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Uncovering the Missing Link in Flexible Work Arrangement Utilization: An Individual Difference Perspective

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Uncovering the Missing Link in Flexible Work Arrangement Utilization: An Individual
Difference Perspective

by

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A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Arts
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Uncovering the Missing Link in Flexible Work Arrangement Utilization: An Individual
Difference Perspective

Kristen M. Shockley

ABSTRACT

Changes in the workforce have led to an increase in work-family conflict for many employed individuals. Fortunately, many organizations have recognized and responded to employees' work-family issues through the implementation of family-friendly benefits, such as flexible work arrangements (FWA).

While offering family-friendly benefits is an important step in easing work-family conflicts, the mere availability of such initiatives may not be enough, as research shows that availability of benefits and utilization are only moderately correlated. These statistics highlight the presence of intermediating factors in the relationship between availability and utilization of family-friendly benefits. With this in mind, some researchers have examined the role of organizational factors in inhibiting benefit use. Although these organizational variables are essential in understanding the relationship between availability and use of flexible benefits, they neglect an important factor – the role that the individual may play in deciding whether to take advantage of these policies. With the exception of general demographic information, only one known study (Butler et al., 2004) has investigated the influence of an individual difference psychological factor in predicting benefit use.

The current study addresses this gap in the literature by testing the influence of

individual differences on FWA utilization. The study focuses on individual differences in four need-based motivational factors, need for affiliation at work, need for structure in the workplace, need for segmentation of work from other life roles, and need for occupational achievement, on flextime and flexplace usage. Furthermore, because FWA policies involve altering physical presence at work, a situational variable that involves the same dynamics, value of “face-time” within an organization, was examined as a moderator in each these relationships. Participants were 238 faculty members at a large research university. Results showed that the need for segmentation and the need for structure were negatively related to flextime and flexplace use, and the need for achievement and need for affiliation were not significantly related to either FWA. Face-time orientation did not significantly moderate any of these relationships. Theoretical and practical implications, as well as future directions, are discussed.

Chapter One

Introduction

Workforce changes in demographic composition, work attitudes, and employer expectations have led to an increase in the conflicting demands of work and family life for many employed individuals (Parasuraman & Greenhaus, 1997). Such conflict, aptly named work-family conflict, has numerous negative repercussions for both the individual and the organization. For example, well-documented are the relationships between work-family conflict and physical health symptoms, depression, substance abuse, lower job satisfaction, greater turnover intentions, and less career satisfaction (e.g., Bruck, Allen, & Spector, 2002; Frone, 2000; Frone, Russell, & Cooper, 1997; Greenhaus, Parasuraman, & Collins, 2001; Martins, Eddleston, & Viega, 2002; Schmidt, Colligan, & Fitzgerald, 1980). Fortunately, many organizations have recognized and responded to employees' work-family issues through the implementation of family-friendly benefits. Examples of common family-friendly benefits include flextime, flexplace, family relevant resource and referral programs, on-site daycares, and eldercare assistance (Lobel & Kossek, 1996).

While offering family-friendly benefits is an important step in easing work-family conflicts, the mere availability of such initiatives may not be enough (Christensen & Staines, 1990; Rodgers, 1992; Thompson, Beauvais, & Lyness, 1999). In fact, researchers measuring both availability and actual utilization of family-friendly benefits report modest correlations between the two. For example, Allen (2001) cites a significant correlation of .54 between flexible benefits offered and those used. Breugh and Frye

(2006) report a significant correlation of .31 between family-friendly benefits provided and those actually used, and Thompson et al. (1999) cite a similar statistic of .28. Interestingly, Butler, Gasser, and Smart (2004) failed to find a significant correlation between family-friendly benefit access and use.

These statistics highlight the presence of intermediating factors in the relationship between availability and utilization of family-friendly benefits. With this in mind, some researchers have examined the role of organizational factors in inhibiting benefit use (e.g., Allen, 2001; Thompson et al., 1999). Although these organizational variables are essential in understanding the relationship between availability and use of flexible benefits, they neglect an important factor – the role that the individual may play in deciding whether to take advantage of these policies. With the exception of general demographic information, only one known study (Butler et al., 2004) has investigated the influence of an individual difference psychological factor in predicting benefit use. The authors found that work-family self-efficacy, or one's belief that he or she is capable of balancing work and family demands, negatively related to family-friendly benefit use. In fact, the authors conclude that the individual is an important area for future research, as “individual psychological factors predicting benefit use remain largely unknown” (p. 58). Moreover, understanding the role of the individual in the decision to use benefits is important in a theoretical sense, as it adds to a comprehensive model of work-family balance strategies. From a practical standpoint, information about individuals can be employed to make work-family policies more usable and effective (Butler et al., 2004).

The current study addresses this gap in the literature by testing the influence of individual differences on the use of one particular family-friendly benefit, flexible work

arrangements (FWA). The study focuses on individual differences in terms of need-based motivational factors. Utilization of benefits is an active process; therefore, examining personality factors that motivate one to actually use policies seems highly relevant. Because FWA policies involve altering physical presence at work, a situational variable that involves the same dynamics, value of “face-time” within an organization, was also examined.

Taken together, the overall aim of the present study is to examine the influence of individual differences in four need-based motivational factors, need for affiliation, need for structure, need for segmentation, and need for achievement, on flextime and flexplace usage and to furthermore examine the extent that face-time orientation moderates these relationships.

Given that the outcome variables of the present study are use of FWA, it is essential to investigate these variables in a context where FWA are readily available. Academia is one such context. Specifically, the occupation of a university professor is known for its flexibility, as professors generally have a great degree of discretion as to where and when work is completed. Importantly, there is also considerable variability in the extent that academics use this flexibility. Some choose to operate under the traditional nine to five system, working at their university offices, while others choose to work off campus. Moreover, flexible policies in academia are generally not formal policies. That is, most academics use their own discretion in work habits and are not required to formally check in with a supervisor before using FWA. This reduces differences in supervisor effects on FWA use, allowing differences in use to be more easily attributed to individual factors. Finally, while the organizational variable of

interest, value of face-time, is likely to be less salient in academia than other occupations, variation is still likely across academic departments.

What follows is a more detailed discussion of FWA, with a particular focus on the two types that were used as dependent variables in the current study. Next, a review of the existing literature that has attempted to link availability and utilization will be presented. Following this, the theory and hypotheses relevant to the current study will be introduced.

Flexible Work Arrangements

In an attempt to aid employees in the struggle of balancing work and life responsibilities, numerous companies have implemented flexible work arrangements. The two most commonly used FWA are flextime and flexplace (Society for Human Resource Management, 2001). Likewise, the current study specifically focuses on the use of these two benefits. Flextime is “a work schedule in which employees can use their own discretion as to the time on the job as long as they complete the specified number of hours within a work period,” (Barker, 1999) while flexplace is broadly defined as flexibility regarding where work is completed and includes options such as telecommuting or working from a virtual office (Hill, Hawkins, Ferris, & Weitzman, 2001). Flexplace also implies the availability of work stations both at home and in the office with flexibility to move between the two at the employee’s convenience (Shamir & Solomon, 1985). FWA are assumed to facilitate the management of competing demands from work and non-work through increases in temporal flexibility (when work is done) and in spatial flexibility (where work is done) (Rau, 2003).

Naturally, these initiatives have sparked the interest of many researchers in terms

of their effects on the organization and the individual. Combining the many studies that have addressed these issues, Baltes, Briggs, Huff, Wright, and Neuman (1999) used meta-analytic techniques to estimate the effects of flexible schedules on productivity/performance, job satisfaction, absenteeism, and satisfaction with work schedules. The meta-analysis only included studies with an experimental design, comparing a group with a flextime intervention and a control group with standard work arrangements to ensure that effects could be attributed to the flextime implementation. Results indicate that flexible work schedules favorably influenced productivity, job satisfaction, absenteeism, and satisfaction with work schedule, with absenteeism being the most influenced. The effects were non significant for self-rated performance.

In regards to flexplace, the two most frequently studied outcomes are productivity and job satisfaction (Bailey & Kurland, 2002). Although there is some variation in results, most researchers investigating the relationship of flexplace and productivity report a positive association between the two (Belanger, 1999; Frolick, Wilkes, & Urwiler, 1993; Geisler, 1985; Hill, Miller, Weiner, & Colihan, 1998; Hartman, Stoner, and Arora, 1992; Olson, 1989; Phelps, 1985; Pratt, 1984). It is important to note that these results should be interpreted cautiously since all of the studies used self-report measures of productivity, which may be prone to exaggeration as most telecommuters volunteer or request to work away from the office and may be biased to claim success (Bailey & Kurland, 2002; Chapman, Sheehy, Heywood, Dooley, Collins, 1995).

The findings regarding flexplace and job satisfaction are less clear. Several researchers report a positive relationship (Hammer, Neal, Newsom, Brockwood, & Colton, 2006; Igarria & Guimaraes, 1999; Kraut, 1989; Olson, 1989). However, others

have suggested that increases in job satisfaction granted by greater flexibility may be offset by the negative repercussions of social isolation (Chapman et al., 1995; Cooper & Kurland, 2002; Dooley, 1996; Gainey, Kelley, & Hill, 1999). In an attempt to reconcile inconsistent findings, Golden and Veiga (2005) found support for their model contending that the extent of telecommuting is related to job satisfaction in an inverted U-shaped manner. Specifically, those who work from alternate locations a moderate amount of time are more satisfied than those who rarely or often telework. The authors explain that moderate amounts of telecommuting maximize satisfaction by allowing management of face-to-face interactions and minimizing feelings of isolation, while still satisfying individual and organizational needs that enhance job satisfaction.

Factors Influencing FWA Utilization

Noting the discrepancy between FWA availability and utilization, several researchers have attempted to understand this relationship by examining organizational variables that inhibit or foster use. One of the most consistent findings is that having a supportive supervisor, one that empathizes with employees' desires to balance work and family and attempts to accommodate this desire (Thomas & Ganster, 1995), is essential in employees' decisions to use available benefits (e.g., Batt & Valcour, 2003; Breugh & Frye, 2006; Christensen & Staines, 1990; Rodgers, 1992; Shellenbarger, 1992). In addition to supervisors, the presence of supportive co-workers also facilitates FWA use (Blair-Loy & Wharton, 2004; Dikkers, Geurts, den Dulk, Peper, & Kompier, 2004; Kirby & Krone, 2002). Others have extended this research, contending that an overall supportive culture, not only a supportive supervisor and co-workers, is crucial to success of FWA policies (e.g., Clark, 2001; Eaton, 2003; Friedman & Johnson, 1997; Thomas &

Ganster, 1995; Thompson et al., 1999; Veiga, Baldrige, Eddleston, 2004). Allen (2001) adds that examining employee's global perceptions about the extent that their organization is supportive of family-friendly programs is additionally predictive in explaining FWA utilization, accounting for unique variance in the relationship over and above supervisor support or the availability of policies.

Additional research examining specific reasons why employees do not use available FWA policies cite fear of negative career consequences (Allen & Russell, 1999; Almer & Kaplan, 2002; Eaton, 2003; Fletcher & Bailyn, 1996; Thompson et al., 1999; Veiga et al., 2004) and organizational norms and reward systems that are incompatible with use (Hill & Weiner, 2003; Lobel & Kossek, 1996; Perlow, 1995; Rodgers, 1992; Thompson, Beauvais, & Allen, 2006). In regards to organizational norms, a topic of considerable mention is the need for organizations to shift from a face-time oriented culture to one that values results (Bailyn, 1993; Friedman, Christensen, & DeGroot, 1998; Hill & Weiner, 2003; Hill, Hawkins, & Martinson, 2003; Perlow, 1995; Rodgers, 1992; Thompson et al., 1999). In summation, the formal existence of flexible policies is not enough. Organizations must adapt their overall culture, norms, values, and reward systems to be consistent with the goals of FWA policies in order to maximize their actual utilization.

The few studies that have examined individual factors tend to focus on general demographic details. For instance, Belanger (1999) found that telecommuters and non-telecommuters differed significantly on job category and gender. Specifically, telecommuters were more likely to be in non-management positions and female. Thompson et al. (1999) concluded that employees who are female, married, or have

children living with them are more likely to use work-family benefits than those who are male, unmarried, and childless. In contrast, Blair-Loy and Wharton (2002) found that use of flexibility policies was unrelated to having young children, being a single parent, being female, or having a spouse as a full time homemaker.

In their sample of married workers, Sharpe, Hermsen, and Billings (2002) found that flextime use was significantly greater for both men and women who were Caucasian, had relatively high levels of education and income, and smaller household sizes. Also, women who had young children and work in managerial, technical, sales, and administrative support positions were most likely to use FWA. As previously mentioned, with the exception of Butler et al.'s (2004) study, research involving individual predictors of FWA is rather limited in scope, focusing on demographics rather than personality differences.

The following section discusses the theory and variables relevant to the present study. To start, a discussion of motivation with a particular focus on need-based motivational theories is presented. Next, the need-based motivational factors of interest are introduced, and relevant hypotheses about their association with FWA use are presented. Lastly, the topic of face-time orientation is discussed and hypotheses about its moderating effects on the relationship between motivational needs and FWA use are proposed.

Motivation

Motivation has been a topic of considerable emphasis in psychology since the 1930s and has been examined in a work context since the 1950s (Kanfer, 1991). Aptly, motivation has been conceptualized via numerous theoretical frameworks. Early work in

the area identified individuals' needs as an explanation for their motivation (e.g., Murray, 1938; Maslow, 1943; Atkinson, 1964; McClelland, 1965; Alderfer, 1972). Murray (1938) refers to a need as "an organic potentiality or readiness to respond in a certain way under given conditions" (p.61) that "gives rise to a certain course of overt behaviour (or fantasy), which (if the organism is competent and external opposition not insurmountable) changes the initiating circumstance in such a way as to bring about an end situation which stills (appeases or satisfies) the organism" (p. 124). Using the idea of needs, Maslow (1943) developed his need hierarchy theory, which placed needs into five distinct hierarchical categories that relied on the fulfillment of lower needs before the consideration of higher needs.

Building on Maslow's theory, Alderfer (1972) proposed existence-relatedness-growth theory, an improvement on the predecessor as it posited that different level needs could be fulfilled simultaneously. Employing similar logic, Atkinson (1964) and McClelland (1965) focused on a sole need, the need for achievement. In summary, need fulfillment theories argue that needs influence the interceding cognitive processes that result in behavior variability (Kanfer, 1991). However, one criticism of need fulfillment theories is their lack of specification of the mediating processes by which motivational needs translate to certain behaviors (Kanfer, 1991; Latham & Pinder, 2005)

Another group of motivation theories, labeled process theories, do provide insight into interceding cognitive processes. The most prominent process theory is expectancy theory (Vroom, 1964). Expectancy theory assumes that individuals' actions are dictated by their expectations of outcomes associated with these actions and by the relative valence (attractiveness) of those outcomes. Although the original model provides no

mention of the process by which valence is assumed, others have suggested (e.g., Lawler, 1971; Staw, 1977; Ronen, 1994) the importance of combining needs theories with expectancy theory to fill this gap. Ronen (1994) views the theories as complementary. He notes that valence serves as a link between these two types of theories, with needs contributing to the type and strength of the valence associated with a behavior and expectancy theory explaining the importance of perceived probability of outcomes.

