone with fewer domestic demands to manage during the work-week (cf. Hammer, Kossek, Anger, Bodner, & Zimmerman, 2009). Thus, flexible work schedule studies must identify the relevant population most likely to benefit from a specific flexible work schedule type when assessing outcomes, but few do. Cross-level work group and organizational moderators also may be critical when assessing individual outcomes. For example flexible work schedules used in a company with an unsupportive work group or organizational culture may weaken the positive effects at the individual level.

Overview of Outcomes by Schedule Type

Baltes, Briggs, Huff, Wright, and Neuman (1999) conducted a meta-analysis that compared effects across schedule types, summarizing 24 years of research (1973–1997). While it was not always clear whether studies were measuring use or access, they found that access to flexible work schedules positively relates to higher job satisfaction and lower absenteeism. Compressed work schedules resulted in higher supervisor ratings of performance. A later meta-analysis by Byron (2005) found that schedule flexibility was negatively related to perceptions of work-to-family conflict ($\rho = -.30$) and family-to-work conflict ($\rho = -.17$). These relationships were moderated by sample parental status (work-to-family conflict, $r = -.72$) and the percentage of the sample that was female (work-to-family conflict, $r = .10$; family-to-work conflict, $r = -.63$).

Drawing on data from the 1997 National Study of the Changing Workforce, Halpern (2005) found that the larger the number of time-flexible policies an organization offers, the greater the organizational cost savings from lower absenteeism by less "missed time at work, fewer days late for work or left early, and the failure to meet deadlines" (p. 162). Future research should build on this study to isolate the effect sizes from use of the specific types of flexibility in relation to absenteeism or deadlines missed.

Richman and colleagues (2008) drew on a consulting firm's sample of 15 large corporations that were part of a Work Family Directions study. They found an incremental effect size of 8% of the variance in employee engagement linked to employee perceptions of perceived flexibility and a 9% increase in the variance in engagement explained by the presence of family supportive policies. This study is one of the few we found that included measures of both formal (e.g., policies) and perceptions of informal flexibility. An area for improvement is that both of the measures used were one-item measures, which are less reliable and too general to identify the source of cultural support or type of flexibility. The items were "Do you have flexibility or not?" and "Or have supportive policies or not?"

Symbolic Outcomes: Availability of Flexibility as Perceived Organizational Support

Eaton (2003) examined work-family policies of seven biopharmaceutical firms in a single state. Based on a sample of 463 employees, Eaton estimated the availability of workplace flexibility via an index of seven flexibility practices (flextime, part-time jobs, flex place, job sharing, compressed workweek, unpaid personal leave, and sick leave to care for ill children). Eaton found that availability of formal and informal policies, perceptions of one's ability to use policies, and degree of control over flexibility ($R^2 = .06$) were all significant predictors of perceived productivity and organizational commitment, after controlling for multiple individual employee variables (e.g., age, education, tenure, company size). No gender moderating effects were

found, indicating that men and women benefit from flexibility.

In a study that investigated perceived cultural support within organizations for the family role and considered many flexible work schedules, Allen (2001) used a sample of 522 employees from a variety of settings (technology firm, utility company, women's professional business association). Allen found that benefits offered (flextime, compressed workweek, flex place, part-time work, and a variety of dependent care supports) were significant predictors of lower work-family conflict, higher job satisfaction, higher organizational commitment, and lower turnover intentions, after controlling for a number of variables (e.g., salary, race, tenure). However, when adding perceptions of organizational support of the family, each of the multiple regressions resulted in a change in R^2 between .15 and .24. This suggests both perceived cultural support for the family role may be more important for favorable work attitudes than mere availability of flexibility.

Hammer, Neal, Newsome, Brockwood, and Colton (2005) found a positive relationship ($\beta = .16$) between use of alternative work schedules and work-family conflict for women. They argued that a potential reason for this non-favorable outcome was that the schedules enabled the women in their study to engage in more non-work-related responsibilities as opposed to using the increased control and time to lower stress and strain outcomes. A study drawback was that the type of alternative work schedule used was not delineated; use was dummy coded, so it was not clear what type of flexible schedule was being used.

Moderators of Outcomes Comparing Flextime With Flexplace

A recent study by Shockley and Allen (2007) employed more measurement precision and examination of moderators than many previous studies on linkages between flextime use and lower work-family conflict. Using a highly educated sample of women with an employed spouse and/or at least one child living at home, results suggest that flextime was more highly related to lower work-to-family conflict than to family-to-work conflict. This relationship was stronger for flextime than telework.

When controlling for age, marital status, work hours, and parental status, flextime and family responsibility accounted for 9% of the variance in work-to-family conflict. Family responsibility moderated the relationship between both access to flextime and work-to-family conflict ($\beta = -1.33$, $\Delta R^2 = .05$) and family-to-work conflict ($\beta = -1.47$, $\Delta R^2 = .06$). Also important, when perceptions of family-supportive organizational policy availability were considered, the relationship between flextime and work-family conflict became insignificant. Perceptions of family-supportive organizational policies accounted for over a fourth (26%) of the variance in work-to-family conflict and 14% of the variance in family-to-work conflict, after controlling for the demographics noted above. These findings suggest that it's not necessarily mere access to schedule flexibility that matters; rather, perceptions of how family-supportive the organization is really drive the direct effects to work-family conflict.

Family Outcomes Related to Shift Work

Rarely are family measures related to scheduling assessed in management and I/O studies. An exception is an interesting study on shift work conducted by Barnett, Gareis, and Brennan (2008). While most studies focus on negative outcomes of shift work, Barnett focused on when shift work can be positive when matching workers' preferences for scheduling. Using a sample of 55 dual-earner families with children between the ages of 8 and 14, Barnett and colleagues examined the within-couple relationships between the wife's work and the spouse's work-family conflict, psychological distress, and marital-role quality. The most robust finding of this study was that the wife's shift work was significantly related to her work-family conflict but not to the husband's level of work-family-conflict. Those who worked evening shifts reported greater work-family conflict than those who worked day shifts. The wife's shift work by number of hours also was significantly related to her level of psychological distress. Interestingly, only the interaction between shift work and number of hours was significant, as shift work and hours worked had no direct effects. The authors found that wives who worked day shifts had no variation in psychological distress;

meanwhile, those who worked evenings reported higher distress with fewer work hours.

Outcomes Related to Workload Flexibility

Hill, Martinson, Ferris, and Baker (2004) sought to better understand how reduced-load work affects perceptions of work-family balance. Using survey data from nearly 700 professionals from the 1996 IBM Work and Life Issues Survey in the United States, they compared mothers of preschool children with their full-time counterparts. These part-time or reduced-load employees worked on average 47% fewer hours and reported 41% lower income than the full-time group. Hill and colleagues found that reduced hours were positively related to work-family balance ($r = .47$) but not career opportunity ($r = -.02$). Likewise, when controlling for occupational level, family income, age, and job flexibility, reduced hours were again positively related to work-family balance ($\Delta R^2 = .09$) but not career opportunity ($\Delta R^2 = .01$). The mean annual family salary was \$100,568 for reduced-load workers, while the mean for their full-time counterparts was \$120,590, suggesting that these were relatively high earners who may be more likely to afford the income loss from working part-time than those in lower paying jobs.

In a qualitative examination, Lee, MacDermid, Williams, Buck, and Leiba-O'Sullivan (2002) examined the role of contextual factors in the success of 82 managers and professionals working a reduced-load work schedule. Lee et al. (2002) found that HR practices and policies for the reduction of work hours were quite successful, with an average reduction of 18 hours per week. In regard to personal outcomes, they found that 91% of respondents reported being more happy and satisfied with their work-family balance, 86% reported positive effects on their children and parent-child relationship, and most reported greater general well-being, less stress, and feeling less worn out and more relaxed. In regard to job and career outcomes, 85% reported neutral or positive implications toward work performance, 67% liked their jobs and felt they were doing challenging and interesting work, and most were satisfied with career implications of a reduced workload. Seventy-six percent of senior managers interviewed believed

that reduced-load work maintained or improved work performance; most felt that it also enhanced recruitment and retention. Lee and colleagues found that 15 contextual factors were strongly endorsed by managers and professionals as being key factors in the success of reduced-load work. Individual factors included personal characteristics, such as having higher levels of work ethic, commitment, an organized and highly concentrated work style, a unique skill set in high demand, being a self-starter and interpersonally skilled, and having strong and clear personal values. Favorable job-context factors related to kinds of work that allowed for higher individual autonomy or were project-oriented. Favorable work-group factors included having a supportive boss and competent and supportive direct reports. Favorable organizational factors were noted for firms that had an organizational culture that valued employees' needs, saw a business need for retaining skills, and offered wide publicity of work-life policies and programs.