By combining these frameworks, I believe the process by which individuals choose to use flexible work arrangements can be better understood. First, based on need-fulfillment theories, specific needs may influence one's desire to engage in use of flextime and/or flexplace. Building on this relationship, it is important to examine the impact of organizational factors in relation to individual differences in needs. As Kristof (1996) notes, the characteristics of the job and/or organization are quite influential in the relationship between individual differences (such as needs and values) and individual outcomes. Similarly, motivation is a result of the individual but also his or her interaction with the environment (Latham & Pinder, 2005). Combining needs and expectancy theoretical frameworks, it is conceivable that while individual differences in needs alone may contribute to FWA utilization, organizational variables can alter the valence of use as a means to satisfy needs, consequently resulting in behavior modification.

Motivational Needs

In the discussion of human needs and need based motivational theories, researchers have proposed various needs as well as diverse methods of classifying these needs. Originally, Murray (1938) noted 20 different manifest needs. He quantifies these

needs as social reaction systems that are used to raise or conserve acquired status, to form affiliations and interact with allied objects, or to resist or attack negative hostile objects. Maslow (1943) uses a more systematic approach to needs research with the proposal of a hierarchy of needs. The hierarchy contains five distinct classes, physiological, safety, love/belonging, status, and self-actualization, and the fulfillment of each is dependent of the satiation of the class below it.

Alderfer (1972) collapsed Maslow's needs into three categories, existence, relatedness, and growth. McClelland (1965) theory of needs posits that an individual's specific needs can be generally grouped as either achievement, affiliation, or power needs. Atkinson (1964) also focused on the need for achievement as an integral part of human motivation. Although the majority of needs based research is dated, there has been a resurgence of emphasis on needs in recent times (Latham & Pinder, 2005). One recent study contends that innate human needs fall into three categories: needs for acceptance and approval, needs for status, power, and control of resources, and needs for predictability and order (Hogan & Warrenfeltz, 2003).

In his fundamental proposition of human needs, Murray (1938) explains that different needs contribute to the enactment of different behaviors. Therefore, it is reasonable to assume for the present study that only a selection of needs pertaining to the work environment will contribute to behavior concerning FWA utilization. The four needs that I believe will be most influential in predicting FWA use fall into the broad categories proposed by Hogan and Warrenfeltz (2003). First, concerning the need for acceptance and approval, I will focus on the specific need for affiliation at work. Under the need for status, power, and control of resources, I will present implications involving

the need for occupational achievement. Finally, for needs for predictability and order, I will target the need for structure in the workplace and the need for integration/segmentation of work from other life roles.

Need for Affiliation at Work

Murray (1938) classified the need for affiliation as a desire to be near, cooperate, and engage in reciprocal relationships with others. The need for affiliation also includes the desire to feel a sense of belonging with others (Baumeister & Leary, 1995).

Individuals vary on the personal importance of this need, as a function of personality and cultural background (McClelland, 1961), and a substantial amount of human behavior, emotion, and thought is a result of the affiliation motive (Baumeister & Leary, 1995).

Affiliation is accomplished through “acts of establishing or maintaining positive affective relationships with people who are in a similar position as oneself” (Verroff & Verroff, 1980, p.192). When this need for affiliation is not met, negative consequences, such as maladjustment, stress, and other health problems may arise (Baumeister & Leary, 1995).

Moreover, need for affiliation has been examined in the context of the workplace.

Individuals with a high need for affiliation tend to engage in more communicative activities at work and gain a greater psychological sense of community at the workplace (Burroughs & Eby, 1998; Lansing & Heyns, 1959).

By definition, those with a high need for affiliation have a strong desire to associate and converse with others and to establish numerous strong affiliations.

Affiliations with others can be formed in a variety of contexts (i.e., community, leisure, and work), and individuals can differ in the strength of their needs for affiliation within contexts (Murray, 1938). As most workers spend at least eight hours per day in

employment settings, the need to find meaning, identity, and support through work is particularly salient, actions that may be achieved via greater affiliation at work (Burroughs & Eby, 1998; Chadsey & Beyer, 2001; Shamir & Salomon, 1985). In fact, Stewart (1985) found that individuals frequently cited work as the second most important social unit in their lives, behind immediate family.

Therefore, it is reasonable to believe that individuals with a high need for affiliation at work will prefer to be present in a traditional work setting where opportunity for social interaction is high. Likewise, they will be less inclined to work from an alternate location, or to use flexplace arrangements, where opportunity to meet social needs may remain unsatisfied (Shamir & Salomon, 1985). Research shows that workers frequently cite fear of social isolation as a main motive for not telecommuting (Belanger, 1999; Cooper & Kurland, 2002; Gainey et al., 1999; Olson, 1989). In addition, being physically away from the workplace may make it more difficult for individuals to feel a sense of identity or belonging to the organization or work group (Sharim & Salomon, 1985), another important facet of the need for affiliation. Due to the detrimental effects remote work may have on an individual's affiliative concerns, it is hypothesized:

Hypothesis 1: Need for affiliation at work will be negatively related to flexplace use. Specifically, individuals with a high need for affiliation at work will be less likely to use flexplace than will individuals lower in need for affiliation at work.

On the other hand, I do not believe that need for affiliation at work will impact individuals' use of flextime. Flextime allows employees to alter the timing of their work, but does not change the physical space where work is conducted. Therefore, those using flextime will still have frequent contact with co-workers, minimizing the risks of social

isolation. In other words, the few hours when not every employee is present will not be substantial enough to hinder those with a high need for affiliation at work from use of flextime.

Need for Structure in the Workplace

Neuberg and Newsom (1993) argue that “people meaningfully differ in the extent to which they are dispositionally motivated to cognitively structure their worlds in simple, unambiguous ways” (p. 114). These variations have been conceptualized as an individual difference variable labeled personal need for structure (Thompson, Naccarato, & Parker, 1989; Neuberg & Newsom, 1993). Individuals with a high need for structure carry an intense desire for clarity and certainty with an affiliated aversion to ambiguity (Elovainio & Kivimaki, 2001). Likewise, situations that lack perceived clarity and structure will create discomfort and annoyance for such individuals, thus motivating them to seek out situations that allow for increased structure, such as established routines and familiar conditions (Neuberg & Newsom, 1993; Thompson, Naccarato, Parker, & Moskowitz, 2001).

In their conceptualization of personal need for structure, Thompson et al. (1989) developed a measure to assess the construct. Neuberg and Newsome (1993) provided discriminant validity information regarding the scale, concluding that need for structure is conceptually related but different from authoritarianism, dogmatism, intolerance of ambiguity, rigidity, and uncertainty orientation. Additionally, they contend that it is much better suited for operationalizing the construct of interest in a direct and reliable manner. Moreover, the construct of need for structure incorporates two dimensions: desire for structure, characterized by a strong affinity for a clear and structured mode of

life and fixed place for everything, and reaction to lack of structure, or individuals' responses to unstructured and unpredictable situations.

Need for structure has rarely been examined in organizational behavior research (Elovainio & Kivimaki, 1999). The few exceptions have mainly investigated need for structure in relation to occupational strain. Kivimaki, Elovainio, and Nord (1996) found reaction to lack of structure was positively related to occupational strain symptoms but desire for structure was negatively related to symptoms. In an attempt to explain the mixed results, Elovainio and Kivimaki (1999) examined need for structure, occupational strain, and job complexity. Consistent with previous findings, they concluded that desire for structure acts as a psychological resource that decreases strain while reactions to lack of structure increase sensitivity to stressors. Job complexity moderated the relationship between reaction to lack of structure and occupational strain, such that the association was significantly stronger under high complexity conditions. Furthermore, need for structure was positively correlated with role ambiguity, which in turn, was associated with higher levels of occupational strain (Elovainio & Kivimaki, 2001), leading the authors to conclude that individuals high in need for structure require some type of structure in their work environments to aid in interpretation of the outer world and anticipation of upcoming events. If this structure is not available, lack of knowledge about individual expectations at work (role ambiguity) will occur and will lead to increased occupational strain.

Jahoda (1979) notes that the imposition of structure is a latent function of work, contributing to the positive relationship between an individual and his/her work. Workplace structure can be provided in a variety of contexts. Organizations with

traditional work arrangements offer structure through consistency in scheduling, as employees generally work the same hours each day and through strict boundaries, as entering and leaving the physical workspace signal the start and stop of work. Additionally, monitoring and feedback from co-workers and supervisors serve to increase structure by keeping employees on task and aware of their expectations and progress. Inherent in the idea of high desire for structure is increased affinity for regularity and perceived control of situation, actions that are more easily achieved when work is conducted on a regular schedule in a designated location. Flexplace arrangements allow employees to engage in work without regular organizationally imposed schedule or placement constraints (Rau & Hyland, 2002). While this is beneficial in the sense that it allows for increased flexibility, it comes at the cost of decreased structure, a cost that would seemingly be too high for individuals with a chronic need for externally imposed structure. Therefore, it is hypothesized:

Hypothesis 2: Need for structure in the workplace will be negatively related to flexplace use. Specifically, individuals higher in need for structure will be less likely to use flexplace than will individuals lower in need for structure.

Although not as flexible or unstructured as flexplace, flextime offers employees discretion in the starting and stopping times for their work day (Christensen & Staines, 1990). In most flextime arrangements, individuals can vary their schedules from day to day as long as they complete the required number of hours within a given work period (Barker, 1999). Because flextime permits individuals to work inconsistent hours, individuals with a high need for structure will likely shy away from such options, preferring a more uniform schedule. It is hypothesized:

Hypothesis 3: Need for structure in the workplace will be negatively related to flextime use. Specifically, individuals higher in need for structure will be less likely to use flextime than will individuals lower in need for structure.

Need for Segmentation of Work from Other Life Roles

Most individuals simultaneously occupy a number of roles in their everyday lives. The most common roles include those related to work, home, family, leisure, and community (Super & Sverko, 1995). As commonly noted in the work-family literature, when demands in one role become incompatible with those in another, interrole conflict may arise (Greenhaus & Beutell, 1985). Individuals attempt to decrease interrole conflict and manage competing roles through the creation of meaningful boundaries (Ashforth, Kreiner, & Fugate, 2000; Nippert-Eng, 1996; Zeruvabel, 1991). This notion, known as boundary theory, assumes that individuals create boundaries around different life roles in an attempt to simplify and order their environment.

Individuals differ regarding the extent that they prefer boundaries to be permeable and flexible, which in turn influences the relative segmentation or integration of roles (Ashforth et al., 2000; Rau & Hyland, 2002). Specifically, boundaries that are highly impermeable and inflexible will lead to greater segmentation of roles, while those that are highly permeable and flexible will contribute to increased integration of roles. Flexibility involves spatial and temporal boundaries, and permeability deals with the ability to enact one role while physically being present in the domain of another. Preference for segmentation and integration exist along a continuum, with the most extreme preference for each serving as poles on opposite ends. Thus, most individuals are not qualified as pure segmentors or integrators but rather fall along a continuum between the two

extremes (Ashforth et al, 2000; Kossek, Lautsch, & Eaton, 2006; Rau & Hyland, 2002).

Ashforth et al. (2000) explain that segmentation and integration of roles come with differing costs and benefits. Greater segmentation of roles involves creating less permeable boundaries around roles, which contributes to easy creation and maintenance of these boundaries and further minimizes role blurring. Role blurring occurs when role identities overlap, leading to confusion about which role should be enacted at a given time. Role blurring can result in negative consequences, such as anxiety, embarrassment, and interrole conflict.

However, with increased segmentation, transitions between roles are made more difficult, often requiring rites of passage between role enactments. Examples of common rites of passage are drinking a cup of coffee before leaving home in the morning, attending the gym after the work days ends and before coming home for the evening, or even the commute to and from work (Ashforth et al, 2000; Rau & Hyland, 2002).

Additionally, greater segmentation of roles causes out-of-role interruptions to be increasingly intolerable. Because roles are so highly segmented such interruptions are unlikely to occur, but if interruptions do occur the segmenting individual will be caught off guard and will likely experience great distress, as interruptions disturb the ongoing identity maintenance process (Burke, 1991).

On the other hand, greater integration of roles allows for lower transition costs and greater tolerance of out-of-role interruptions at the cost of possible role blurring (Hill et al., 1998). Because different boundary management strategies result in different outcomes, individuals are expected to differ on their preferences for each (Ashforth et al, 2000; Rau & Hyland, 2002). Furthermore, need for segmentation vs. need for integration

is considered to be a determinant of both individual differences and situational factors, such as job structure, and is an integral part of one's preferred approach to work-life role synthesis (Kossek, Noe, & DeMarr, 1999; Kossek, 2005).

Flexplace arrangements normally allow spatial and temporal flexibility, as workers can decide both where and when they want to work. Permeability of boundaries is also increased through flexplace because individuals can easily enact other life roles while in the work domain (Rau & Hyland, 2002). With these increases of boundary flexibility and permeability, workers gain the advantage of minimizing costs associated with transitions among roles, and rites of passage between roles may become simple and quick, even occurring without conscious awareness. However, roles are likely to become blurred and open to frequent out of role interruptions (Ashforth et al., 2000). In essence, flexplace arrangements facilitate the integration of roles and create difficulty in maintenance of role segmentation, making it an integrating policy (Desrochers, Hilton, & Larwood, 2005; Hill, Hawkins, & Miller, 1996; Kossek et al., 2006; Kurland & Bailey, 1999; Rau & Hyland, 2002). The benefits incurred from flexplace are offset by the costs, costs that would be largely unattractive for an individual with a high need for segmentation. As desire for segmentation and integration are conceptualized along a continuum, hypotheses will use the need for segmentation as the label to represent this continuum, with underlying assumptions that a low need for segmentation represents a high need for integration and vice versa. It is hypothesized:

Hypothesis 4: Need for segmentation of work roles from other life roles will be negatively related to flexplace use. Specifically, individuals higher in need for segmentation will be less likely to use flexplace than will individuals lower in

need for segmentation.

Flextime allows workers to alter the timing of their work to better accommodate other life roles. In doing so, flextime increases the temporal flexibility of work boundaries, while maintaining the impermeability and spatial inflexibility provided by traditional work arrangements (Rau & Hyland, 2002). For instance, workers who would normally engage in family-related activities at work, such as calling their children when they arrive home from school, can use flextime to adjust their schedule so that they can end the work day before the children arrive home. Thus, flextime affords employees the benefit of minimizing out of role interruptions and reinforces boundaries between roles (Rothbard, Phillips, & Dumas, 2005).