Similar results to the research just cited, showing a positive relationship between working part-time and lower work-family conflict and higher levels of well-being, were found in a study by Rijswijk, Bekker, Rutte, and Croon (2004).

Outcomes of Short-Term Breaks and Time for Work Recovery

Collectively, outcomes of flexibility policies that allow breaks from work have received far less empirical and theoretical focus, so our review here is more descriptive. Kramer (2001) discussed the potential benefits of sabbaticals. Kramer compiled an impressive list of stories from individuals who opted for a sabbatical, including a former governor of Tennessee, lawyers, clergy, high-tech industry employees, educators, and even store clerks. All of the sabbatical reports reviewed by Kramer revolved around positive features such as feelings of being reenergized, reinvigorated, and refreshed. Kramer found that (a) employees enjoy their sabbaticals and feel better when they are done; (b) employees return to work with a new viewpoint and with new vigor; (c) some employees improve their skills or perform acts of social worth; (d) hiring substitutes to fill in for those on sabbatical could reduce unemployment; and (e) having

a sabbatical policy gives an organization a competitive edge.

To address the limited empirical evidence examining work recovery, Totterdell and colleagues (1995) explored recovery duration based on 28 days of self-ratings, cognitive-performance tasks, and sleep diary results from a sample of 28 nurses. The longer the time allowed for recovery from the work shift, the greater the employee satisfaction on subsequent workdays. Satisfaction also was significantly higher at the end of day shifts when that shift was preceded by 2 rest days compared with only 1. Results also showed that a number of measures (sleep, mood, and social satisfaction) were worse on the 1st day of rest compared with subsequent days. These results suggest that recovery from work takes time. Although the findings were not longitudinal, they do indicate that short-term breaks benefit the employee and employer.

As an extension of this work, Fritz and Sonnentag (2006) conducted a longitudinal study to explore the effects of vacation on employee performance-related outcomes and well-being. Using a working sample of 221 university employees, they found changes in effort expenditure and well-being between responses before and after vacation. Specifically, they noted vacation effects and partial fade-out effects. Vacation experiences (negative work reflection) contributed to well-being immediately after vacation ($\beta = .27$) and 2 weeks later ($\beta = .16$), after controlling for negative affect and well-being before vacation. Likewise, vacation experiences of negative work reflection ($\beta = .21$), relaxation ($\beta = -.13$), and nonwork hassles ($\beta = .15$) all significantly predicted self-reported effort expenditure 2 weeks after vacation. These results further suggest that short-term breaks in employment are beneficial to employees.

FUTURE RESEARCH AND PRACTICE

Overall, this chapter has reviewed the growing diversity in the different schedules used to organize working time from both the individual and the organizational perspectives. We have demonstrated that not all forms of schedule flexibility are the same in impacts on the individual and the organization, and that the views of the individual and the organization

on the benefits and drawbacks of flexible work schedules sometimes differ. We have also noted that the literature on flexible work schedules is very descriptive and needs both methodological and theoretical development. We have noted the need for studies to include new trends such as the growth in casual use of flexible work schedules, such as checking e-mail during nonwork hours, a social trend that must be accounted for in formal studies of flexible work schedules.

Although many implications for research have already been made throughout this chapter, we close with additional suggestions regarding (a) a research agenda specifically focusing on flexible work schedule implementation, (b) the need for I/O theory to consider how flexible work schedules impact growing heterogeneity in work experiences, (c) improving measurement and theoretical linkages, (d) support and context as moderators, (e) assessment of more varied outcomes, and (f) increased consideration of “the future of flex” as an organizational effectiveness tool.

Implementation Research Agenda

Clearly, research needs to move beyond whether flexible work schedules merely exist and attempt to increase understanding of the conditions under which they are effectively implemented and used. We also need greater insights into the variation in antecedents and outcomes and processes related to different types of flexible work schedules used by employees and organizations with varying characteristics. Toward this end, Table 17.3 provides a list of hypotheses on implementation issues for future research. Many of the hypotheses in this table draw on our review of criteria of what makes a work schedule “flexible.” These design criteria can also be used to create new measures to better assess implementation of flexible work arrangements. We have also noted I/O constructs such as job control, valence and expectancies, work–family spillover, and preferences for boundary management integration or segmentation that could be used to assess the implementation of these schedules. We believe it is critical to discuss the implications of different schedule types for control perceptions as a pathway to understand other outcomes. We also have

pointed out that control over work time does not necessarily involve a formal program but can relate to an aspect of job design. We would like to see more integrated studies on implementation that measure human resource policy use, organizational cultural and supervisor support of flexibility, and worker perceptions of flexible-scheduling autonomy to reconcile the gap between policy and practice. We would also like to see more inclusion of family schedule design and flexible scheduling supports in these studies.

New I/O Theory Needed Related to Growing Heterogeneity in Work Experiences

I/O theories need to be reviewed to account for the growing heterogeneity in work schedules and arrangements. They also need to adopt a multiple-stakeholder approach to determine differential impacts of flexible schedules on managers and on different types of workers and families, as well as communities. As the use and customization of flexible work schedules continues to grow, an increasing important issue is “When are ‘nonstandard hours’ considered standard?” Heterogeneity in work schedules is likely to grow in bad economies as well as good ones. For example, during growing economic activity, they are ways to attract workers or keep up with rising product demand; meanwhile, during an economic downturn, they are ways to retain workers when raises are limited or as an alternative to layoffs. Many organizations will need to manage blended workforces, with employees working standard work schedules working side by side with those working flexible schedules, which can create challenges for managers in implementation (Lautsch & Kossek, 2009).

Many basic theories of work, such as motivation, job satisfaction, culture and leadership, and organizational commitment, among many others, implicitly assume standard or regular work schedule and arrangements, with some homogeneity in employment experiences and motivations (see chaps. 7 and 12, this volume; Vol. 3, chaps. 3 and 4, this handbook). The reality—that more employees are working in many different ways with greater heterogeneity of work schedules—influences how

TABLE 17.3

Implementation Issues Related to Moderating Effects of Use of Flexible Work Schedules on Employee's Work Attitudes and Behavior: Hypotheses for Future Research

Flexible work schedule design attribute	Hypothesis based on literature trends for future research
1. <i>Employer or employee initiated.</i> Is use of flexible work schedules employer or employee initiated?	Hypothesis 1: When use of flexible work schedules is initiated by the employee, there is a significant positive relationship between use and employee job and family satisfaction and a significant negative relationship with work turnover.
2. <i>Formal policy or informal practice/job characteristic.</i> Does the experience of using the formal flexible work schedule lead to actual employee perceptions of greater control over work hours and workload?	Hypothesis 2: When use of flexible work schedules leads to employee perceptions of greater control over the timing, time, and amount of work, the employee will experience lower work-to-family conflict.
3. <i>Policy availability compared with use.</i> Does the flexible work schedule have availability on paper but lower use by workers?	Hypothesis 3: Flexible work schedules that are available on paper but have low actual use by workers and will have lower influences on reducing work-family conflict, as well as lower influences on positive employee work attitude and behaviors.
4. <i>Social cultural support and use backlash.</i> Does working in different ways have strong cultural support from management and limited negative backlash from use?	Hypothesis 4: When employees initiate use of a flexible work arrangement, if using flexibility is not positively valued by the organizational culture or leads to stigmatization, the positive effects of flexible work schedules will be ameliorated.
5. <i>Organizational attachment effects.</i> How does use of the flexible work schedule affect organizational attachment and the long-term employment attachment?	Hypothesis 5: Flexible work schedules that are designed in ways that support positive organizational identification and attachment to the employment relationship will be most likely to lead to positive employer benefits.
6. <i>Nature of workforce use.</i> Are flexible work schedules used by many different types of employees in many different functions?	Hypothesis 6: The more that flexible work schedules are used by employees of a wide range of demographics and workforce functions, the more flexibility is seen as a socially normalized way of working.

people experience work attachment, work roles, and work culture. Socialization of new employees and resocialization of existing ones will be increasingly difficult as more and more workers have varied time and work, and work at a geographical distance. Increasingly, high-talent employees may not necessarily look the same in how they work and act, nor will they view the work role as primary and be willing to restructure nonwork demands to enable them to devote primary attention and energy to working time (Kossek & Misra, 2009). (See also Vol. 3, chap. 2, this handbook.)