Additionally, costs that individuals high in need for segmentation normally incur under traditional work arrangements are minimized with flextime use. It may be easier to engage in the rites of passage that are normally used as transition tools. Rau and Hyland (2002) explain that common rites of passage, such as going to the gym after work, are facilitated by schedule flexibility, as one could engage in the rituals more efficiently by attending the facility during hours where it is not congested with the normal post five o'clock crowd. In summation, flextime allows individuals with a high need for segmentation to engage in activities that will feed this need, such as reducing overlap between work and life roles through temporal flexibility (Rothbard et al., 2005). Also, flextime allows segmentors to participate in activities that will lessen costs that are normally associated with segmentation, such as less risk of out of role interruptions and easier transitions between roles. As such, consistent with prior research (Kossek et al., 1999; Nippert-Eng, 1995; Rothbard et al., 2005), flextime is considered a more

segmenting policy than is a traditional work arrangement. Thus, it is hypothesized:

Hypothesis 5: Need for segmentation of work roles from other life roles will be positively related to flextime use. Specifically, individuals higher in need for segmentation will be more likely to use flextime than will individuals lower in need for segmentation.

Need for Occupational Achievement

Murray (1938) defines need for achievement as a chronic need to accomplish something difficult, overcome obstacles, attain a high standard, rival and surpass others, and to increase self-regard by the successful exercise of talent in a rapid and independent manner. Individuals vary in the extent that they desire personal achievement and in the focalization of achievement motivations into specific life domains (Murray, 1938; McClelland, 1961). Achievement may be focused on athletic, social, or intellectual domains; however, the professional and occupational domains seem to be an especially important channel for achievement (Murray, 1938).

Several studies have linked high need for achievement to actual occupational achievement, in terms of promotion and financial success, across various occupations (e.g., Amyx & Alford, 2005; McClelland & Boyatzis, 1982; Singh, 1978; Wainer & Rubin, 1969). In addition, research has generally supported the notion that individuals with a high need for achievement tend to seek out and perform better at moderately challenging tasks, take responsibility for their own performance, actively request feedback on their performance, and search for innovative and more efficient ways of doing things (McClelland, 1987). In looking at the specific need for occupational achievement, it seems that two outcomes are most relevant to the utilization of flextime

and flexplace, the search for innovative and more efficient ways of doing things and the general striving for success. Combining these notions, it is reasonable to assume that an individual with a high need for achievement will likely prefer a work environment that would allow the most work to be accomplished in the minimal amount of time.

Presumably, this environment will have nominal susceptibility to distractions.

Distractions are interruptions triggered by external stimuli or internal processes and that disrupt focused concentration on a primary task (Jett & George, 2003; Carlson & Frone, 2003) and can occur in both the work and home environments. Possible disruptions at work are social encounters with other employees, background noise, co-workers' nearby conversations, and electronic media (Oldham, Kulik, & Stepina, 1991; Perlow, 1999; Speier, Valacich, & Vessey, 1999). Examples of home distracters are the presence of children or other family members, interruptions by neighbors or door-to-door salesmen, personal phone calls, and domestic tasks (Ammons & Markham, 2004). Moreover, because individuals differ on personal work preferences, certain environmental factors may be distracting to some individuals but not to others (Oldham et al., 1991).

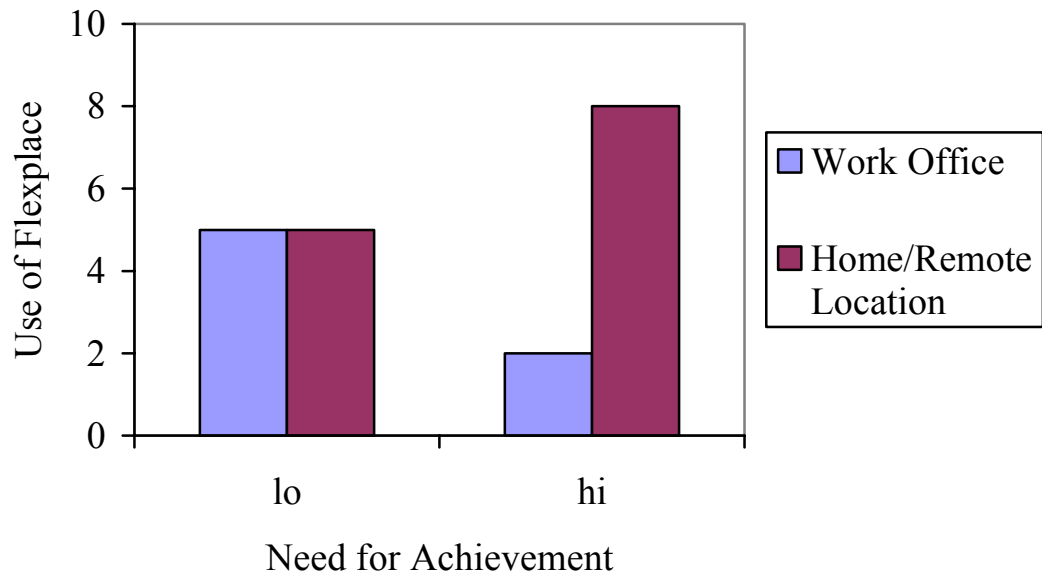
Thus, it is likely that individual differences in employees' personalities will influence which work environment (e.g., home, remote location, or main office) is most preferable to completing job-related tasks for him or her. In this sense, preferable environment refers to the location which is most efficient in terms of output, presumably that which is least distractive and most conducive to completing work tasks. Those with a high need for occupational achievement will likely strive to work in this preferred environment in order to maximize productivity. Combining the concept of high need for

occupational achievement and the means by which it is likely obtained, the following is hypothesized:

Hypothesis 6: Need for occupational achievement will interact with preferred work environment to predict use of flexplace. Specifically, individuals with a high need for occupational achievement will be more likely to use flexplace when the home or remote environment is preferred and will be less likely to use flexplace when the work office environment is preferred. (See Figure 1 for graphic representation).

Figure 1

Predicted Impact of Need for Occupational Achievement on Use of Flexplace as a Function of Preferred Work Environment.



As previously mentioned, flextime should contribute to an increase in productivity, as temporal flexibility allows employees to work at personal peak efficiency times where distraction are minimal and decreases commute time (Belanger, Collins, & Cheney, 2001; Frolick et al. 1993). Additionally, Baltes et al.'s (1999) meta-analysis concluded that flextime is positively associated with productivity. By definition, those with a high need for occupational achievement should be attracted to flextime because it is conducive to greater efficiency and productivity, precursors to overall job achievement. Therefore, it is hypothesized:

Hypothesis 7: Need for occupational achievement will be positively related to flextime use. Specifically, individuals higher in need for occupational achievement will be more likely to use flextime than will individuals lower in need for occupational achievement.

Using needs theory as a framework, the previous hypotheses have proposed the relationship of need-based motivational factors to FWA use, independent of situational variables. However, in organizational settings, situational factors are ever-present and likely play a role in decisions to use FWA. As outlined by expectancy theory, situational variables may alter the perceived attractiveness of FWA as a method of satiating needs, leading to a change in use. Thus, the influence of a situational variable, face-time orientation, is considered as a moderating variable in the relationships between the four motivational needs and FWA use.

Face-Time Orientation

Within organizations there is variation in the extent that supervisors expect employees to work long hours at the office and in the extent that employees perceive that

they will garner rewards for time spent at the work (Major, Klein, & Ehrhart, 2002). Workplaces that have high expectations for employees to be physically present at work and seem to reward based on the fulfillment of these expectations can be referred to as having a face-time orientation. On the opposite extreme, organizations that do not highly value physical presence are labeled results-oriented organizations (Hill & Weiner, 2003). Organizations that highly value face-time are likely to inhibit employees from using FWA. Because the use of flexible policies allow for flexibility in physical presence at work, organizations that offer FWA but still place an emphasis on face-time are sending employees mixed messages. Employees may want to use FWA but do not, for fear of negative career repercussions, such as missed promotions or wage increases (Bailyn, 1993; Glass & Fujimoto, 1995).

Likewise, Perlow (1995) explains that face-time oriented cultures view physical presence at work as a form of organizational commitment. Thus, those who are not in the office will be viewed as lacking commitment and may receive negative performance evaluations as a result. Even when FWA users are equally productive, there is often an underlying assumption that work is more valued to the extent it can be readily observed by a supervisor (Rodgers, 1992). In an empirical investigation, Major et al. (2002) highlight the impact of a face-time culture, finding that organizational norms about time spent at work are positively related to work time. Additionally, researchers have explained that a shift away from face-time norms and relevant adaptations in performance evaluations systems are essential for the effectiveness of flexible work policies (Perlow, 1995; Friedman, Christensen, & DeGroot, 1998; Hill et al., 2003).

Despite the agreement about the possible negative repercussions of a face-time oriented organization in relation to FWA use, there is little empirical evidence to support these claims. Some researchers have imbedded the idea within the broader context of organizational barriers to use (i.e., Allen, 2001; Thompson et al., 1999), but none have looked specifically at face-time orientation and FWA use. It seems to be a particularly relevant situational variable in the relationship between FWA availability and use, as norms about physical presence should directly relate to one's decision to use an arrangement that will alter physical presence. With this in consideration, the effects of extent of face-time orientation will be examined as a moderator of the previously hypothesized relationships between needs and FWA use. Specifically, because past research suggests that organizational focus on face-time has such strong negative impacts, it is hypothesized that perceived workplace face-time orientation will lead to decrease in the use of both flextime and flexplace, regardless of individual differences in needs.

Hypothesis 8: Face-time orientation will moderate the relationship between need for affiliation at work and use of flexplace, such that those with a low need for affiliation will be less likely to use flexplace when face-time orientation is perceived as high than when it is perceived as low. (See Figure 2 for graphic representation).

Hypothesis 9: Face-time orientation will moderate the relationship between need for structure at work and use of flexplace, such that those with a low need for structure will be less likely to use flexplace when face-time orientation is

perceived as high than when it is perceived as low. (See Figure 2 for graphic representation).

Hypothesis 10: Face-time orientation will moderate the relationship between need for structure at work and use of flextime, such that those with a low need for structure will be less likely to use flextime when face-time orientation is perceived as high than when it is perceived as low. (See Figure 3 for graphic representation).

Hypothesis 11: Face-time orientation will moderate the relationship between need for segmentation of work from other life roles and use of flexplace, such that those with a low need for segmentation will be less likely to use flexplace when face-time orientation is perceived as high than when it is perceived as low. (See Figure 2 for graphic representation).

Hypothesis 12: Face-time orientation will moderate the relationship between need for segmentation of work from other life roles and use of flextime, such that those with a high need for segmentation will be less likely to use flextime when face-time orientation is perceived as high than when it is perceived as low. (See Figure 4 for graphic representation).

Hypothesis 13: Face-time orientation will moderate the relationship between need for occupational achievement and flexplace use. Specifically, when the workplace is perceived as having a low face-time orientation there will be no relationship between need for achievement and flextime use but when the workplace is perceived as having a high face-time orientation there will be a negative relationship between need for achievement and flexplace use. (See

Figure 5 for graphic representation).

Hypothesis 14: Face-time orientation will moderate the relationship between need for occupational achievement and use of flextime, such that those with a high need for occupational achievement will be less likely to use flextime when face-time orientation is perceived as high than when it is perceived as low. (See Figure 4 for graphic representation).

Figure 2. *Predicted Impact of Need for Occupational Achievement, Need for Structure at Work, and Need for Segmentation of Work From Other Life Roles on Flexplace Use as a Function of Face-Time Orientation.*

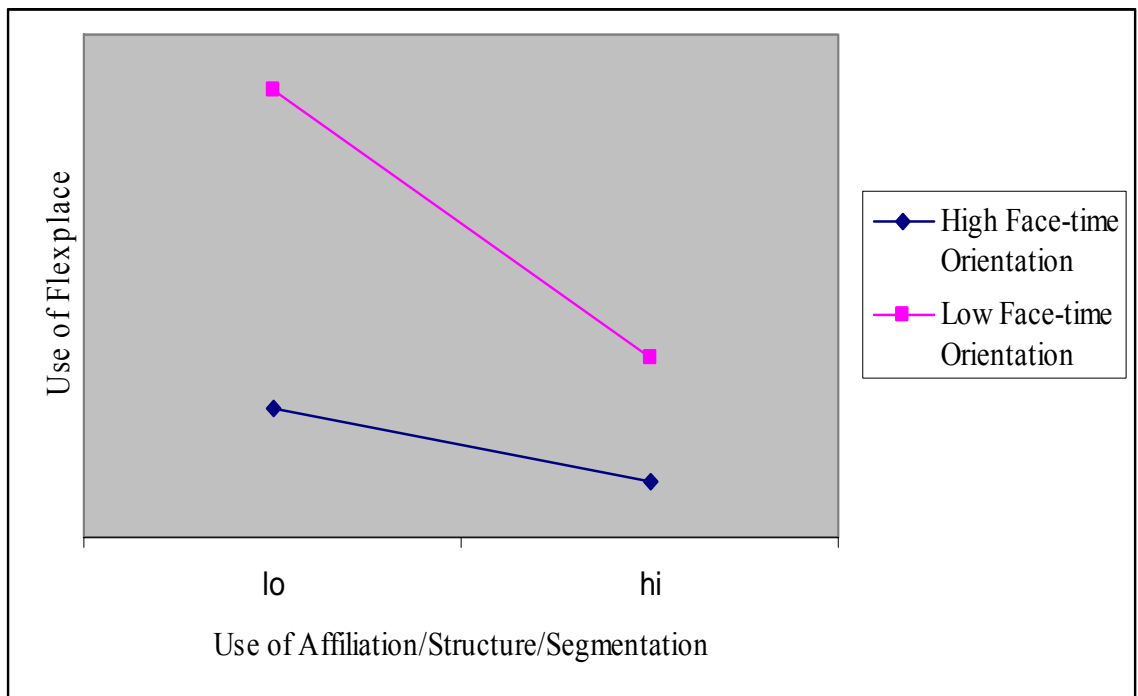


Figure 3

Predicted Impact of Need for Structure at Work on Flexitime Use as a Function of Face-Time Orientation.

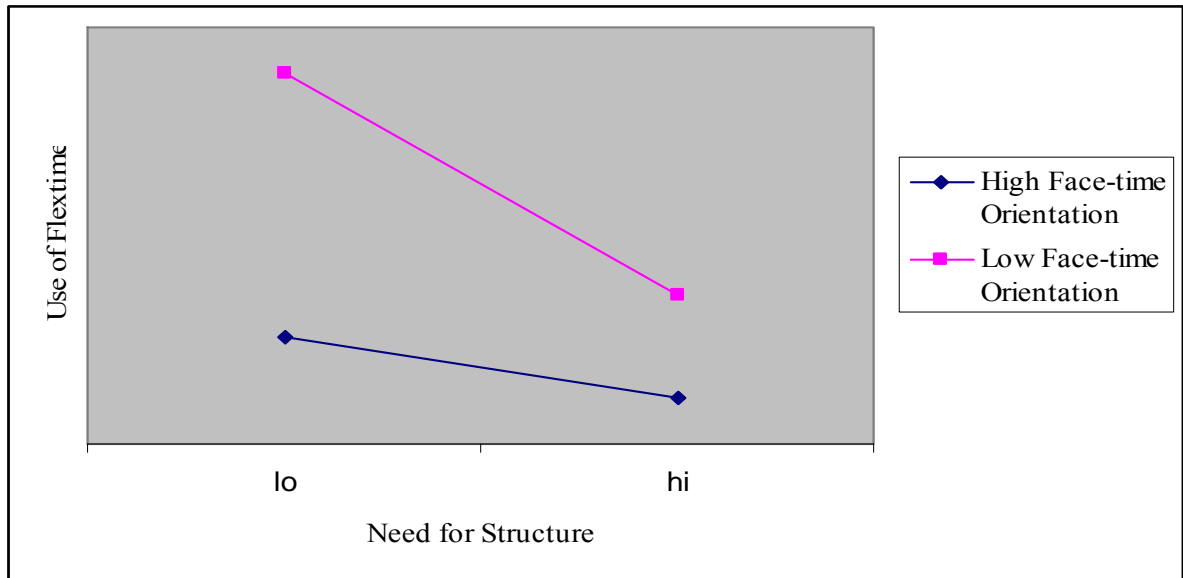


Figure 4

Predicted Impact of Need for Segmentation of Work From Other Life Roles and Need for Occupational Achievement on Flexitime Use as a Function of Face-Time Orientation.

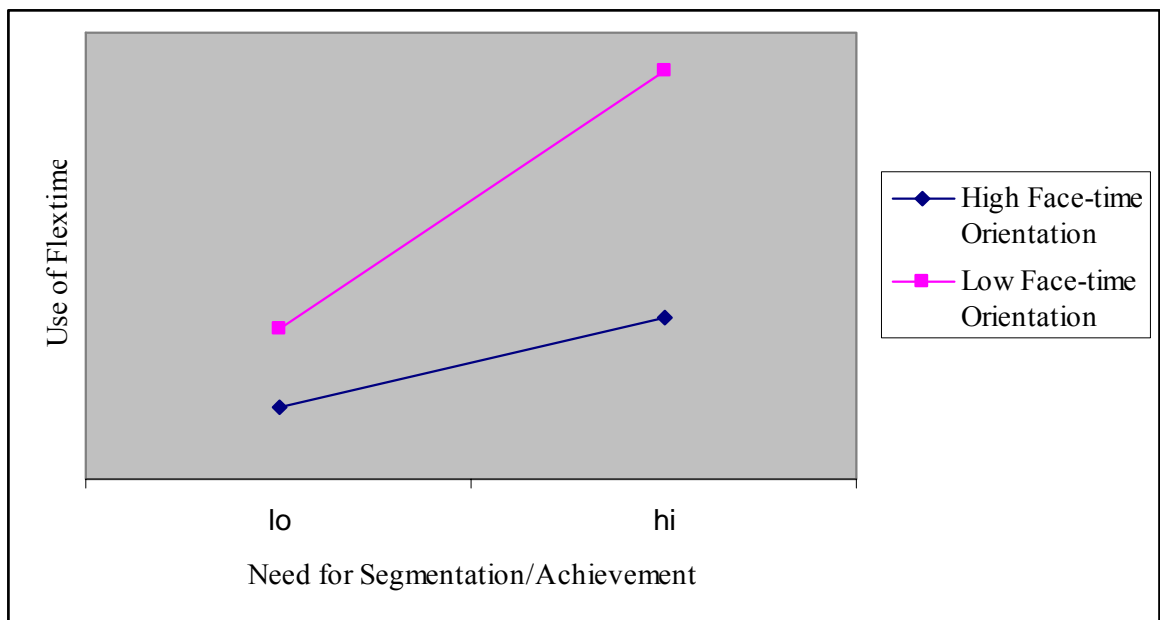
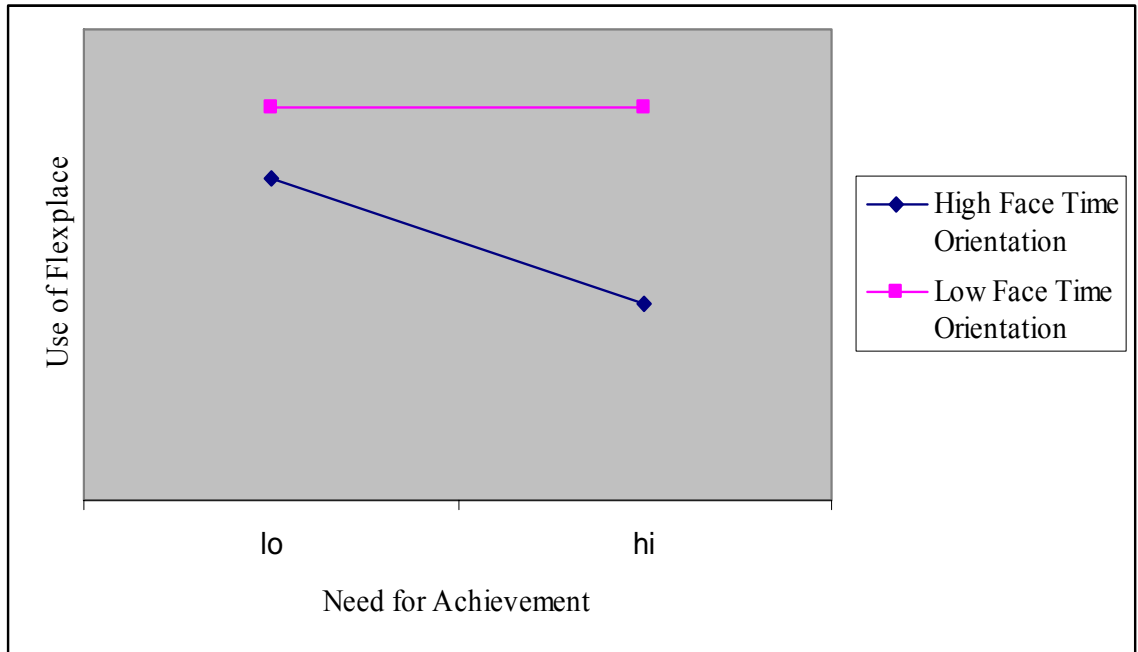


Figure 5

Predicted Impact of Need for Occupational Achievement on Flexplace Use as a Function of Face-Time Orientation.



Chapter Two

Method

Participants

The sample consisted of 238 faculty members from a large southeastern university. Participation for the study was solicited through an email message describing the research as an examination of personality and work behaviors in an academic context. According to the university's policies, online solicitation of faculty members for research purposes must be sent through the Provost's office. Thus, upon approving the study, the Provost's office sent the email message to an online Listserve containing the majority of the faculty within the university. The email included a link to the online survey and was sent to 1,602 faculty members. Two hundred and thirty eight respondents completed the survey, resulting in a response rate of approximately 15%.

The faculty members represented a wide variety of departments within the university. Of the 217 participants reporting their gender, 43.3% were male and 56.7% were female. In regards to rank, 18.9% of the participants identified themselves as assistant professors, 22.3% were associate professors, 21.4% were full professors. Approximately 27% of the participants placed themselves into the "other" category, which included job titles such as adjunct faculty, emeritus professor, instructor, university librarian, research associate, visiting professor, practicum coordinator, and associate dean. The remaining 10.1% of the participants did not provide their job rank or title. Thirty-nine (16.4%) participants described themselves as pre-tenure, 96 (40.3%) were

post-tenure, and 80 (33.6%) were on a non-tenure track. The remaining 9.7% did not report their tenure status.

Measures

All measures are included in the Appendix. Unless otherwise noted, scores on each scale were obtained by averaging the score on each item, with higher scores indicating a greater prevalence of the construct.

Need for affiliation at work. In reviewing the existing measures for need for achievement, the Manifest Needs Questionnaire (MNQ) (Steers & Braunstein, 1976) and an adaptation of the MNQ, the Needs Assessment Questionnaire (NAQ) (Heckert, Cuneio, Hannah, Adams, Droste, Mueller, Wallis, Griffin, & Roberts, 1999) were found. However, due to low internal consistency of the MNQ and the lack of consistent focus of the NAQ on the specific domain of achievement at work, a new measure was adapted from these scales. In the new measure, some items from the MNW and NAQ were adapted, and other original items were added. In creating the new items, Murray (1938) and McClelland's (1961) conceptualizations of the need for affiliation were reviewed. The new scale consisted of seven items that targeted social relationships, belongingness, and acceptance in the workplace. Response options were on a 6-point Likert scale that ranged from strongly disagree to strongly agree. The current measure showed higher internal consistency reliability than that of previous measures ($\alpha = .75$).

Need for structure in the workplace. Neuberg and Newsom's (1993) Personal Need for Structure Scale was adapted to a workplace context. The scale is composed of 12 items, which were answered on a 6-point Likert scale that ranged from strongly disagree to strongly agree with no neutral point. The coefficient alpha for the present

study was .85

Need for segmentation of work from other life roles. Kreiner's (2006) four item scale assessing segmentation preferences was used. Responses were based on a 6-point Likert scale that ranged from strongly disagree to strongly agree. Higher scores indicated greater needs for segmentation of work from other life roles, and lower scores indicated greater need for integration of work with other life roles. The coefficient alpha for the current study was .96.

Need for occupational achievement. The nine item scale developed by Eisenberger, Jones, Stinglhamber, Shanock, and Randall (2005) was used. Eisenberger et al. created the scale from the Manifest Needs Questionnaire (Steers & Braunstein, 1976), as well as their own items, all aligning with McClelland's (1961, 1987) definition of need for achievement. Responses were based on a 6-point Likert scale that ranged from strongly disagree to strongly agree. The internal consistency reliability was acceptable, as coefficient alpha was .82.

Preference for work environment. Using a forced choice format, participants were asked to choose whether they prefer to complete job-related tasks at their work offices or home/remote location. Responses were dummy coded for analysis (work office = 0, home/remote location = 1).

Face-time orientation. As no known measure of face-time orientation exists, a seven item scale was created for this study. After reviewing several descriptions of an organization highly reliant on face time (i.e., Bailyn, 1993; Major et al., 2002; Perlow, 1995; Rodgers, 1992; Thompson et al., 1999), seven items targeting relevant characteristics of face-time orientation were constructed. Items targeted both overall

organizational values and rewards in relation to face-time. Participants were asked to consider spring and fall semesters only in their responses, as face-time norms may differ during summer semesters due to the nature of the academic calendar. Responses were based on a 6-point Likert scale that ranged from strongly disagree to strongly agree. This original measure showed good internal consistency reliability ($\alpha = .76$).

Utilization of FWA. In line with Eaton's (2003) recommendations, the degree of flexibility actually practiced was measured, rather than just a general measure of use. Amount of flexplace practiced was assessed using Kossek et al.'s (2006) measure of telecommuting volume. Participants were asked to indicate the percent of their jobs that are currently performed away from their work office. Use of flextime was measured with a four item scale that asked about participant's modification of work hours on campus. In developing the scale, experts in the field of work-family conflict were asked to provide input about the content of the items to verify construct validity. Additionally, professors from another university were asked to assess the scale from a participant's viewpoint. Items were adjusted to reflect these comments. Response options were based on a 5-point Likert scale format from strongly disagree to strongly agree. The measure showed acceptable internal consistency reliability, as coefficient alpha was .83. For both measures, participants were asked to consider spring and fall semesters only in their responses, as the use of FWA may differ in summer semesters due to the nature of the academic calendar.

Control variables. Due to their potential relationships with the dependent variables, flexibility available, gender, marital status, job level, family responsibility, and work-family conflict were considered as potential control variables. Although it is

assumed that faculty have a great deal of flexibility available to them, there is variation in the amount of flexibility available across academic departments. Therefore, *perceived flexibility available* was included as a control, using Hyland's (2000) four item scale. Response options were set on a 5-point Likert scale, ranging from entirely not true to entirely true, and the coefficient alpha in the present study was .92. *Gender* was dummy coded (male = 0, female = 1). *Marital status* was dummy coded (not married = 0, married or not married but living with a partner = 1). *Job level* was assessed in two ways: tenure status (pre-, post-, and non-tenure) and rank (full professor, associate professor assistant professor, and other). *Family responsibility* was measured using Rothausen's (1999) responsibility for dependents scale. Rothausen used subject matter expert ratings to create differential responsibility weights according to children's living arrangements and age. The scale also asks about dependent adults. *Work-family conflict* was measured with Netemeyer, Boles, and McMurrrian's (1996) ten item work-family conflict scale. The scale includes five items assessing work interference with family (WIF) and five items assessing family interference with work (FIW). Responses ranged from strongly disagree to strongly agree on a 5-point Likert scale. The coefficient alpha was .95 for WIF and .92 for FIW.

Chapter Three

Results

Preliminary Analysis

Assumptions. Before conducting analyses, data were inspected for outliers and violations of assumptions of correlation and regression analyses. Outliers were determined by examining data points that were more than three standard deviations above or below the mean. According to these criteria, one outlier was found regarding need for affiliation at work, need for occupational achievement, and flexplace utilization, and two outliers were found in regards to the FIW measure. However, all outliers were still plausible values for each scale and were therefore not removed. In order to test for the Pearson's product moment correlation assumption of normality, graphical plots and skewness and kurtosis values were examined. Several of the variables exhibited some degree of kurtosis and skewness. Need for affiliation at work, need for occupational achievement, and flextime utilization were negatively skewed, whereas flexplace utilization, FIW, and family responsibility were positively skewed. Need for segmentation of work from other life roles, need for occupational achievement, WIF, and FIW were kurtotic. Given the product moment correlation's robustness to violation of this assumption (Cohen, 1969), analyses were conducted without transforming the data.

Assumptions of regression analysis include independence, normality of residuals, linearity, and homoscedasticity of residuals. Due to the nature of the data collection and study design, independence of data is assumed. Normality of residuals was tested using

q-q plots; inspection of the plots generally indicates normality of residuals for all variables. Linearity was examined by plotting the residuals against each measured independent variable and against the predicted values. The scatterplots mostly appeared linear, providing evidence for this assumption. Finally, homoscedasticity of residuals was assessed using a modified Levene test comparing each independent variable to both flextime and flexplace utilization. If the Levene statistic is significant at the .05 level or better, the null hypothesis that the groups have equal variances should be rejected. The statistic was significant for several of the relationships: face-time orientation and flextime utilization, and need for segmentation of work from other life roles, need for structure in the workplace, flexibility available, WIF, and FIW and flexplace utilization. Again, given the robustness of regression analysis to this violation, analyses were conducted without transforming the data.

Descriptive statistics for all study variables (number of responses, means, standard deviations, minimum and maximum values, number of items, and coefficient alphas) are listed in Table 1. Intercorrelations among study variables are listed in Table 2. It is important to note that due the setup of the survey question regarding family responsibility, it was impossible to decipher between those with no family responsibility and those who chose not to answer the question. Thus, no definitive conclusions could be drawn from this variable and it was not included in analyses.