On the practitioner side, HR policies, particularly for the high-potential and high-talent workers, are currently designed to most heavily reward employees who work schedules that meet core hours set by the

employer or are willing to increase hours to place working time above personal or family time. Yet, as noted above, growing numbers of employees simply do not work in this way. This was the way work was done in the 1950s, when organizations consisted primarily of men with homogenous careers and schedules (Whyte, 1956). It is not necessarily the way work schedules are enacted in the 21st century. Organizations have not fully adapted scheduling to meet the labor market, technological, and environmental shifts we discussed in this chapter. HR systems related to performance management, training, socialization, and career development, for example, have not kept up with these changes nor have they been adapted to mesh with the flexible organization of today.

Improving Measurement and Theoretical Linkages

This chapter has shown that one of the major limitations in the current literature on flexible work arrangements is the imprecision with which flexible policies are measured. A key implication for research and practice of this chapter is that it is important for I/O psychologists to improve definition and measurement of flexible work schedules and better link measures to theoretical models. We have noted one area of this imprecision in the tendency for researchers to cluster or combine lists of flexible work arrangements (e.g., Allen, 2001; Casper & Harris, 2008; Stavrou, 2005) in order to create a composite score of adopted policies. This skews results toward rating larger organizations as more flexible simply because they have policies on paper. Researchers must also measure effectiveness, access across organizational groups, mixed consequences from use, and flexibility type. In sum, better reporting of specific flexibility design types is needed, perhaps drawing on the framework in this chapter that looks at types of flexibility practices in clusters, as not all forms of flexibility are similar in processes or outcomes.

Here is an example of how flexibility type might differentially relate to outcomes comparing flextime and compressed workweeks. Though flexible work schedule practices are often implemented to benefit an organization's workforce, various flexible schedule types differentially benefit, and potentially hinder, individual workers, depending on their scheduling needs. Flextime greatly benefits an employee with parental responsibilities because they are better able to respond to such needs (e.g., day care or school drop-off and pick-up schedule), while a compressed workweek hinders this same worker's ability to respond to these needs, by making it difficult to do pick up or drop off a child over a 10- or 12-hour day. As such, it is important to examine individual flexible work arrangements individually, as well as how combinations suppress or change outcome relationships. Key moderators such as level of caregiving should also be assessed.

As an example of how drawing on theory more closely could better inform measures, we use motivation theory as an illustration. Currently, the literature generally does not distinguish motivational

effects of different types of flexible work schedules. Studies drawing on a motivation perspective would measure variation in the degree to which employees with different employee backgrounds value different types of flexible scheduling and regard such schedules as instrumental in enhancing their ability to perform on the job. Studies should also measure the degree to which individuals have high expectancy that using flexible work schedules will accrue positive outcomes (such as low backlash and favorable work and family experiences). More research is needed to assess whether individuals who highly value flexible work schedules as a job characteristic and who use them are likely to have higher performance and a stronger relationship between use and performance linkages.

Research drawing on motivation perspectives also would measure the degree to which different workers value different types of flexible work schedules and how different types of flexible schedules help individuals achieve important goals, both personal and work related (Kossek & Misra, 2008). It would also be important to measure the degrees to which individuals have high social identity pertaining to work and family roles and also how much they value integrating these roles, as this may predict increased valence regarding flexible work schedule use. (See Lobel, 1991, for a review of relationships between work-family role allocation and social identity.) Individuals who value work and family roles equally highly are often referred to as *dualcentric*, where two roles are both primary to social identity, and therefore the individuals put high dual investment in both roles. Dualcentric individuals are more likely to value flexible work schedules, as they enable greater participation in work and family roles simultaneously.

Another area of imprecision that we have noted is that many studies confound the measurement of availability and use, often only examining the availability of formal flexible work arrangements. Fortunately, this seems to be a trend that some research is now rectifying by examining the unique effects of both the availability and use of flexible schedules (e.g., Casper & Harris, 2008; Parker & Allen, 2001). However, there still seems to be significant imprecision in regard to both the measurement

of temporality and intensity, amount, or extent of one's use of flexible work arrangements. For example, Kossek, Barber, and Winters (1999) used survey data from single-item measures that assessed whether respondents had ever used alternative work schedule options; the data were then coded as users versus nonusers. Casper and Harris (2008) assessed use as "don't use," "use occasionally," and "use frequently," coded as 0, 1, and 2, respectively. These scores were then summed across a variety of policies to determine the amount of schedule flexibility used. Butler, Gasser, and Smart (2004) assessed a variety of flexible schedules with 5-point single items ranging from "never" to "very often," coded as 0 to 5, respectively. Collectively, these examples represent the general norm within the literature regarding the measurement of use, each lacking in temporal (e.g., frequency over the course of a year) and intensity (e.g., frequency over the course of a week) information. Clearly, what needs to be clarified is how long and how frequently one has to use a schedule to be considered a user in order to have the schedule affect employee behaviors and attitudes. If someone can telework from home once a month or in bad weather, or have flextime when a child is sick, is that sufficient to have an impact on outcomes? Furthermore, what happens when someone uses more than one schedule at the same time, such as flextime with telework? How does one tease out the effects of each type over time?

Overall, we need to move from studies reporting descriptive use of work schedule flexibility to measures of the extent of and effectiveness of implementation such as the hypotheses noted in Table 17.3. We also need to link measurement of use to workers' perceptions of control and satisfaction. It is important for studies to include measures of actual policy use and measures of the degree to which workers' experience flexibility on the job in the same study, so that scholars can ascertain whether using a flexible work schedule actually enhances job autonomy perceptions. Kossek, Lautsch, and Eaton (2006) suggested that future work-family research should distinguish between descriptions of flexibility use (formal telecommuting policy user, amount of telecommuting practiced), how the individual experiences flexibility psychologically, and performance on and off the job.

Support and Context as Moderators

We have noted the importance of measuring not only the availability of flexible schedule policies and practices but also the degree to which individuals' perceive that the company and supervisors are supportive of actually using flexibility without backlash. More studies need to combine measurement of policy availability and use with examination of cultural support for new ways of working. Several studies reported here showed interactions between formal flexible work schedule availability and use and support in relation to work-family conflict reduction.

Another area of concern moves beyond the pure measurement of use of flexible work schedules and focuses more on the implications of using flexible benefits. For example, it has been proposed that when individuals take advantage of flexible work arrangements and overtly demonstrate interest in nonwork life, they may face negative judgments regarding their lack of organizational commitment (Allen & Russell, 1999; Fletcher & Bailyn, 1996; Lobel & Kossek, 1996). Accordingly, it has been suggested that an organizational culture for acceptance and use of flexible work schedules is critical to avoid backlash from not only management but peer nonusers as well. For example, Breaugh and Frye (2008) found that employees who reported their supervisors as being more family supportive were more likely to use flexible work schedules; more research is needed to tease out the ordering of this relationship. In addition, future research needs to further explore cultural support of flexible work schedules at the organizational level and work group level, along with the potential backlash of nonsupportive cultures.

More studies also need to examine flexible work schedules in personal contexts. By this we mean that studies should examine not only the individual worker's schedule but also the worker in the context of other family members' schedules or the prevailing work group and organizational context and variable schedules. For example, we need to examine work schedules as part of a family system and investigate not only the employees' schedules but how they mesh with those of family members. Similarly, there is a need to examine the compatibility of individual

flexible schedules with coworker, manager, and customer schedules.

It is also important for studies to state the reasons for the adoption of flexible work schedules; who controls use—the employer or employee? Research is also needed on the degree to which flexible schedules are viewed as integrated into the business context. For example, flexplace may be standard for many mobile IT workers but very unusual for someone working in another industry. In the latter case, flexplace may engender social backlash from use in one context but not another, and studies need to be clear on workplace norms. Cross-level studies on variation in flexibility norms and preferences should be done. At the individual level, research might examine flexstyles such as psychological preferences for integration and segmentation (Kossek & Lautsch, 2008), which may shape preferences for various flexible schedules. These same proclivities could be aggregated at work group and organizational levels to understand the micro and organizational climates for work schedule flexibility and also to unpack the factors leading to growing scheduling conflicts between workers and managers.

Cross-cultural research on flexible work scheduling is needed in which studies examine culture differences in the primacy of work to leisure and the perceived need for managers to control workers' behaviors. Most cross-cultural research on flexible work schedules has been at the national public policy level, such as the availability of leaves across nation states. Very little research has examined the use of flexible work schedules across national cultures at the level of the firm, and these measurement challenges are discussed next.