Control Variables. The use of control variables was determined according to their association with the dependent variables. For continuous or dichotomous control variables (flexibility available, gender, and work-family conflict), correlations were

Table 1

Descriptive statistics of study variables

Variable	N	# of Items	A	M	SD	Obs. Min.	Obs. Max.
Variables							
Need for Affiliation	238	7	.75	4.32	.79	1.00	6.00
Need for Structure	236	12	.85	3.57	.80	1.36	5.50
Need for Segmentation	227	4	.96	3.45	1.51	1.00	6.00
Need for Achievement	228	9	.82	4.79	.64	1.00	6.00
Face-Time Orientation	227	7	.76	2.90	.93	1.00	5.29
Environment Pref.*	204	1	--	.36	.36	0.00	1.00
Flextime Utilization	220	4	.83	4.05	1.33	1.00	6.00
Flexplace Utilization**	217	1	--	30.45	22.73	0.00	100.00
WIF	219	5	.95	3.33	1.42	1.00	6.00
FIW	219	5	.92	2.13	1.13	1.00	6.00
Flexibility Available***	221	4	.92	3.74	.82	1.50	5.00
Demographics							
Gender	217	1	--	.57	.50	0.00	1.00
Marital Status	218	1	--	.81	.40	0.00	1.00
Tenure Status	215	1	--	1.07	.90	0.00	2.00
Job Rank	214	1	--	1.42	1.16	0.00	3.00

All non-demographic variables are measured on a 6-point scale unless otherwise noted

* Preference for work environment was coded work office =0, home/remote location = 1

** Flexplace utilization was measured on a scale from 0 to 100

*** Perceived Flexibility Available was measured on a 5-point scale

Male = 0, Female = 1

Non-tenure = 0, Pre –tenure = 1, Post-tenure = 2

Not married = 0, Married or Not married but living with partner = 1

Other = 0, Assistant professor = 1, Associate professor = 2, Full professor = 3

Table 2

Intercorrelations among study variables

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Flextime Use	--												
2. Flexplace Use	.43**	--											
3. Need Affiliation	-.02	-.09	--										
4. Need Structure	-.21**	-.15*	.03	--									
5. Need Segment.	-.36**	-.46**	-.06	.30**	--								
6. Need Achieve.	.00	-.10	.24**	-.01	-.02	--							
7. Face-time Orient	-.31**	-.28**	.09	.08	.23**	.07	--						
8. Envir. Pref.	.34**	.53**	-.05	-.14	-.33**	-.06	-.12	--					
9. Gender	-.09	.00	.04	.16*	.14*	-.08	.09	.16*	--				
10. Marital Status	-.07	.02	.00	-.08	-.01	.02	.01	-.17*	-.22**	--			
11. Tenure Status	.30**	.18**	-.05	.00	-.34**	-.03	-.30**	.07	-.33**	.07	--		
12. WIF	.22**	.10	.08	.09	.02	.02	.05	.15*	.03	.04	.12	--	
13. FIW	.01	.00	-.10	.06	.13	-.06	.07	-.12	-.05	.13	.06	.59**	--
14. Flex Available	.33**	.30**	.02	-.04	-.31**	.07	-.55**	.01	-.25**	-.01	.39**	-.07	-.03

Preferred Work Environment (Envir. Pref.): Work office = 0, home/remote location = 1; Gender: Male = 0, Female = 1; Tenure Status: Non-tenure track = 0, Tenure-track = 1; Marital Status: Not married = 0, Married or Not married but living with partner = 1

examined. For categorical variables with more than two levels (job rank, tenure status), ANOVAs and Tukey HSD post-hoc comparisons were conducted to determine whether groups within each category had differential associations with the dependent variables. Flexibility available significantly correlated with both flextime and flexplace utilization ($r = .33, p < .01$; $r = .30, p < .01$, respectively) and WIF was significantly correlated with flextime use ($r = .22, p < .01$).

An ANOVA revealed that significant differences did exist between job rank categories (assistant professors, associate professor, full professor, other) in regards to both flextime ($F = 5.01, p < .01$) and flexplace ($F = 2.71, p < .05$) use. A Tukey HSD post-hoc comparison was used to pinpoint the source of these differences. The “other” category used flextime significantly less than associate and full professors and flexplace significantly less than associate professors ($p < .05$). An ANOVA revealed that significant differences also existed between tenure categories (non-tenure, pre-tenure, post-tenure) in regards to both flextime ($F = 10.49, p < .01$) and flexplace ($F = 3.82, p = .02$) use. A Tukey HSD post-hoc comparison showed that participants on a non-tenure track used flextime significantly less than those on pre- and post-tenure tracks professors ($p < .05$). Non-tenure track respondents also used flexplace significantly less than post-tenure participants professors ($p < .05$). Given the nature of the differences identified, tenure status was collapsed into two categories, tenure-track and non-tenure track (dummy coded 0 and 1, respectively), for control purposes. Job rank was not included as a control variable due to its conceptual overlap with tenure. The majority of participants classified as “other” were also on a non-tenure track; therefore, in order to preserve power only the measure of tenure status was included as a control.

In sum, based on the aforementioned associations, flexibility available, WIF, and tenure status, were included as controls for regression analyses involving flextime use. Flexibility available and tenure status were included as controls for regression analyses involving flexplace use.

Hypothesis Testing

Hypotheses 1, 2, 3, 4, 5, and 7 were tested by examining the zero-order correlations between the relevant motivational need variable and the proper dependent variable, flextime or flexplace use. Hypotheses were further examined using hierarchical multiple regression (Cohen & Cohen, 1983) in order to test whether or not relationships remained significant after controlling for the effects of the relevant control variables and the other independent variables. As there are two dependent variables, two separate regression equations (use of flexplace and use of flextime) were calculated. For each equation, control variables were entered in step one and independent variables (need for affiliation at work, need for structure at work, need for segmentation of work from other life roles, need for occupational achievement) were entered in step two. Variables with standardized beta weights significant at the .05 level were considered significant predictors. Regression results are displayed in Table 3 and Table 4.

Hypothesis 1 predicted that need for affiliation at work would be negatively related to flexplace use. This prediction was not supported ($r = -.09, p = .19$; $\beta = -.09, p = .14$). Hypothesis 2 proposed that need for structure in the workplace would be negatively related to flexplace use. This proposition was supported using correlation coefficients ($r = -.15, p = .03$); however, once the effects of tenure status and flexibility available were controlled for, the relationship was no longer significant ($\beta = .01, p = .91$). Hypothesis 3,

Table 3

Regression of need variables on flextime utilization

Variable	Dependent Variable: Flextime Utilization	
	Step 1 (β)	Step 2 (β)
Control Variables		
WIF	.21**	.24**
Tenure	.17*	.10
Flexibility Available	.26**	.22**
Independent Variables		
Need for affiliation		-.04
Need for structure		-.14*
Need for segmentation		-.22**
Need for achievement		-.01
F	14.74**	9.97**
df	3, 209	4, 205
Overall R ²	.18	.25
Δ in R ²		.08**

p < .05, ** *p* < .01

Table 4

Regression of need variables on flexplace utilization

Variable	Dependent Variable: Flexplace Utilization	
	Step 1 (β)	Step 2 (β)
Control Variables		
Tenure	.08	-.04
Flexibility available	.26**	.19**
Independent Variable		
Need for affiliation		-.09
Need for structure		.01
Need for segmentation		-.43**
Need for achievement		-.10
F	10.26**	12.13**
Df	2, 207	4, 203
Overall R ²	.09	.26
Δ in R ²		.17**

* *p* < .05, ** *p* < .01

that need for structure in the workplace and flextime utilization would be negatively related, was also supported ($r = -.21, p < .01; \beta = -.14, p = .03$). Hypothesis 4 predicted that need for segmentation of work roles from other life roles would be negatively related to flexplace use. This hypotheses was supported ($r = -.46, p < .01; \beta = -.43, p < .01$). Hypothesis 5 was not supported; need for segmentation of work roles from other life roles was not positively related to flextime utilization. However, a significant association was found in the opposite direction of prediction ($r = -.36, p < .01; \beta = -.22, p < .01$). Hypothesis 7, that need for achievement at work would be positively related to flextime use, was not supported ($r = .00, p = .98; \beta = -.09, p = .14$).

Moderator Hypotheses

Moderated hierarchical regression was used (James & Brett, 1984) to test Hypotheses 6, 8, 9, 10, 11, 12, 13, and 14 For these regression equations, control variables were added in step one, followed by the independent variables (need for affiliation at work, need for structure at work, need for segmentation of work from other life roles, need for occupational achievement) and the moderating variables (preferred work environment and face-time orientation) in step two. As preferred work environment is a categorical variable, it was dummy coded (work office = 0, home/remote location = 1). The interaction terms (need for occupational achievement x preferred work environment, need for affiliation at work x face-time orientation, need for structure at work x face-time orientation, need for segmentation of work from other life roles x face-time orientation, need for occupational achievement x face-time orientation) were entered in step three. All independent and continuous moderating variables were centered and interaction terms were created based on the centered variables. In order to determine the

presence of a moderating effect, or the incremental variance that is accounted for by the moderation, the significance of the ΔR^2 were examined. Results are presented in Tables 5 - 12. Hypothesis 6 predicted that need for occupational achievement would interact with preferred work environment to predict use of flexplace. No support was found ($\Delta R^2 = .01, p = .21$). Hypothesis 8 was not supported ($\Delta R^2 = .00, p = .93$), as face-time orientation did not significantly moderate the relationship between need for affiliation at work and use of flexplace. Hypothesis 9 and 10 predicted that face-time orientation would moderate the relationship between need for structure at work and use of flexplace and flextime, respectively. No support for moderation was found for either hypothesis (Hypothesis 9, $\Delta R^2 = .00, p = .54$; Hypothesis 10, $\Delta R^2 = .00, p = .61$). Hypothesis 11 and 12 suggested that face-time orientation would moderate the relationship between need for segmentation of work from other life roles and use of flexplace and flextime, respectively. No support was found (Hypothesis 11, $\Delta R^2 = .00, p = .47$; Hypothesis 12, $\Delta R^2 = .01, p = .13$). Finally, no support was found for Hypotheses 13 and 14, which predicted that face-time orientation would moderate the relationship between need for occupational achievement and flexplace use ($\Delta R^2 = .00, p = .60$) and flextime use ($\Delta R^2 = .01, p = .24$), respectively.

Table 5

Moderated regression results of need for occupational achievement and preferred work environment on flexplace utilization (Hypothesis 6)

Variable	Dependent Variable: Flexplace Utilization		
	Step 1 (β)	Step 2 (β)	Step 3 (β)
Control Variables			
Tenure	.06	.01	.01
Flexibility available	.25**	.28**	.27**
Independent Variables			
Need for achievement		-.11	-.04
Environment preference		.51**	.51**
Interaction Term			
Need for achievement x Env. pref			-.10
F	8.35**	26.26**	21.39**
Df	2, 192	4, 190	5, 189
Overall R ²	.08	.36	.36
Δ in R ²		.28**	.01

* $p < .05$, ** $p < .01$

Table 6

Moderated regression results of need for affiliation at work and face-time orientation on flexplace utilization (Hypothesis 8)

Variable	Dependent Variable: Flexplace Utilization		
	Step 1 (β)	Step 2 (β)	Step 3 (β)
Control Variables			
Tenure	.09	.06	.06
Flexibility available	.26**	.19*	.19*
Independent Variables			
Need for affiliation		-.07	-.08
Face-time orientation (FTO)		-.14	-.14
Interaction Term			
Need for affiliation x FTO			-.01
F	10.43**	6.45**	5.14**
Df	2, 208	4, 206	5, 205
Overall R ²	.09	.11	.11
Δ in R ²		.02	.00

* $p < .05$, ** $p < .01$

Table 7

Moderated regression results of need for structure in the workplace and face-time orientation on flexplace utilization (Hypothesis 9)

Variable	Dependent Variable: Flexplace Utilization		
	Step 1 (β)	Step 2 (β)	Step 3 (β)
Control Variables			
Tenure	.09	.07	.07
Flexibility available	.26**	.19*	.19**
Independent Variables			
Need for structure		-.11	-.10
Face-time orientation (FTO)		-.14	-.14
Interaction Term			
Need for structure x FTO			.04
F	10.43**	6.88**	5.57**
Df	5, 208	4, 206	5, 205
Overall R ²	.09	.12	.12
Δ in R ²		.03*	.00

* $p < .05$, ** $p < .01$

Table 8

Moderated regression results of need for structure in the workplace and face-time orientation on flextime utilization (Hypothesis 10)

Variable	Dependent Variable: Flextime Utilization		
	Step 1 (β)	Step 2 (β)	Step 3 (β)
Control Variables			
WIF	.22**	.24**	.24**
Tenure	.17*	.15*	.15*
Flexibility available	.26**	.19*	.19*
Independent Variables			
Need for structure		-.19**	-.19*
Face-time orientation (FTO)		-.15*	-.15*
Interaction Term			
Need for structure x FTO			.03
F	15.13**	12.80**	10.67**
Df	3, 210	5, 208	6, 207
Overall R ²	.18	.24	.24
Δ in R ²		.06**	.00

* $p < .05$, ** $p < .01$

Table 9

Moderated regression results of need for segmentation of work from other life roles and face-time orientation on flexplace utilization (Hypothesis 11)

Variable	Dependent Variable: Flexplace Utilization		
	Step 1 (β)	Step 2 (β)	Step 3 (β)
Control Variables			
Tenure	.08	-.03	-.03
Flexibility available	.26**	.14	.14
Independent Variables			
Need for segmentation		-.41**	-.40**
Face-time orientation (FTO)		-.08	-.08
Interaction Term			
Need for segmentation x FTO			.05
F	10.26**	16.65**	13.40**
Df	2, 207	4, 205	5, 204
Overall R ²	.09	.25	.25
Δ in R ²		.16**	.00

* $p < .05$, ** $p < .01$

Table 10

Moderated regression results of need for segmentation of work from other life roles and face-time orientation on flextime utilization (Hypothesis 12)

Variable	Dependent Variable: Flextime Utilization		
	Step 1 (β)	Step 2 (β)	Step 3 (β)
Control Variables			
WIF	.21**	.23**	.23**
Tenure	.17*	.09	.08
Flexibility available	.26**	.15	.14
Independent Variables			
Need for segmentation		-.25**	-.27**
Face-time orientation (FTO)		-.13	-.13
Interaction Term			
Need for segmentation x FTO			-.09
F	14.74**	13.45**	11.66**
Df	3, 209	5, 207	6, 206
Overall R ²	.18	.25	.25
Δ in R ²		.07**	.01

* $p < .05$, ** $p < .01$

Table 11

Moderated regression results of need for occupational achievement and face-time orientation on flexplace utilization (Hypothesis 13)

Variable	Dependent Variable: Flexplace Utilization		
	Step 1 (β)	Step 2 (β)	Step 3 (β)
Control Variables			
Tenure	.08	.06	.06
Flexibility available	.26**	.20*	.21*
Independent Variables			
Need for achievement		-.11	-.11
Face-time orientation (FTO)		-.13	-.13
Interaction Term			
Need for achievement x FTO			.04
F	10.32**	6.85**	5.52**
Df	2, 207	4, 205	5, 204
Overall R ²	.09	.12	.12
Δ in R ²		.03*	.00

* $p < .05$, ** $p < .01$

Table 12

Moderated regression results of need for occupational achievement and face-time orientation on flextime utilization (Hypothesis 14)

Variable	Dependent Variable: Flextime Utilization		
	Step 1 (β)	Step 2 (β)	Step 3 (β)
Control Variables			
WIF	.21**	.22**	.21**
Tenure	.17*	.15*	.15*
Flexibility available	.26**	.18*	.18*
Independent Variables			
Need for achievement		-.01	.00
Face-time orientation (FTO)		-.17*	-.17*
Interaction Term			
Need for achievement x FTO			.08
F	14.81**	10.01**	8.58**
Df	3, 209	5, 207	6, 206
Overall R ²	.18	.20	.20
Δ in R ²		.02	.01

* $p < .05$, ** $p < .01$

Exploratory Analyses

Several variables were included in the survey for exploratory purposes. First, participants were asked whether they were part of a dual-earner couple and if their spouse worked in the same field. While having a working spouse had no significant effects on flextime or flexplace use ($r = .07, p = .34$; $r = .01, p = .91$, respectively), having a spouse that worked in the same field significantly related to greater use of flexplace ($r = .25, p < .01$). Additionally, as a supplement to the measure of flextime utilization participants were asked the following question, “If you work consistent hours, what are your general start and stop times (i.e., 9 to 5)?” From responses to this question, a measure of nontraditional work hours was created by summing the number of hours worked outside of the traditional 8.am. to 5 p.m. work day. For instance, a participant indicating 10 a.m. to 7 p.m. as their consistent work hours was considered to work 2 nontraditional hours. This variable was positively correlated with the overall measure of flextime use ($r = .22, p = .03$), providing evidence for convergent validity of the flextime measure. For exploratory purposes nontraditional hours works was substituted as a measure of flextime and tested with each hypothesis involving flextime use as the dependent variable (Hypotheses 3, 5, 7, 10, 12, and 14). WIF and tenure were the only variables to significantly correlate with nontraditional work hours; thus, both were included as controls for results involving regression analysis. It is important to note that the sample sizes used in these analyses are substantially smaller, as not everyone reported working consistent hours and therefore the question was not applicable to all respondents.

The results were identical to the original findings involving the full measure of flextime with two exceptions, Hypotheses 5 and 12. Hypothesis 5 was not supported;

need for segmentation of work roles from other life roles was not positively related to nontraditional hours worked. However, similar to previous results, a significant correlation was found in the opposite direction of prediction ($r = -.25, p = .01$), but once WIF and tenure were controlled for this relationship was no longer significant ($\beta = -.16, p = .12$). Hypothesis 12 suggested that face-time orientation would moderate the relationship between need for segmentation of work from other life roles and flextime. Support was found for the interaction using nontraditional work hours as the dependent variable ($\Delta R^2 = .03, p = .04$). Specifically, when face-time orientation is perceived as low, there is a negative relationship between nontraditional hours worked and need for segmentation. When face-time orientation is perceived as high, there is no relationship between the need for segmentation and nontraditional hours worked. Moderated regression results are presented in Table 13, and the interaction is plotted in Figure 6.

Table 13

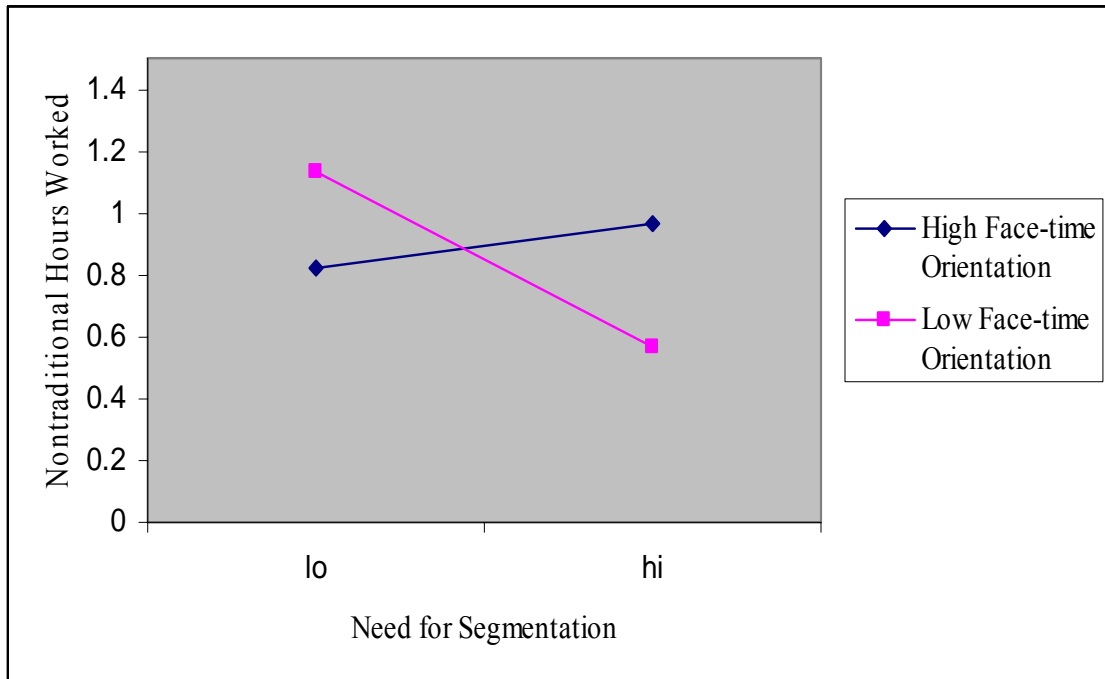
Moderated regression results of need for segmentation of work from other life roles and face-time orientation on nontraditional hours worked (exploratory analysis)

Variable	Dependent Variable: Nontraditional Hours Worked		
	Step 1 (β)	Step 2 (β)	Step 3 (β)
Control Variables			
WIF	.29**	.29**	.30**
Tenure	.32**	.28**	.29**
Independent Variables			
Need for segmentation		-.16	-.12
Face-time orientation (FTO)		.01	-.02
Interaction Term			
Need for segmentation x FTO			.19*
F	13.69**	7.65**	7.19**
Df	2, 102	4, 100	5, 99
Overall R ²	.18	.25	.25
Δ in R ²		.02	.03*

* $p < .05$, ** $p < .01$

Figure 6

Interaction of Need for Segmentation of Work from Other Life Roles on Nontraditional Hours Worked as a Function of Face-Time Orientation.



Chapter Four

Discussion

The purpose of this study was to gain greater insight into employees' FWA utilization. Although previous studies have investigated organizational factors that contribute to family-friendly benefit utilization, this is one of the first studies to address the role of the individual. Specifically, the relationships between individual differences in four work-related needs, need for affiliation at work, need for structure in the workplace, need for segmentation of work from other life roles, and need for occupational achievement, and flextime and flexplace use were considered. Furthermore, the moderating influence of an empirically under-studied organizational variable, face-time orientation, was also examined.

The results indicate that two motivational needs, the need for structure in the workplace and the need for segmentation of work from other life roles, are particularly important in relation to FWA utilization. As hypothesized, the zero-order correlations indicated that need for structure in the workplace negatively related to both flexplace and flextime use. However, the beta weight associated with need for structure in the workplace was nonsignificant in the regression equation involving flextime when the influence of all predictors was controlled. The need for segmentation of work from other life roles was negatively related to flexplace and flextime according to zero-order correlations and regression analyses. Although the relationship with flextime was significant, it was in the opposition direction of original prediction. On the other hand,

the influence of the need for occupational achievement and the need for affiliation at work are not significant predictors of flexible policy use.

None of the hypotheses predicting the moderating role of face-time orientation in the relationships between each need-based factor and FWA use were supported. That is, face-time orientation does not seem to suppress utilization differently for those with differing levels of needs. Interestingly, exploratory analyses revealed that face-time orientation does moderate the relationship between need for segmentation of work from other life roles and the amount of nontraditional hours worked. Further explanation of each of these findings is discussed below.

Theoretical Underpinnings and Implications

Need for affiliation at work. The need for affiliation at work was hypothesized to negatively relate to flexplace use. Rationale for this prediction was grounded in the idea that those with high affiliative needs would prefer being physically present at work as a means to enhance affiliation with coworkers. There are several speculative reasons to explain the null results. Individuals may satiate their work affiliation needs through colleagues in their field that do not necessarily belong to the same organization. For instance, those who study the same subjects often collaborate and may consider each other coworkers, even if they are proximally distant or working for different organizations. Employees may still fulfill their need for affiliation at work through such collaboration even if it is not accomplished in their office workspace. It is likely that individuals have different types of needs for affiliation at work, and some may be specific to colleagues in their current organization. The current study did not measure need for affiliation in a way that allows for examination of the need at different levels, but

researchers should consider this when conducting future investigations on this topic.

Another consideration is the strength of the need for affiliation at work. Although research has documented the strength and persistence of humans' overall need for affiliation (Baumeister & Leary, 1995), less is known about the strength of the specific need for affiliation at work. Perhaps the need for affiliation at work is a weak need that is not robust enough to influence work behaviors. Working individuals may have a desire to feel a sense of belonging at work, but affiliation in other areas of life may compensate for it. Future research is needed to gain a fuller understanding of the need for affiliation at work. Notwithstanding the aforementioned ideas, the results of the present study indicate that the need for affiliation at work does not seem to drive employee's decisions whether or not to use flexplace.

Need for structure in the workplace. It was hypothesized that individuals with high need for structure in the workplace would use flexplace less because the home environment has inherently less structure than the work environment. It was also hypothesized that they would use flextime less because inconsistency in schedule provides less structure than fixed hours. Zero-order correlations supported both of these claims; however, using regression analyses and controlling for tenure status, flexibility available, and the other independent variables, need for structure in the workplace was no longer significantly associated with flexplace use. This may be due to the substantial correlation between the need for segmentation of work from other life roles and the need for structure in the workplace ($r = .30$). Conceptually, it is logical that these two variables are correlated. Segmentation is essentially a way of imposing structure and boundaries on life roles. Individuals desiring structure in their workplace are likely to

also desire the management of multiple life roles in a structured way, which aligns more with segmentation than integration practices.

Because need for structure in the workplace and flexplace use are correlated, the nonsignificant beta weight associated with the need for structure suggests that the part of need for structure that is driving this relationship is almost totally captured by another variable(s). Given the large significant beta weight associated with the need for segmentation of work from other life roles ($\beta = -.43$), it is reasonable that it is the influential force. In fact, exploratory analyses reveal that the relationship between the need for structure in the workplace and flexplace utilization is fully mediated by the need for segmentation of work from other life roles ($z = -3.87, p < .001$). Mediation results are presented in Table 14. Thus, the nonsignificant relationship between the need for structure in the workplace does not mean that this variable is not an important predictor of flexplace use. Rather, it appears to be related to flexplace use through the need for segmentation, indicating that the aspects of need for structure that are conceptually similar to the need for segmentation are most influential. This overlap may be evidence for the influence of another motivational-based need, namely the need for order. Future researchers should consider using a need for structure scale that assesses multiple dimensions of the construct (e.g., needs for order, organization, consistency) that allows for a more fine-grained analysis.

The relationship between the need for structure in the workplace and flextime use was significant with both zero-order correlations and regression analysis. This suggests that there are unique aspects about possessing a high need for structure in

Table 14

Need for segmentation of work from other life roles as a mediator between the need for structure in the workplace and flexplace utilization (exploratory analysis)

	Dependent Variable		
	Need for segmentation	Flexplace Utilization	
	Step 1 (β)	Step 2 (β)	Step 3 (β)
Need for structure	.30**	-.15*	.00
Need for segmentation			-.45**

* $p < .05$, ** $p < .01$

the workplace that make flextime use less appealing. As hypothesized, the act of physically coming and going to work at the same time each day, having a consistent schedule, and clear rules about when work should be done seem to hold appeal to individuals desiring structure. Flextime takes away these aspects of work and does not serve as a means to satisfy workplace structure needs, creating a negative relationship.

Need for segmentation of work from other life roles. As hypothesized, the need for segmentation of work from other life roles was significantly negatively related to flexplace use. A negative relationship was anticipated because of the blurring of boundaries that is invoked by flexplace use. Flexplace normally involves working from home, and it is extremely difficult to keep work and life roles separate when they occur in the same physical space. For those preferring to manage multiple roles through segmentation, physically and temporal boundaries are often crucial in allowing transfer between roles. Working from home makes these boundaries much more permeable, making segmentation almost impossible. Thus, by not using flexplace practices, high segmenters will not risk the undesirable integration of life roles.

Conversely, it was predicted that need for segmentation of work from other life roles would positively relate to flextime use. Some researchers (Kossek et al, 1999; Nippert-Eng, 1995; Rothbard et al., 2005) consider flextime to be a segmenting policy, as it helps minimize out of role interruptions. Employees can alter their schedules so that family roles are enacted at one time and work roles at another, versus a standard schedule when there might be inevitable overlap between the two (e.g., children's 4:00 return from school). Also, rights of passage used to transition between roles may be facilitated by flextime use, making it an attractive option for segmenters. However, the results do not support these claims, as the relationship was actually negative. Those with high needs for segmentation use flextime less, meaning that flextime is actually an integrating policy.

Rau and Hyland (2002) created a model of flexible work arrangements, placing flextime, flexplace, and standard work arrangements on a continuum based upon the amount of integration or segmentation they allow. The authors consider flextime to be more integrating than standard work arrangements because of the control over temporal boundaries granted by flextime. Although the impermeability and inflexibility of spatial boundaries remains intact, the greater flexibility in temporal boundaries alone facilitates integration through easing role transitions and rites of passage between roles. While other researchers argue that this is more conducive to segmentation of roles, Rau and Hyland believe that when role transitions and rights of passage are easier individuals will be more drawn to readily switching between roles, and thus practice greater integration. In hypothesizing for the present study, Rothbard's et al. (2005) theoretical reasoning was followed; however, the results provide greater support for Rau and Hyland's proposition. The current findings help resolve these opposite viewpoints and suggest that future

researchers should adapt the theoretical lens of viewing flextime as a more integrating policy.

Previous researchers have called for more research on the effects of boundary management strategies (Olson-Buchanan & Boswell, 2006), particularly in relation to FWA (Kossek et al., 2006). The present study answers this call, and contends that the need for segmentation is quite influential on one's decision to use FWA. Furthermore, the present findings provide additional evidence that work-family researchers are moving in the right direction by focusing on the need for segmentation. It appears to be a influential variable in individual's work-family balance strategies, and continued research on the topic will contribute to a more a fruitful picture of work-family conflict and surrounding issues.

Need for occupational achievement. None of the hypotheses regarding the need for occupational achievement were supported. Preferred work environment (home/remote location vs. work office) did not interact with need for occupational achievement to predict flexplace use. Although it is theoretically sound to assume that individuals desiring achievement will work in an environment that is most conducive to gaining such achievement, this was simply not the case. One possible explanation for the lack of significant results surrounds the negatively skewed distribution of need for occupational achievement scores. Given that the sample was entirely composed of professionals in an occupation where job stability and advancement are largely dependent upon high performance, this skewness is not surprising. The nonsignificant findings could therefore be attributable to range restriction of the independent variable. In order to clarify null results, subsequent investigators should test the hypothesis using a sample

with greater variance in achievement needs.