CLARIFYING PUBLIC POLICY CONTEXTUAL MEASUREMENT INFLUENCES IN NATIONAL SURVEYS

Future research should aim to reduce measurement ambiguity currently found in national and international surveys in the United States and EU. For example, a review of three national U.S. surveys on flexible work schedules identified a lack of definitional clarity in the published literature on what is meant by flexible work schedules (Kossek &

Distelberg, 2009). The review compared the National Compensation Survey (USLBS, 1999, 2000, 2003, 2007), The National Study of the Changing Workforce (Bond, Thompson, Galinsky, & Prottas, 2003), and a professional association membership survey (Kossek & Distelberg, 2008). Wide variation was found in definitions, measures, and sampling techniques. The lack of agreement on how to study flexible work schedules is problematic because (a) it makes it difficult to compare these national surveys when one is not sure if the samples or measures are similar and (b) it is likely there is higher measurement error in assessment, given the wide latitude that respondents have to interpret general items, making prevalence levels and empirical linkages more suspect.

Similarly, Piotet (1988) cautioned against relying on statistics that assess prevalence across the EU, because common definitions either do not exist or, if they do exist, vary from country to country. It is difficult, therefore, to develop international data on worldwide health effects of flexible work schedule use, or even within-country comparisons within the same firm. As an illustration on a more global scale, there currently is no internationally accepted definition of a "standard" work day or schedule; the definition can vary by national law and culture, organizational culture, and occupation (Cappelli, 1999). Although there is wide variation in culture and legislation on flexibility and work hours, little of this variation has been considered in I/O studies of flexible work schedules. Yet these differences do matter. Take France, for example: The French workweek is officially 35 hours (<http://www.triplet.org>). Employers can pay a fine to allow lower level workers to work longer hours. In France, most stores are closed on Sundays and many employees take a month-long holiday in August. Although an understanding of these trends certainly makes it possible to study flexibility in France, the fact that France is now part of the EU may make it more difficult to make work-hour comparisons across countries, unless there is some legislative support to discourage workers from working long or irregular hours. Even in the EU variation exists, with full-time work ranging from 35 to 39 hours per week. Yet there is much more public policy support to protect workers from long hours than in the United States. For example,

EU legislation has been passed limiting the maximum number of weekly work hours for nonexempt workers to 48 even with overtime payments (Crosby, Williams, & Biernat, 2004). Rarely are such differences considered in studies to put international work-hour trends and flexible schedule use in context.

We should note that a growing trend in some nations is to actively encourage employers to support flexibility, and more I/O studies should consider institutional effects on flexible work schedule adoption and use. In the UK and Australia, laws regarding equal access to flexible employment have instituted employees' "right to request" a flexible schedule and the investigation of employer ability to accommodate such requests. International studies of work-life will need to consider this variation in labor standards and legislation context when studying workplace flexibility from an I/O frame.

Need for Expansion of Measurement: More and Different Types of Outcomes

More research is needed to clarify outcomes from flexible work schedules, including the amount of flexibility used and the chronology of use, attitudes, and behaviors. With the growing cost of oil, there is renewed interest in the productivity and organizational impacts of varying work schedules, but little quality research exists to inform organizations and society of the costs and benefits of multiple stakeholder perspectives (e.g., employee, employer, family, community) of different flexibility forms. We also need more research on linkages between schedule control and employee health and stress, as this is a growing societal concern. New research suggests linkages between support for flexible work schedules and health, including heart rates, blood pressure, sleep quality, depressive symptoms, and physical pain (Kossek & Hammer, 2008). Such findings suggest flexibility is not just a nice thing to do to attract and retain workers; it also may impact longevity, as well as family and societal well-being. New intermediate measures of work productivity such as engagement, focus, creativity, conflicts over availability, and communication patterns should be included in outcome studies.

Certainly studies of outcomes need to be based on longitudinal quasi-experimental work with con-

trol groups. As noted, we found relatively few of such studies in our review. We also believe that one finding—that the favorable effects of using flexibility were higher for individuals with higher work-family conflict—suggests that interventions might be tailored to focus on the members of the workforce who have the greater need and interest in flexible work scheduling. This is the target group most in need of workplace support and who are most immediately likely to benefit from workplace innovation in the short run. In the long run, all workers may benefit from having greater control over where, when, and how long they work over the life course.

The fact that more and more employees are spending what used to be personal time for work highlights the need for workers (especially those on a flexible work schedule) to increasingly self-regulate boundaries between work and personal time (Nippert-Eng, 1996). It is also important to determine whether the employer exerts social pressure on employees to restructure personal time as work time, particularly if workloads are too high and there are ambiguous norms about work hours (Kossek & Lee, 2008). Among issues that should be addressed are professional work cultures that socially foster overwork and the tendency to use telework and other flexible work schedule forms to manage rising workloads. This issue is especially important during times when companies may be cutting staff in a bad economy and people may be afraid to request or use flexibility. One may ask, "Is there a minimum or optimal amount of work schedule flexibility to promote well-being?" and "Under what conditions does use of which types of flexible work schedules lead to greater perceptions of schedule control?"

The Future of Flex as a Work Group and Organizational Effectiveness Tool

Studies should consider factors influencing acceptance and use, such as the importance of need assessments to make sure policies adopted are congruent with workforce characteristics that may wax and wane over the career and family life cycle. Researchers also should examine the degree to which flexible work schedules are integrated with organizational and business objectives, as well as ensuring the development of managerial support

and a favorable organizational culture or climate. We found far more research on the latter topic of support and culture than the former on business strategy or workforce fit or even implementation.

Although policies are typically adopted at the organizational level, within firms, there is often wide variation and organizational stratification in which different jobs, work groups, and workforce demographics have access to flexible schedules. Relatively little research has been done at the work-group level of analysis, in particular, which is critical for implementation because most policies are implemented on the basis of supervisory discretion. A review by Van Dyne, Kossek, and Lobel (2007) found that motivation and coordinating effects of flexible schedules were the main implementation challenges at the work-group level. Managers are more likely to experience positive work-group performance impacts if they are able to effectively manage coordination of work schedules and learn how to manage equity within the work group. To facilitate this, it is critical for the employer to allocate resources to train managers and employees to learn how to work in new scheduling forms and to monitor the effectiveness of implementation of work schedules (Kossek & Hammer, 2008; Lautsch & Kossek, 2009).

The National Work Family Health Network (see <http://www.workfamilyhealthnetwork.org>) is one example of an effort to train and resocialize supervisors to help work groups and employers learn how to redesign social processes to better support employees' schedule flexibility. This is a cross-university interdisciplinary initiative, sponsored by the U.S. National Institutes of Health and the Centers for Disease Control and Prevention, that began in 2005. New management training and organizational culture change interventions are being designed to increase employee control over work schedules (cf. Kossek & Hammer, 2008; Kelly & Moen, 2007). The premise is that increasing supervisory and cultural support for workplace flexibility will enable employees to have more control over work schedules, reduce work-family conflicts, and ultimately improve worker health, family well-being, and organizational productivity. Conducted in over 60 work sites nationwide, the study uses a longitudinal quasi-experimental design with repeated waves of measurement of I/O

outcomes, as well as measures of biodata and productivity from workers, coworkers, supervisors, and families. Overall, the study will assess the utility of increased work schedule flexibility as an effective workplace intervention to increase worker health and work productivity. It is an example of the kind of integrative future research that is needed to improve the promise of flexible work schedules to benefit workers, employers, and society (<http://www.workfamilyhealthnetwork.org>).

References

- Allen, T. D. (2001). Family-supportive work environments: The role of organizational perceptions. *Journal of Vocational Behavior*, 58, 414-435. doi:10.1006/jvbe.2000.1774
- Allen, T. D., & Russell, J. E. A. (1999). Parental leave of absence: Some not so family-friendly implications. *Journal of Applied Social Psychology*, 29, 166-191. doi:10.1111/j.1559-1816.1999.tb01380.x
- Allenspach, H. (1975). *Flexible working hours*. Geneva: International Labor Office.
- Anderson, S., Coffey, B. S., & Byerly, R. (2002). Formal organizational initiatives and informal workplace practices: Links to work-family conflict and job-related outcomes. *Journal of Management*, 28, 787-810. doi:10.1016/S0149-2063(02)00190-3
- Ang, S., & Slaughter, S. A. (2001). Work outcomes and job design for contract versus permanent information systems professionals on software development teams. *MIS Quarterly*, 25, 321-350. doi:10.2307/3250920
- Ashford, S. J., George, E., & Blatt, R. (2008). Old assumptions, new work: The opportunities and challenges of research on nonstandard employment. In J. P. Walsh & A. Brief (Eds.), *Academy of Management annals* (pp. 65-117). New York: Erlbaum.
- Ashforth, B. E. (2001). *Role transitions in organizations: An identity-based perspective*. Mahwah, NJ: LEA Press.
- Avery, C., & Zabel, D. (2001). *The flexible workplace: A sourcebook of information and research*. Westport, CT: Quorum.
- Bachler, C. J. (1995). Workers take leave of job stress. *Personnel Journal*, 74, 38-48.
- Balepur, P. N., Varma, K. V., & Mokhtarian, P. L. (1998). Transport impacts of centre-based telecommuting: Interim findings from the neighborhood telecenters project. *Transportation*, 25, 287-306. doi:10.1023/A:1005048329523
- Baltes, B. B., Briggs, T. E., Huff, J. W., Wright, J. A., & Neuman, G. A. (1999). Flexible and compressed workweek schedules: A meta-analysis of their