Similarly, no significant association was found between the need for occupational achievement and flextime use. The relationship was posited to be positive, as flextime allows employees to work at times of personal peak efficiency. Again, range restriction in need for occupational achievement scores could help explain the null result.

Additionally, it is possible that the need for occupational achievement could manifest itself differently for various individuals. Although people with high needs may choose to use flextime for the aforementioned efficiency purposes, others may fulfill their needs by increasing work hours overall. For instance, they may work the entire day from 7 a.m. to 7 p.m., leaving no room for use of flextime. Research does support this idea, as workaholism positively correlates with need for achievement (Mudrack & Naughton, 2001). Both types of high achievers would be combined in the analyses, canceling each other out, and making it appear that there is no significant relationship. The total number of work hours was not measured in the present study, but future researchers should incorporate this variable in order to better understand how the need for occupational achievement manifests itself.

Face-time orientation. None of the hypotheses predicting the moderating role of face-time orientation were supported, meaning that individuals with various levels of needs are not impacted differentially by the face-time orientation of their department. However, this is not to say that face-time orientation is not a meaningful variable. In fact, face-time orientation significantly correlated with both flextime and flexplace use ($r = -.31, p < .01, r = -.28, p < .01$, respectively). Consistent with anecdotal research, the negative relationships indicate that when one perceives his/her organization to place

much value on physical presence at work, he/she will be less likely to take advantage of flexible policies. As the first known study to empirically test the role of face-time orientation, this finding extends current theory explaining why the mere availability of family-friendly benefits is not enough. In addition to having supervisor support for policies (Batt & Valcour, 2003) and an overall family-supportive organization (Allen, 2001), employers should devalue face-time norms in order to enhance FWA use.

Taken together, the results of this study provide some insight into the impact of individual differences and face-time orientation in employees' decisions to use family-friendly benefits. By incorporating the newfound knowledge that the need for structure in the workplace and the need for segmentation of work from other life roles relate to FWA utilization, we gain a more comprehensive understanding of work-family balance strategies.

Exploratory analysis. An exploratory analysis revealed that face-time orientation significantly moderates the relationship between the need for segmentation of work from other life roles and the amount of nontraditional hours worked. Specifically, when face-time orientation is perceived as low, there is a negative relationship between nontraditional hours worked and need for segmentation. When face-time orientation is perceived as high, there is no relationship between the need for segmentation and nontraditional hours worked. Thus, when face-time orientation is low, the relationship between need for segmentation and nontraditional work hours is consistent with previous findings involving the need for segmentation and flextime. However, when employees feel that they are being judged based upon their physical presence at work, the need for segmentation is no longer influential. Essentially, high face-time orientation reduces

individuals' attentiveness to FWA as a means to fulfill their need for segmentation or integration. This interaction provides further evidence for negative repercussions of organizational reliance on face-time norms.

Practical Implications

In addition to contributing to theory, the present findings also have applied implications. If an organization is attempting to help employees balance work and family roles, FWA alone are not the answer. Those with a high need for segmentation of work from other life roles are less likely to flexplace, and those with high needs for structure in the workplace and segmentation of work from other life roles are less likely to use flextime. Therefore, FWA are not a very effective means of easing work-family conflict for these people. To circumvent this issue, a wide variety of family-friendly policies should be offered, such as dependent care supports, family and personal leaves, options for maximizing time and money resources, work/life education and training, and conventional provisions for job quality and compensation/benefits (Lobel & Kossek, 1996). With future research pinpointing how need-based motivational factors relate to other benefits, we can gain a clearer understanding of the "cocktail of benefits" that should be offered to accommodate people of all needs.

The results indicate that perceiving the organization as having a face-time orientation negatively relates to the use of both flexplace and flextime. As with any organizational implementation, it is necessary to make changes to the organizational culture for programs to be most effective. Based on the results of the current study, altering norms about physical presence at work is a necessary accommodation for organizations offering FWA. If face-time orientation remains high, FWA will likely be

underutilized and serve as a less effective means to balancing work and family roles.

Limitations

Although this study provides important contributions to the literature, some limitations must be noted. First, the study sample was chosen because of the naturally occurring flexibility associated with faculty jobs within a university context. Given the neglect of individual differences research, use of an occupation with such flexibility was a crucial starting point. However, academia is a unique profession with much autonomy; thus, its generalizability to other more traditional occupations is unknown. Everyone in the sample was highly educated, and over 40% of the participants were in a tenured position, giving them job security that is foreign to the vast majority of workers. Future research applying the present study to a wide array of occupations and organizational contexts is needed to assess the generalizability of the findings. This type of research would also be particularly informative in understanding how need-based motivational factors relate to FWA use in companies where taking advantage of flexibility is a more formalized process.

A second limitation of the study is the use of cross-sectional data. Although it is theoretically sound to assume that dispositional needs influence FWA use, the design precludes any inferences about causality. It is possible that one may use a flexible policy so much that it actually alters their needs. For instance, an individual with a high need for structure may be forced to work from home and eventually, adapting to the home environment, develop a weaker need for structure. Future researchers should employ a longitudinal approach with multiple measurement times in order to determine changes across time.

Third, because the data was all collected via self-report methods, common method bias is a concern. However, the independent variables required self-report, as it is unlikely that anyone else is as knowledgeable about an individual's own needs. Similarly, use of flexplace and flextime are probably most accurately measured through self-report, although future researchers may consider obtaining reports from family members to reduce bias. Additionally, face-time orientation could be measured using coworker reports, and an aggregate measure could be created to gain a more objective picture of the value of face time within an organization. However, an individual's perception of face-time orientation may be different than "true" face-time orientation. Arguably, one's perceptions of the organization are more important in determining behavior than the objective reality. Thus, future investigators should consider the questions they want to address when deciding how to measure face-time orientation.

Finally, as no known measure of amount of flextime use existed, an original scale was created for the present study. Although the measure showed good internal consistency reliability and was deemed construct valid by a panel of subject matter experts, there is still cause for concern. Overall, the measure mainly focused on one aspect of flextime – the ability to change one's schedule on a daily basis. However, individuals may use flextime in a different manner, working the same schedule everyday but doing so with nontraditional hours (e.g., consistently working from 6:30 a.m. to 3:30 p.m.) Although the current measure of flextime did not capture this variable, an exploratory item, "If you work a consistent set of hours, what are they?" did. As mentioned in the exploratory analyses section, this item was correlated with the overall measure of flextime, providing further evidence for construct validity. Nonetheless, it

would be useful to create a measure that combines both aspects of flextime, allowing researchers to look at both dimensions together as one construct. Future theorists should certainly take the multidimensional aspect of flextime into account to gain a more fruitful understanding of the construct and its individual difference correlates.

Future Directions

With the exception of general demographics and Butler et al. (2004)'s study involving work-family self-efficacy, this was the first study to examine the role of individual differences in FWA utilization. Thus, this study serves as a starting point in this research area, paving the way for many possible future inquiries. The present study only examined individual differences in four variables. These four constructs are by no means an exhaustive set of variables that could relate to FWA utilization; future researchers should consider the potential influences of other motivational needs and personality variables, such as the Big 5, affectivity, and personality type (i.e., Type A).

Similarly, the present study only used two types of family-friendly benefits, flextime and flexplace, as the dependent variables. While these are commonly offered benefits, there are many others that warrant investigation. Future researchers may examine how individual differences relate to the use of on-site daycare, maternal/paternal leave, and other dependent care assistance programs. Comparisons of how individual differences differentially relate to each type of family-friendly benefit will help us understand the profile of those who are most and least likely to use benefits in general. This information could further be employed to create or refine benefits that may be more usable for those that are less likely to practice current policies.

In order to look at a situational variable in conjunction with individual differences, the present study investigated face-time orientation. It was hypothesized that workplaces with a high face-time orientation would alter the valence of flextime and flexplace as a means to fulfill needs. Face-time orientation was chosen as the organizational variable of interest in the present study for two main reasons. First, it is often mentioned in the literature but has been empirically neglected. Second, it involves norms about physical presence at work, which relate directly to FWA policies that too involve altering physical presence at work. Although there was strong rationale to include face-time orientation as a moderator, future researchers should consider the effects of other organizational variables. For instance, FSOP, supervisor support, and reward systems inconsistent with use have been cited as barriers to FWA use. Thus, these variables could also alter the valence of FWA as a means to satisfy needs and should also be tested as moderators in the relationship between needs and FWA utilization.

In providing theoretical backing for each hypothesis, several notions were proposed as to why the relationships would be in the hypothesized direction. While the philosophy is sound, the nature of the current study did not allow for specific testing of why each need related the FWA use. For instance, the need for structure in the workplace was predicted to negatively relate to flextime use because inconsistency in a work schedule inherently introduces less structure. This relationship was negative as predicted, but we can not be sure that it was inconsistency in schedule that was driving the relationship. Essentially, more research involving process variables needs to be conducted to gain a clearer picture. Owing to its infancy, this line of research could

profit from qualitative methods that may give more insight into the actual mechanisms linking needs to FWA use.

Conclusion

The current study addressed an important gap in the family-friendly benefit usage literature – the role of the individual. The impact of four individual difference variables, all based on motivational needs, were examined in relation to flextime and flexplace utilization. The results suggest that the need for segmentation of work from other life roles and the need for structure in the workplace are particularly relevant in understanding who some individuals use FWA more than others. The implications of norms surrounding physical presence at work were also examined. Although face-time orientation did not moderate the relationships between needs and FWA use as proposed, the study adds an important contribution by establishing an empirical way to evaluate this theoretically meaningful variable.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple Regression: Testing and Interpreting Interactions*. Newbury Park, CA.: Sage.
- Alderfer, C.P. (1972). *Existence, relatedness, and growth: Human needs in organizational settings*. New York: The Free Press.
- Allen, T.D. (2001). Family-supportive work environments: The role of organizational perceptions. *Journal of Vocational Behavior, 58*, 414-435.
- Allen, T.D., & Russell, J.E.A. (1999). Parental leave of absence: Some not so family-friendly implications. *Journal of Applied Social Psychology, 29*(1), 166-191.
- Almer, E.D., & Kaplan, S.E. (2002). The Effects of Flexible Work Arrangements on Stressors, Burnout and Behavioral Job Outcomes. *Behavioral Research in Accounting, 14*, 1-34.
- Ammons, S.K., & Markham, W.T. (2004). Working at Home: Experiences of Skilled White Collar Workers. *Sociological Spectrum, 24*(2), 191-238.
- Amyx, D., & Alford, B.L. (2005). The effects of salesperson need for achievement and sales manager leader reward behavior. *Journal of Personal Selling & Sales Management, 25*(4), 345-359.
- Ashforth, B.E., Kreiner, G.E., & Fugate, M. (2000). All in a day's work: Boundaries and micro role transitions. *Academy of Management Review, 25*, 472-491.
- Atkinson, J.W. (1964). *An introduction to motivation*. Princeton, NJ: Van Nostrand.
- Bailey, D.E., & Kurland, N.B. (2002). A review of telework research: Findings, new

- directions and lessons for the study of modern work. *Journal of Organizational Behavior*, 23, 383-400.
- Bailyn, L. (1993). *Breaking the mold: Women, men, and time in the new corporate world*. New York: The Free Press.
- 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(4), 496-513.
- Barker, R. L. (Ed.). (1999). *The social work dictionary* (4th Ed.). Washington, DC: NASW Press.
- Batt, R., & Valcour, P.M. (2003). Human resources practices as predictors of work-family outcomes and employee turnover. *Industrial Relations*, 42, 189-220.
- Baumeister, R.F., & Leary, M.R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.
- Belanger, F. (1999). Workers' propensity to telecommute: An empirical study. *Information & Management*, 35, 139-159.
- Belanger, F., Collins, R.W., & Cheney, P.H. (2001). Technology requirements and work group communication for telecommuters. *Information Systems Research*, 12(2), 155-176.
- Blair-Loy, M., & Wharton, A.S. (2002). Employees' use of work-family policies and the workplace social context. *Social Forces*, 80, 813-845.
- Blair-Loy, M., & Wharton, A.S. (2004). Organizational commitment and constraints on work-family policy use: Corporate flexibility policies in a global firm.

Sociological Perspectives, 47, 243-267.

- Breaugh, J.A., & Frye, N.K. (2006). *Family-supportive supervisors and the use of family-friendly benefits*. Poster presented at the annual meeting of the Society for Industrial and Organizational Psychologists in Dallas, TX
- Bruck, C.S., Allen, T.D., & Spector, P.E. (2002). The relation between work-family conflict and job satisfaction: A finer-grained analysis. *Journal of Vocational Behavior*, 60(3), 336-353.
- Burke, P.J. (1991). Identity processes and social stress. *American Sociological Review*, 56, 836-849.
- Burroughs, S.M., & Eby, L. T. (1998). Psychological sense of community at work: A measurement system and explanatory framework. *Journal of Community Psychology*, 26, 509-532.
- Butler, A., Gasser, M., & Smart, L. (2004). A social-cognitive perspective on using family-friendly benefits. *Journal of Vocational Behavior*, 65(1), 57-70.
- Carlson, D. S. & Frone, M. R. (2003). Relation of behavioral and psychological involvement to a new four-factor conceptualization of the work-family interference. *Journal of Business and Psychology*, 17, 515-535.
- Chadsey, J., & Beyer, S. (2001). Social relationships in the workplace. *Mental Retardation and Developmental Disabilities Research Reviews*, 7, 128-133.
- Chapman, A.J., Sheehy, N.P., Heywood, S., Dooley, B., & Collins, S.C. (1995). The organizational implications of teleworking. In C.L. Cooper & I.T. Robertson (Eds.), *International review of industrial and organizational psychology*, Vol. 10 (pp. 229-248). London: Wiley.

- Christensen, K. E., & Staines, G. L. (1990). Flextime: A viable solution to work/family conflict? *Journal of Family Issues*, *11*(4), 455-476.
- Clark, S.C. (2001). Work cultures and work/family balance. *Journal of Vocational Behavior*, *58*, 348-365.
- Cohen, Jacob (1969). *Statistical power analysis for the behavioral sciences*. NY: Academic Press.
- Cohen, J., Cohen, P., West, S.G., & Aiken, L.S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd Ed.). Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Cooper, C.D., & Kurland, N.B. (2002). Telecommuting, professional isolation, and employee development in public and private organizations. *Journal of Organizational Behavior*, *23*, 511-532.
- Desrochers, S., Hilton, J.M., & Larwood, L. (2005). Preliminary validation of the work-family integration-blurring scale. *Journal of Family Issues*, *26*(4), 442-466.
- Dijkers, J.S.E., Geurts, S.A.E., Den Dulk, L., Peper, B., & Kompier, M. (2004). Relations among work-home culture, the utilization of work-home arrangements, and work-home interference. *International Journal of Stress Management*, *11*, 323-345.
- Dooley, B. (1996). At work away from work. *The Psychologist*, *9*, 155-158.
- Eaton, S.C. (2003). If you can use them: Flexibility policies, organizational commitment, and perceived performance. *Industrial Relations*, *42*, 145-167.
- Eisenberger, R., Jones, J.R., Stinglhamber, F., Shanock, L., & Randall, A.T. (2005). Flow experiences at work: For high need achievers alone? *Journal of Organizational*

Behavior, 26(7), 755-775.