- effects on work-related criteria. *Journal of Applied Psychology*, 84, 496–513.
- Barnett, R. C. (1998). Toward a review and reconceptualization of the work/family literature. *Genetic, Social, and General Psychology Monographs*, 124, 125–182.
- Barnett, R. C., Gareis, K. C., & Brennan, R. T. (2008). Wives' shift work schedules and husbands' and wives' well-being in dual-earner couples with children: A within-couple analysis. *Journal of Family Issues*, 29, 396–422.
- Barnett, R. C., & Hall, D. T. (2007). The silver lining in shift work: Can your organization take advantage of it? *Organizational Dynamics*, 36, 404–417. doi:10.1016/j.orgdyn.2007.06.006
- Barringer, M., & Milkovich, G. (1998). A theoretical explanation of the adoption and design of flexible benefit plans: A case in human resource innovation. *Academy of Management Review*, 23, 305–324. doi:10.2307/259376
- Baum, C. L., II. (2006). The effects of government-mandated family leave on employer family leave policies. *Contemporary Economic Policy*, 24, 432–445. doi:10.1093/cep/byj025
- Bergman, M. E. (2002, August). *Psychological and objective contingency as predictors of work attitudes and behavior*. Paper presented at the Academy of Management meeting, Denver, Colorado.
- Bernardino, A., & Ben-Akiva, M. (1996). Modeling the process of adoption of telecommuting: Comprehensive framework. *Transportation Research Record*, 1552, 161–170. doi: 10.3141/1552-22
- Bernhard-Oettel, C., Sverke, M., & De Witte, H. (2005). Comparing three alternative types of employment with permanent full-time work: How do employment contract and perceived job conditions related to health complaints? *Work and Stress*, 19, 301–318. doi:10.1080/02678370500408723
- Bond, T. Thompson, C., Galinsky, E., & Protas, D. (2003). *Highlights of the National Study for the Changing Workforce*. New York: Families and Work Institute.
- Boyce, A. S., Ryan, A. M., Imus, A. L., & Morgeson, F. P. (2007). "Temporary worker, permanent loser?" A model of the stigmatization of temporary workers. *Journal of Management*, 33, 5–29. doi:10.1177/0149206306296575
- Breaugh, J. A., & Frye, N. K. (2008). Work–family conflict: The importance of family-friendly employment practices and family-supportive supervisors. *Journal of Business and Psychology*, 22, 345–353. doi:10.1007/s10869-008-9081-1
- Bureau of Labor Statistics. (2009, May 27). *Employment characteristics of families in 2008*. Retrieved February 19, 2010, from <http://www.bls.gov/news.release/pdf/lamee.pdf>
- Burke, M. E. (2005). *Benefits Survey Report: A study by the Society for Human Resource Management*. Alexandria, VA: Society for Human Resource Management.
- Butler, A., Gasser, M., & Smart, L. (2004). A social-cognitive perspective on using family-friendly benefits. *Journal of Vocational Behavior*, 65, 57–70. doi:10.1016/S0001-8791(03)00097-6
- Byron, K. (2005). A meta-analytic review of work–family conflict and its antecedents. *Journal of Vocational Behavior*, 67, 169–198.
- Cappelli, P. (1999). Career jobs are dead. *California Management Review*, 42(1), 146–167.
- Casper, W. J., & Harris, C. M. (2008). Work-life benefits and organizational attachment: Self-interest utility and signaling theory models. *Journal of Vocational Behavior*, 72, 95–109.
- Chesley, N., & Moen, P. (2006). When workers care: Dual-earner couples' caregiving strategies, benefit use, and psychological well-being. *American Behavioral Scientist*, 49, 1248–1269. doi:10.1177/0002764206286388
- Christensen, K. E., & Staines, G. L. (1990). Flextime: A viable solution to work/family conflict? *Journal of Family Issues*, 11, 455–476. doi:10.1177/019251390011004007
- Clifton, T. J., & Shepard, E. (2004). Work and family programs and productivity: Estimates applying a production function model. *International Journal of Manpower*, 25, 714–728. doi:10.1108/01437720410570036
- Cohen, P. (2002). Cohabitation and the declining marriage premium of men. *Work and Occupations*, 29(3), 346–363. doi:10.1177/0730888402029003004
- Cohen, A. R., & Gadon, H. (1978). *Alternative work schedules: Integrating individual and organizational needs*. Reading, MA: Addison-Wesley.
- Conley, H. M. (2003). Temporary work in the public services: Implications for equal opportunities. *Gender, Work and Organization*, 10, 455–477. doi:10.1111/1468-0432.00206
- Connelly, C. E., & Gallagher, D. G. (2004). Emerging trends in contingent work research. *Journal of Management*, 30, 959–983. doi:10.1016/j.jm.2004.06.008
- Contingent and alternative work arrangements. (2005, February). Retrieved August 7, 2008, from <http://www.bls.gov/news.release/conemp.nr0.htm>
- Costa, G. (2003). Factors influencing health of workers and tolerance to shift work. *Theoretical Issues in Ergonomics Science*, 4, 263–288. doi:10.1080/14639220210158880
- Crosby, F. J., Williams, J. C., & Biernat, M. (2004). The maternal wall. *Journal of Social Issues*, 60, 675–682. doi:10.1111/j.0022-4537.2004.00379.x

- Cully, M., O'Reilly, A., & Millward, N. (1998). *The 1998 Workplace Employee Relations Survey First findings* (URN 98/934). London and Swindon, England: Department of Trade and Industry; Economic and Social Research Council; and Advisory, Conciliation and Arbitration Service.
- Dalton, D. R., & Mesch, D. J. (1990). The impact of flexible scheduling on employee attendance and turnover. *Administrative Science Quarterly*, 35, 370-387. doi:10.2307/2393395
- Davidson, O. B., Eden, D., & Westman, M. (2004). *Sabbatical leave as a "time out" from chronic academic job stress: A test of conservation of resources theory*. Unpublished manuscript.
- Davis, A., & Kalleberg, A. (2006). Family friendly organizations: Work and family programs in the 1990s. *Work and Occupations*, 33, 191-223. doi:10.1177/0730888405280446
- Davenport, T., & Pearlson, K. (1998). Two cheers for the virtual office. *Sloan Management Review*, 39(4), 51-65.
- Deal, J. (2007). *Retiring the generation gap: How employees young and old can find common ground*. San Francisco: Jossey-Bass and Center for Creative Leadership.
- De Bloom, J., Kompier, M., Geurts, S., De Weerth, C., Taria, T., & Sonnentag, S. (2009). Do we recover from vacation? Meta-analysis of vacation effects on health and well-being. *Journal of Occupational Health*, 51(1), 13-25. doi:10.1539/joh.K8004
- Deci, E. L., & Ryan, R. M. (1995). Human autonomy: The basis for true self-esteem. In M. Kemis (Ed.), *Efficacy, agency, and self-esteem* (pp. 31-49). New York: Plenum Press.
- Dieringer Research Group. (2004). *American interactive consumer survey*. Brookfield, WI: Author.
- Druker, J., White, G., Hegewisch, A., & Mayne, L. (1996). Between hard and soft HRM: Human resource management in the construction industry. *Construction Management and Economics*, 14, 405-416. doi:10.1080/014461996373278
- Duetschman, A. (1994). The managing wisdom of high-tech superstars. *Fortune*, 17, 197-206.
- Dunham, R. B., Pierce, J. L., & Castaneda, M. B. (1987). Alternative work schedules: Two field quasi-experiments. *Personnel Psychology*, 40, 215-242. doi:10.1111/j.1744-6570.1987.tb00602.x
- Eaton, S. (2003). If you can use them: Flexibility policies, organizational commitment and perceived performance. *Industrial Relations*, 42, 145-167.
- Etzion, D. (2003). Annual vacation: Duration of relief from job stressors and burnout. *Anxiety, Stress & Coping*, 16, 213-226.
- Evans, J., Kunda, G., & Barley, S. (2004). Beach time, bridge time, and billable hours: The temporal structure of technical contracting. *Administrative Science Quarterly*, 49, 1-38.
- Fagan, C. (2001). The temporal reorganization of employment and household rhythm of work schedules. *American Behavioral Scientist*, 44, 1199-1212. doi:10.1177/00027640121956728
- Feldman, D. C., & Doeringhaus, H. L. (1992). Patterns of part-time employment. *Journal of Vocational Behavior*, 41, 283-294. doi:10.1016/0001-8791(92)90030-4
- Fletcher, J. K., & Bailyn, L. (1996). Challenging the last boundary: Reconnecting work and family. In M. B. Arthur & D. M. Rousseau (Eds.), *The boundaryless career* (pp. 256-267). New York: Oxford University Press.
- Fritz, C., & Sonnentag, S. (2006). Recovery, well-being, and performance-related outcomes: The role of workload and vacation experiences. *Journal of Applied Psychology*, 91, 936-945. Medline doi:10.1037/0021-9010.91.4.936
- Galinsky, E., Bond, J. T., & Hill, E. J. (2004). *A status report on workplace flexibility: Who has it? Who wants it? What difference does it make?* New York: Families & Work Institute.
- Galup, S., Saunders, C., Nelson, R. E., & Cerveney, R. (1997). The use of temporary staff and managers in a local government environment. *Communication Research*, 24, 698-730. doi:10.1177/0093650297024006005
- Golden, L. (2001, March). Flexible work schedules: What are we trading to get them? *Monthly Labor Review*, 124(3), 50-67.
- Golden, L. (2008). Limited access: Disparities in flexible work schedules and work-at-home. *Journal of Family and Economic Issues*, 29, 86-109. doi:10.1007/s10834-007-9090-7
- Golden, T. D., Veiga, J. F., & Simsek, Z. (2006). Telecommuting's differential impact on work-family conflict: Is there no place like home? *Journal of Applied Psychology*, 91, 1340-1350. Medline doi:10.1037/0021-9010.91.6.1340
- Goodale, J. G., & Aagaard, A. K. (1975). Factors relating to varying reactions to the 4-day workweek. *Journal of Applied Psychology*, 60, 33-38. doi:10.1037/h0076345
- Granrose, C. S., & Appelbaum, E. (1986, January). The efficiency of temporary help and part-time employment. *Personnel Administrator*, 31(1), 71-82.
- Greenhaus, J. H., & Powell, G. N. (2006). When work and family are allies: A theory of work-family enrichment. *Academy of Management Review*, 31, 72-92.

- Grönlund, A. (2007). More control, less conflict? Job demand-control, gender and work-family conflict. *Gender, Work and Organization*, 14, 476-497. doi:10.1111/j.1468-0432.2007.00361.x
- Halpern, D. F. (2005). How time-flexible work policies can reduce stress, improve health, and save money. *Stress and Health*, 21, 157-168. doi:10.1002/smi.1049
- Hammer, L. B., & Barbera, K. M. (1997). Toward an integration of alternative work schedules and human resource systems. *Human Resource Planning*, 20(2), 28-36.
- Hammer, L., Kossek, E., Anger, K., Bodner, T., & Zimmerman, K. (2009, April). *A field study to clarify work-family intervention processes: The roles of work-family conflict and family supportive supervisor behaviors* (Working Paper, Portland State University, OR). Paper presented at the Annual Meeting of the Society for Industrial Psychology.
- Hammer, L. B., Kossek, E. E., Zimmerman, K., & Daniels, R. (2007). Clarifying the construct of family supportive supervisory behaviors (FSSB): A multilevel perspective. In P. L. Perrewe & D. C. Ganster (Eds.), *Research in occupational stress and well-being* (Vol. 6, pp. 171-211). Amsterdam: Elsevier.
- Hammer, L. B., Neal, M. B., Newsom, J., Brockwood, K. J., & Colton, C. (2005). A longitudinal study of the effects of dual-earner couples' utilization of family-friendly workplace supports on work and family outcomes. *Journal of Applied Psychology*, 90, 799-810. doi:10.1037/0021-9010.90.4.799
- Hamermesh, D. (1999). The timing of work over time. *Economic Journal*, 109, 37-66. doi:10.1111/1468-0297.00390
- Harris, H., & Fennell, H. (1988). A multivariate model of job stress and alcoholic consumption. *The Sociological Quarterly*, 29, 391-406. doi:10.1111/j.1533-8525.1988.tb01260.x
- Henderson, D., & Mokhtarian, P. (1996). Impacts of center-based telecommuting on travel and emissions: Analysis of the Puget Sound demonstration project. *Transportation Research Part D, Transport and Environment*, 1(1), 29-45. doi:10.1016/S1361-9209(96)00009-0
- Hernreich, R. (2008). [Post to Ellen Ernst Kossek, Harvard Business Press blog]. Retrieved August 23, 2008, from http://conversationstarter.hbsp.com/2008/04/when_flextime_isnt_working.html
- Higgins, C., Duxbury, L., & Johnson, K. L. (2000). Part-time work for women: Does it really help balance work and family? *Human Resource Management*, 39, 17-32. doi:10.1002/(SICI)1099-050X(200021)39:1<17::AID-HRM3>3.0.CO;2-Y
- Hill, E. J., Martinson, V. K., Ferris, M., & Baker, R. Z. (2004). Beyond the mommy track: The influence of new-concept part-time work for professional women on work and family. *Journal of Family and Economic Issues*, 25, 121-136. doi:10.1023/B:JEEI.0000016726.06264.91
- Hornung, S., Rousseau, D. M., & Glaser, J. (2008). Creating flexible work arrangements through idiosyncratic deals. *Journal of Applied Psychology*, 93, 655-664. doi:10.1037/0021-9010.93.3.655
- Houseman, S., & Osawa, M. (Eds.). (2003). *Nonstandard work in developed economies: Causes and consequences*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.
- Hunnicutt, B. K. (1996). *Kellogg's six-hour day*. Philadelphia: Temple University Press.
- Ilies, R., Schwind, K., Wagner, D., Johnson, M., DeRue, S., & Ilgen, D. (2007). When can employees have a family life? The effects of daily workload and affect on work-family conflict and social behaviors at home. *Journal of Applied Psychology*, 92, 1368-1379. doi:10.1037/0021-9010.92.5.1368
- Ivanovic, A., & Collin, P. (Eds.). (2006). *Dictionary of human resources and personnel management*. London: A & C Black.
- Jansen, N. W. H., Kant, I., Nijhuis, F. J. N., Swaen, G. M. H., & Kristensen, T. S. (2004). Impact of worktime arrangements on work-home interference among Dutch employees. *Scandinavian Journal of Work, Environment & Health*, 30, 139-148.
- Jacobs, J., Gerson, K., & Gornick, J. (2004). *The time divide: Work, family and gender inequality* (pp. 127-147). Cambridge: Harvard University Press.
- Jacobs, J., & Winslow, S. (2004). Overworked faculty: Job stresses and family demands. *Annals of the American Academy of Political and Social Science*, 596, 104-129.
- Kahne, H. (1985). *Reconceiving part-time work: New perspectives for older workers and women*. Totowa, NJ: Rowman & Allanheld.
- Karnowski, S., & White, B. (2002). The role of facility managers in the diffusion of organizational telecommuting. *Environment and Behavior*, 34, 322-334. doi:10.1177/0013916502034003003
- Karasek, R. (1979). Job demands, job decision latitude and mental strain. *Administrative Science Quarterly*, 24, 285-308. doi:10.2307/2392498
- Karasek, R. A., & Theorell, T. (1990). *Healthy work: Stress, productivity, and the reconstruction of working life*. New York: Basic Books.
- Kelly, E. (2006). Work-family policies: The U.S. in international perspective. In M. Pitt-Catsoupes, E. Kossek, & S. Sweet (Eds.), *The work and family handbook: Multi-disciplinary perspectives, methods and approaches* (pp. 99-124). Mahwah, NJ: Erlbaum.
- Kelly, E. L., & Moen, P. (2007). Rethinking the clock-work of work: Why schedule control may pay off at

- work and at home. *Advances in Developing Human Resources*, 11, 487–506.
- Kelly, E., Kossek, E., Hammer, L., Durham, M., Bray, J., Chermack, K., et al. (2008). Getting there from here: Research on the effects of work–family initiatives on work–family conflict and business outcomes. In J. P. Walsh & A. Brief (Eds.), *Academy of Management annals* (Vol. 2, No. 1, pp. 305–349). Briarcliff Manor, NY: Academy of Management.
- Kossek, E. (2008). *When flextime isn't working* [post on Harvard Business Publishing blog]. Retrieved October 6, 2009, from http://blogs.harvardbusiness.org/cs/2008/04/when_flextime_isnt_working.html
- Kossek, E., & Distelberg, B. (2008). Work and family employment policy for a transformed work force: Trends and themes. In N. Crouter & A. Booth (Eds.), *Work-life* (pp. 1–51). Washington, DC: Urban Institute Press.
- Kossek, E., & Distelberg, B. (2009). Work and family employment policy for a transformed work force: Trends and themes. In N. Crouter & A. Booth (Eds.), *Work-life policies that make a real difference for individuals, families, and organizations* (pp. 3–51). Washington, DC: Urban Institute Press.
- Kossek, E., & Hammer, L. (2008, November). Work/life training for supervisors gets big results. *Harvard Business Review*, p. 36.
- Kossek, E., & Lautsch, B. (2008). *CEO of me: Creating a life that works in the flexible job age*. New York: Wharton School.
- Kossek, E., & Lautsch, B. (2009). "Good teleworking": Under what conditions does teleworking enhance employees' well-being? In Y. Amichai-Hamburger (Ed.), *Technology and psychological well-being* (pp. 148–173). Cambridge, England: Cambridge University Press.
- Kossek, E., Lautsch, B., & Eaton, S. (2005). Flexibility enactment theory: Implications of flexibility type, control and boundary management for work–family effectiveness. In E. E. Kossek & S. Lambert (Eds.), *Work and life integration: Organizational, cultural and psychological perspectives* (pp. 243–262). Mahwah, NJ: Erlbaum.
- Kossek, E., & Lee, M. (2005). *Making flexibility work: What managers have learned about implementing reduced-load work* (Alfred P. Sloan Foundation Study Technical Report). Williamsburg and Toronto, Ontario, Canada: Michigan State University and McGill University. Available at <http://ellenkossek.lir.msu.edu/>
- Kossek, E., & Lee, M. (2008). Implementing a reduced-workload arrangement to retain high talent: A case study. *Journal of Managerial Psychology*, 11(1), 49–64. doi:10.1080/10887150801966995
- Kossek, E., & Misra, K. (2008). Nonwork influences on work motivation. In R. Kanfer, G. Chen, & R. Pritchard (Eds.), *Work motivation: Past, present, and future* (pp. 471–500). Oxford, England: Routledge.
- Kossek, E. E. (2005). Workplace policies and practices to support work and families. In S. Bianchi, L. Casper, & R. King (Eds.), *Work, family, health, and well-being* (pp. 97–116). Mahwah, NJ: Erlbaum.
- Kossek, E. E. (2006). Work and family in America: Growing tensions between employment policy and a changing workforce: A thirty year perspective (Commissioned chapter by SHRM Foundation and University of California Center for Organizational Effectiveness for the 30th anniversary of the State of Work in America). In E. Lawler & J. O'Toole (Eds.), *America at work: Choices and challenges* (pp. 53–72). New York: Palgrave MacMillan.
- Kossek, E. E., Barber, A., & Winters, D. (1999). Using flexible schedules in the managerial world: The power of peers. *Human Resource Management*, 38, 33–46. doi:10.1002/(SICI)1099-050X(199921)38:1<33::AID-HRM4>3.0.CO;2-H
- Kossek, E. E., Lautsch, B. A., & Eaton, S. C. (2006). Telecommuting, control, and boundary management: Correlates of policy use and practice, job control, and work–family effectiveness. *Journal of Vocational Behavior*, 68, 347–367.
- Kossek, E. E., Noe, R., & DeMarr, B. (1999). Work–family role synthesis: Individual, family and organizational determinants. *Journal of Conflict Resolution*, 10, 102–129. doi:10.1108/eb022820
- Kossek, E. E., & Ozeki, C. (1998). Work–family conflict, policies, and the job–life satisfaction relationship: A review and directions for organizational behavior/human resources research. *Journal of Applied Psychology*, 83, 139–149. doi:10.1037/0021-9010.83.2.139
- Kossek, E., & Van Dyne, L. (2008). Face time matters: A cross level model of how work life flexibility influences work performance of individuals and groups. In D. Lero, K. Korabick, & D. Whitehead (Eds.), *Work family handbook*. Amsterdam: Elsevier.
- Kramer, D. C. (2001). *Workplace sabbaticals: Bonus or entitlement?* Westport, CT: Quorum.
- Kurkland, N. B., & Bailey, D. E. (1999). Telework: The advantages and challenges of working here, there, anywhere, and anytime. *Organizational Dynamics*, 28, 53–68. doi:10.1016/S0090-2616(00)80016-9
- Lambert, S. (2000). Added benefits: The link between work–life benefits and organizational citizenship behavior. *Academy of Management Journal*, 43, 801–815. doi:10.2307/1556411

- Landry, B., Mahesh, S., & Hartman, S. (2005). The changing nature of work in the age of e-business. *Journal of Organizational Change Management*, 18, 132-144. doi:10.1108/09534810510589561
- Lapierre, L. M., & Allen, T. D. (2006). Work-supportive family, family-supportive supervision, use of organizational benefits, and problem-focused coping: Implications for work-family conflict and employee well-being. *Journal of Occupational Health Psychology*, 11, 169-181. doi:10.1037/1076-8998.11.2.169
- Lautsch, B., & Kossek, E. (2009). Supervisor paradoxes of managing telecommuting. *Human Relations*, 62, 795-827. doi:10.1177/0018726709104543
- Lee, M. D., MacDermid, S. M., & Buck, M. L. (2000). Organizational paradigms of reduced load work: Accommodation, elaboration, transformation. *Academy of Management Journal*, 43, 1211-1226. doi:10.2307/1556346
- Lee, M. D., MacDermid, S. M., Williams, M. L., Buck, M. L., & Leiba-O'Sullivan, S. (2002). Contextual factors in the success of reduced-load work arrangements among managers and professionals. *Human Resource Management*, 41, 209-223. doi:10.1002/hrm.10032
- Lee, T. W., & Johnson, D. R. (1991). The effects of work schedule and employment status on the organizational commitment and job satisfaction of full-versus part-time employees. *Journal of Vocational Behavior*, 38, 208-224. doi:10.1016/0001-8791(91)90028-K
- Local Government Management Board. (1998). *Flexible working: Working patterns in local authorities and the wider economy*. London: Author.
- Lobel, S. A. (1991). Allocation of investment in work and family roles: Alternative Theories and implications for research. *Academy of Management Review*, 16, 507-521. doi:10.2307/258915
- Lobel, S. A., & Kossek, E. E. (1996). Human resource strategies to support diversity in work and personal lifestyles: Beyond the "family-friendly" organization. In E. E. Kossek & S. A. Lobel (Eds.), *Managing diversity: Human resource strategies for transforming the workplace* (pp. 221-244). Cambridge, MA: Blackwell.
- Lockyer, C., & Scholarios, D. (2007). The "rain dance" of selection in construction: Rationality as ritual and the logic of informality. *Personnel Review*, 36, 528-548. doi:10.1108/00483480710752786
- Lucas, J. L., & Heady, R. B. (2002). Flextime commuters and their driver stress, feelings of time urgency, and commute satisfaction. *Journal of Business and Psychology*, 16, 565-571. doi:10.1023/A:1015402302281
- MacEachen, E., Polzer, J., & Clarke, J. (2008). You are free to set your own hours: Governing productivity and health through flexibility and resilience. *Social Science & Medicine*, 66, 1019-1033. doi:10.1016/j.socscimed.2007.11.013
- Marks, N. F. (1998). Does it hurt to care? Caregiving, work-family conflict, and midlife well-being. *Journal of Marriage and the Family*, 60, 951-966. doi:10.2307/353637
- Martens, M. F. J., Nijhuis, F. J. N., Van Boxtel, M. P. J., & Knottnerus, J. A. (1999). Flexible work schedules and mental and physical health: A study of a working population with non-traditional working hours. *Journal of Organizational Behavior*, 20, 35-46. doi:10.1002/(SICI)1099-1379(199901)20:1<35::AID-JOB879>3.0.CO;2-Z
- Martínez-Sánchez, A., Pérez-Pérez, M., Vela-Jiménez, M. J., & de-Luis-Carnicer, P. (2008). Telework adoption, change management, and firm performance. *Journal of Organizational Change Management*, 21, 7-31. doi:10.1108/09534810810847011
- Maxwell, G., Rankine, L., Bell, S., & MacVicar, A. (2007). The incidence and impact of flexible working arrangements in smaller businesses. *Employee Relations*, 29, 138-161. doi:10.1108/01425450710719987
- McDonald, D. J., & Makin, P. J. (2000). The psychological contact, organizational commitment and job satisfaction of temporary staff. *Leadership and Organization Development Journal*, 21, 84-91. doi:10.1108/01437730010318174
- McGinnis, S. K., & Morrow, P. C. (1990). Job attitudes among full- and part-time employees. *Journal of Vocational Behavior*, 36, 82-96. doi:10.1016/0001-8791(90)90016-U
- Meiksins, P., & Whalley, P. (2002). *Putting work in its place: A quiet revolution*. Ithaca, NY: Cornell University Press.
- Mery, A. (2009, May 15). Personal communication. General Electric site visit. Buc, France.
- Mokhtarian, P. L. (1998). A synthetic approach to estimating impacts of telecommuting on travel. *Urban Studies* [Edinburgh, Scotland], 35, 215-241. doi:10.1080/0042098984952
- Nippert-Eng, C. (1996). *Home and work: Negotiating boundaries through everyday life*. Chicago: University of Chicago Press.
- Nord, W. R., & Costigan, R. (1973). Workers adjustment to the four-day week: A longitudinal study. *Journal of Applied Psychology*, 58, 60-66. doi:10.1037/h0035419
- Olmsted, B., & Smith, S. (1989). *Creating a flexible workplace: How to select and manage alternative work options*. New York: AMACOM.
- Orpen, C. (1981). Effect of flexible working hours on employee satisfaction and performance: A field

- experiment. *Journal of Applied Psychology*, 66, 113–115. doi:10.1037/0021-9010.66.1.113
- Parker, L., & Allen, T. D. (2001). Work/family benefits: Variable related to employees' fairness perceptions. *Journal of Vocational Behavior*, 58, 453–468. doi:10.1006/jvbe.2000.1773
- Pearce, J. A. (1993). Toward an organizational behavior of contract laborers: Their psychological involvement and effects on employee coworkers. *Academy of Management Journal*, 36, 1082–1096. doi:10.2307/256646
- Pérez, M. P., Sánchez, A. M., & de-Luis-Carnicer, M. P. (2003). The organizational implications of human resources managers' perceptions of teleworking. *Personnel Review*, 32, 733–755. doi:10.1108/00483480310498693
- Pierce, J. L., & Newstrom, J. W. (1983). The design of flexible work schedules and employee responses: Relationships and process. *Journal of Occupational Behavior*, 4, 247–262.
- Pierce, J. L., Newstrom, J. W., Dunham, R. B., & Barber, A. E. (1989). *Alternative work schedules*. Needham Heights, MA: Allyn & Bacon.
- Piotet, F. (1988). *The changing face of work: Researching and debating the issues*. Dublin, Ireland: European Foundation for the Improvement of Living and Working Conditions.
- Pleck, J. H. (1997). Paternal involvement: Levels, origins, and consequences. In M. E. Lamb (Ed.), *The role of the father in child development* (3rd ed., pp. 66–103). New York: Wiley.
- Polivka, A. E., & Nardone, T. (1989). The definition of contingent work. *Monthly Labor Review*, 112, 9–16.
- Presser, H. (1999, June 11). Toward a 24-hour economy. *Science*, 284, 1778–1779. doi:10.1126/science.284.5421.1778
- Presser, H. (2003). *Working in a 24/7 economy: Challenges for American families*. New York: Russell Sage Foundation.
- Ralston, D. A. (1989). The benefits of flextime: Real or imagined? *Journal of Organizational Behavior*, 10, 369–373. doi:10.1002/job.4030100407
- Rau, B. (2003). Flexible work arrangements. *Work family encyclopedia*. Sloan Work-Family Network. Retrieved July 23, 2009, from http://wfnetwork.bc.edu/encyclopedia_entry.php?id=240&area=All
- Richman, A., Civian, J., Shannon, L., Hill, J., & Brennan, R. (2008). The relationship of perceived flexibility, supportive work life policies, and use of formal flexible arrangements and occasional flexibility to employee engagement and expected retention. *Community Work & Family*, 11(20), 183–197. doi:10.1080/13668800802050350
- Robert, M., & Börjesson, M. (2006). Company incentives and tools for promoting telecommuting. *Environment and Behavior*, 38, 521–549. doi:10.1177/0013916505283422
- Ronen, S. (1981). *Flexible working hours: An innovation in the quality of work life*. New York: McGraw-Hill.
- Rothbard, N., Phillips, K., & Dumas, T. (2005). Managing multiple roles: Work-family policies and individual's desires for segmentation. *Organization Science*, 16, 243–258. doi:10.1287/orsc.1050.0124
- Rousseau, D. (2007). *I-Deals: Idiosyncratic deals that employees bargain for themselves*. New York: W. E. Sharpe.
- Ryan, A., & Kossek, E. (2008). Work-Life Policy Implementation: Breaking Down or Creating Barriers to Inclusiveness. *Human Resource Management*, 47, 295–310. doi:10.1002/hrm.20213
- Shockley, K. M., & Allen, T. D. (2007). When flexibility helps: Another look at the availability of flexible work arrangements and work-family conflict. *Journal of Vocational Behavior*, 71, 479–493. doi:10.1016/j.jvb.2007.08.006
- Sonnentag, S. (2001). Work, recovery activities, and individual well-being: A diary study. *Journal of Occupational Health Psychology*, 6, 196–210. doi:10.1037/1076-8998.6.3.196
- Stavrou, E. T. (2005). Flexible work bundles and organizational competitiveness: A cross-national study of the European work context. *Journal of Organizational Behavior*, 26, 923–947. doi:10.1002/job.356
- Stebbins, L. F. (2001). *Work and family in America: A reference handbook*. Santa Barbara, CA: ABC-CLIO.
- Tilly, C. (1996). *Half a bad job: Bad and good part time jobs in a changing labor market*. Philadelphia: Temple University Press.
- Totterdell, P., Spelten, E., Smith, L., Barton, J., & Folkard, S. (1995). Recovery from work shifts: How long does it take? *The Journal of Applied Psychology*, 80(1), 43–57. doi:10.1037/0021-9010.80.1.43
- UK Department for Business Innovation & Skills. (1998). *Workplace employee relations survey*.
- University of Illinois Office of the Vice President for Academic Affairs. (1996). *Sabbatical study*. Retrieved July 10, 2008, from http://www.vpaa.uillinois.edu/reports_retreats/sabbatical.asp
- U.S. Census Bureau. (2002). *Statistical abstract of the United States: 2002, The National Data Book, Section 12, Labor force, employment, and earnings, Table No. 578. Persons doing job-related work at home: 2001*. Washington, DC: U.S. Census Bureau.
- U.S. Office of Personnel Management. (2003). *Negotiating flexible and compressed work schedules*. Retrieved July 2007 from <http://www.opm.gov/lmr/html/flexible.asp>

- Williams, J. C., & Calvert, C. T. (2002). Balanced hours: Effective part-time policies for Washington law firms: The Project for Attorney Retention [Final report, 3rd ed.]. *William & Mary Journal of Women and the Law*, 8, 357. Available at http://www.triplet.com/50-10_employment/50-20_workingtime.asp
- Van Dyne, L., Kossek, E., & Lobel, S. (2008). Less need to be there: Cross level effects of work practices that support work-life flexibility and enhance group processes and group-level OCB. *Human Relations*, 60, 1123-1153.
- Van Dyne, L., & Ang, S. (1998). Organizational citizenship behavior of contingent workers in Singapore. *Academy of Management Journal*, 41, 692-703.
- Van Echtelt, P., Giebbeeck, A., & Lindenberg, S. (2006). The new lumpiness of work: Explaining the mismatch between actual and preferred working hours. *Work, Employment and Society*, 20, 493-512.
- van Rijswijk, K., Bekker, M. H. J., Rutte, C. G., & Croon, M. A. (2004). The relationships among part-time work, work-family interference, and well-being. *Journal of Occupational Health Psychology*, 9, 286-295.
- Venkatesh, V., & Johnson, P. (2002). Telecommuting technology implementations: A within- and between-subjects longitudinal field study. *Personnel Psychology*, 55, 661-687.
- Vroom, V. (1964). *Work and motivation*. New York: Wiley.
- Watson, I., Buchanan, J., Campbell, I., & Briggs, C. (2003). *Fragmented futures: New challenges in working life*. Sydney, Australia: Federation Press.
- Whyte, W. (1956). *The organization man*. New York: Simon & Schuster.