Elovainio, M., & Kivimaki, M. (1999). Personal need for structure and occupational strain: An investigation of structural models and interaction with job complexity. *Personality and Individual Differences, 26, 209-222.*

Elovainio, M., & Kivimaki, M. (2001). The effects of personal need for structure and occupational identity in the role stress process. *The Journal of Social Psychology, 141, 365-378.*

Fletcher, J., & Bailyn, L. (1996). Challenging the last boundary: Reconnecting work and family. In M.B. Arthur & D.M. Rosseau (Eds.), *The boundaryless career: A new employment principle for a new organizational era* (pp. 256-267). New York: Oxford University Press.

Friedman, S.D., Christensen, P., & DeGroot, J. (1998). Work and life: the end of the zero-sum game. *Harvard Business Review, 76(6), 119-29.*

Friedman, D.E., & Johnson, A.A. (1997). Moving from programs to culture change: The next stage for the corporate work-family agenda. In S. Parasuraman & J.H. Greenhaus (Eds.), *Integrating work and family: Challenges and choices for a changing world* (pp. 192-208). Westport, CT: Quorum Books.

Frolick, M.N., Wilkes, R.B., & Urwiler, R. (1993). Telecommuting as a workplace alternative: An identification of significant factors in American firms' determination of work-at-home policies. *Journal of Strategic Information Systems, 2, 206-222.*

Frone, M.R. (2000). Work-family conflict and employee psychiatric disorders: The national comorbidity survey. *Journal of Applied Psychology, 85(6), 888-895.*

- Frone, M.R., Russell, M., & Cooper, M.L. (1997). *Journal of Occupational and Organizational Psychology*, 70(4), 325-335.
- Gainey, T.W., Kelley, D.E., & Hill, J. (1999). Telecommuting's Impact on Corporate Culture and Individual Workers: Examining the Effect of Employee Isolation. *SAM Advanced Management Journal*, 64, 4-11.
- Geisler, G. (1985). Blue Cross/Blue Shield of South Carolina: Program for clerical workers. In M.H. Olson (Ed.), *Office Workstations in the Home* (p. 16-23). Washington, DC: National Academy Press.
- Glass, J., & Fujimoto, T. (1995). Employer characteristics and the provision of family responsive policies. *Work and Occupations*, 22(4), 380-411.
- Golden, T.D., & Veiga, J.F. (2005). The Impact of Extent of Telecommuting on Job Satisfaction: Resolving Inconsistent Findings. *Journal of Management*, 31(2), 301-318.
- Greenhaus, J.H., & Beutell, N.J. (1985). Sources and conflict between work and family roles. *Academy of Management Review*, 10(1), 76-88.
- Greenhaus, J.H., Parasuraman, S., & Collins, K.M. (2001). Career involvement and family involvement as moderators of relationships between work-family conflict and withdrawal from a profession. *Journal of Occupational Health Psychology*, 6(2), 91-100.
- Hammer, L.B., Neal, M.B., Newson, J.T., Brockwood, K.J., & Colton, C.L. (2006). 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.

- Hartman, R.I., Stoner, C.R., & Arora, R. (1992). Developing successful organizational telecommuting arrangements: Worker perceptions and managerial prescriptions. *SAM Advanced Management Journal*, *57*, 35-42.
- Heckert, T.M., Cuneio, G., Hannah, A.P., Adams, P.J., Droste, H.E., Mueller, M.A., Wallis, H.A., Griffin, C.M., & Roberts, L.L. (1999). Creation of a new needs assessment questionnaire. *Journal of Social Behavior and Personality*, *15*, 121-136.
- Hill, E.J., Hawkins, A.J., Ferris, M., & Weitzman, M. (2001). Finding an extra day a week: The positive influence of perceived job flexibility on work and family life balance. *Family Relations*, *50*, 49-58.
- Hill, E.J., Hawkins, A.J., Mårtinson, V. (2003). Studying 'Working Fathers': Comparing Fathers' and Mothers' Work-Family Conflict, Fit, and Adaptive Strategies in a Global High-Tech Company. *Fathering*, *1*(3), 239-261.
- Hill, E.J., Hawkins, A.J., & Miller, B.C. (1996). Work and family in the virtual office: perceived influences of mobile telework. *Family Relations*, *45*(3), 293-301.
- Hill, E. J., Miller, B.C., Weiner, S.P. & Colihan, J. (1998). Influences of the virtual office on aspects of work and work/life balance. *Personnel Psychology*, *51*, 667-683.
- Hill, E.J., & Weiner, S.P. (2003). Work/life balance policies and programs. In J.E. Edwards, J.C. Scott, & N.S. Raju (Eds.), *The human resources program-evaluation handbook*. (pp. 447- 468). Thousand Oaks, CA: Sage Publications.
- Hogan, R., & Warrenfeltz, R. (2003). Educating the modern manager. *Academy of Management Learning and Education*, *2*, 74-84.

- Hyland, M. M. (2000). *Flexibility in work arrangements: How availability, preferences and use affect business outcomes*. Paper presented at the Annual Meeting of the Academy of Management, Toronto, ON.
- Igbaria, M., & Guimaraes, T. (1999). Exploring differences in employee turnover intentions and its determinants among telecommuters and non-telecommuters. *Journal of Management Information Systems, 16*, 147-164.
- Jahoda, M. (1979). The impact of unemployment in the 1930s and the 1970s. *Bulletin of the British Psychological Society, 32*, 309-314.
- James, L. R., & Brett, J. M. (1984). Mediators, moderators, and tests for mediation. *Journal of Applied Psychology, 69*, 307-321.
- Jett, Q. R. & George, J. M. (2003). Work interrupted: A closer look at the role of interruptions in organizational life. *Academy of Management Review, 28*, 494-507.
- Kanfer, R. (1991). Motivation theory and industrial and organizational psychology. In M.D. Dunnette & L.M. Hough (Eds.), *Handbook of industrial and organizational psychology*, (Vol. 1, pp. 75–170). Palo Alto, CA: Consulting Psychologists Press.
- Kirby, E.L., & Krone, K.J. (2002). “The policy exists but you can’t really use it”: Communication and the structuration of work-family policies. *Journal of Applied Communication Research, 30*, 50-77.
- Kivimaki, M., Elovainio, M., & Nord, J. (1996). Effects of components of personal need for structure on occupational strain. *The Journal of Social Psychology, 136*(6), 769-777.
- 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, New Jersey: Lawrence Erlbaum Associates.
- 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. *International Journal of Conflict Resolution*, 10, 102-129.
- Kraut, R.E. (1989). *Telecommuting: The trade-offs of home work*. *Journal of Communication*, 39, 19-47.
- Kristof, A.L. (1996). Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49(1), 1-49.
- Kurland, N.B., & Bailey, D.E. (1999). Telework: The advantages and challenges of working here, there, anywhere, and anytime. *Organizational Dynamics*, 28(2), 53-68.
- Lansing, J.B., & Heyns, R.W. (1959). Need for affiliation and four types of communication. *Journal of Abnormal and Social Psychology*, 58, 365-372.
- Latham, G.P., & Pinder, C.C. (2005). Work motivation theory and research at the dawn of the twenty-first century. *Annual Review of Psychology*, 56, 485-516
- Lawler, E.E. (1971). *Pay and organizational effectiveness: A psychological view*. New York: McGraw-Hill.
- 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, Massachusetts: Blackwell.
- Major, V.S., Klein, K.J., & Ehrhart, M.G. (2002). Work time, work interference with family, and psychological distress. *Journal of Applied Psychology, 87*(3), 427-436.
- Martins, L.L., Eddleston, K.A., & Veiga, J.F. (2002). Moderators of the relationship between work-family conflict and career satisfaction. *Academy of Management Journal, 45*, 399-409.
- Maslow, A.H. (1943). A theory of human motivation. *Psychological Review, 50*, 370-396.
- McClelland, D. C. (1961) *The achieving society*. Princeton: Van Nostrand.
- McClelland, D. (1965). Toward a theory of motive acquisition. *American Psychologist, 20*, 321-333.
- McClelland, D.C. (1987). *Human Motivation*. New York: Cambridge University Press.
- McClelland, D.C., & Boyatzis, R.E. (1982). The leadership motive pattern and long term success in management. *Journal of Applied Psychology, 67*, 737-743.
- Mudrack, P.E., & Naughton, T.J. (2001). The assessment of workaholism as behavioral tendencies: Scale development and preliminary empirical testing. *International Journal of Stress Management, 8*(2), 93-111.
- Murray, H.A. (1938). *Explorations in personality*. New York: Oxford University Press.
- Netemeyer, R.G., Boles, J.S., & McMurrian, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied*

- Psychology*, 81(4), 400-410.
- Neuberg, S.L., & Newsom, J.T. (1993). Personal need for structure: Individual differences in the desire for simple structure. *Journal of Personality and Social Psychology*, 65, 113-131.
- Nippert-Eng, C. (1996). Calendars and keys: The classification of 'home' and 'work'. *Sociological Forum*, 11, 563-581.
- Oldham, G. R., Kulik, C. T., & Stepina, L. P. (1991). Physical environments and employee reactions: Effects of stimulus-screening skills and job complexity. *Academy of Management Journal*, 34, 929-938.
- Olson, M.H. (1989). Organization barriers to professional telework. In E. Boris & C.R. Daniels (Eds.) *Homework: Historic and contemporary perspectives on paid labor at home* (pp. 215-230). Urbana, IL: University of Illinois Press.
- Olson-Buchanan, J.B., & Boswell, W.R. (2006). Blurring boundaries: Correlates of integration and segmentation between work and nonwork. *Journal of Vocational Behavior*, 68, 432-445.
- Parasuraman, S., & Greenhaus, J.H. (1997). The changing world of work and family. In S. Parasuraman & J.H. Greenhaus (Eds.), *Integrating work and family: Challenges and choices for a changing world* (pp. 3-14). Westport, CT: Quorum Books.
- Perlow, L.A. (1995). Putting the work back into work/family. *Group & Organization Management*, 20(2), 227-239.
- Perlow, L.A. (1999). The time famine: Toward a sociology of work time. *Administrative Science Quarterly*, 44, 57-81.

- Phelps, N. (1985). Blue Cross/Blue Shield of South Carolina: Program for clerical workers. In M.H. Olson (Ed.), *Office Workstations in the Home* (pp. 33-37). Washington, DC: National Academy Press.
- Pratt, J.H. (1984). Home teleworking: A study of its pioneers. *Technological Forecasting and Social Change*, 25, 1-14.
- Rau, B.L. (2003). Flexible work arrangements. *Sloan Online Work and Family Encyclopedia*. http://wfnetwork.bc.edu/encyclopedia_entry.php?id=240&area=All
- Rau, B.L., & Hyland, M.M. (2002). Role conflict and flexible work arrangements: The effects on applicant attraction. *Personnel Psychology*, 55, 111-136.
- Rodgers, C.S. (1992). The flexible workplace: What have we learned? *Human Resource Management*, 31, 183-199.
- Ronen, S. (1994). An underlying structure of motivation need taxonomies: A cross-cultural confirmation. In H.C. Triandis, M.D. Dunnette & L.M. Hough (Eds.), *Handbook of industrial and organizational psychology* (Vol 4., pp. 241-269).
- Rothausen, T.J. (1999). "Family" in organizational research: A review and comparison of definitions and measures. *Journal of Organizational Behavior*, 20, 817-836.
- Rothbard, N.P., Phillips, K.W., & Dumas, T.L. (2005). Managing multiple roles: Work-family policies and individuals' desires for segmentation. *Organization Science*, 16, 243-258.
- Schmidt, N., Colligan, M. J., & Fitzgerald, M. (1980). Unexplained physical symptoms in eight organizations: Individual and organizational analyses. *Journal of Occupational Psychology*, 53, 305-317.
- Shamir, B., & Salomon, I. (1985). Work-at-home and the quality of working life.

- Academy of Management Review*, 10(3), 455-464.
- Sharpe, D.L., Hermsen, J.M., & Billings, J. (2002). Gender differences in use of alternative full-time work arrangements by married workers. *Family and Consumer Sciences Research Journal*, 31, 78-110.
- Shellenbarger, S. (1992). Lessons from the workplace: How corporate policies and attitudes lag behind workers' changing needs. *Human Resource Management*, 31, 157-169.
- Singh, S. (1978). Achievement motivation and entrepreneurial success: A follow-up study. *Journal of Research in Personality*, 12(4), 500-503
- Society for Human Resource Management Foundation. (2001). *SHRM 2001 benefits survey*. Society for Human Resource Management.
- Speier, C., Valacich, J. S., & Vessey, I. (1999). The influence of task interruption on individual decision making: An information overload perspective. *Decision Sciences*, 30, 337-360.
- Staw, B.M. (1977). Motivation in organizations: Towards a synthesis and redirection. In B.M. Staw & G.R. Salancik (Eds.), *New directions in organizational behavior*. Chicago: St. Clair Press.
- Steers, R.M., & Braunstein, D.N. (1976). A behaviorally-based measure of manifest needs in work settings. *Journal of Vocational Behavior*, 9, 251-266.
- Stewart, N. (1985). *Winning friends at work*. New York: Ballantine Books.
- Super, D.E., & Sverko, B. (1995). *Life roles, values, and careers: International findings of the Work Importance Study*. San Francisco: Jossey-Bass.
- Thomas, L.T., & Ganster, D.C. (1995). Impact of family-supportive work variables on

work-family conflict and strain: A control perspective. *Journal of Applied Psychology*, 80(1), 6-15.

Thompson, C., Beauvais, L., & Allen, T. D. (2006). Work and family from an industrial/organizational psychology perspective. In M. Pitt-Catsouphes, E. E. Kossek, & S. Sweet (Eds.) *Work-family handbook: Multi-disciplinary perspectives and approaches* (pp. 283-307). Mahwah, New Jersey: Lawrence Erlbaum.

Thompson, C.A., Beauvais, L.L., & Lyness, K.S. (1999). When work-family benefits are not enough: The influence of work-family culture on benefit utilization, organizational attachment, and work-family conflict. *Journal of Vocational Behavior*, 54(3), 392-415.

Thompson, M.M., Naccarato, M.E., Parker, K.E. (1989). *Assessing cognitive need: The development of the personal need for structure and personal fear of invalidity scales*. Paper presented at the annual meeting of the Canadian Psychological Association, Halifax, Nova Scotia.

Thompson, M.M., Naccarato, M.E., Parkter, K.E., & Moskowitz, G.B. (2001). The personal need for structure and personal fear of invalidity measures: Historical perspectives, current applications, and future directions. In G.B. Moskowitz (Ed.) *Cognitive social psychology: The Princeton symposium on the legacy and future of social cognition* (pp.19-39). Mahwah, NJ: Lawrence Erlbaum Associates.

Veiga, J.F., Baldrige, D.C., & Eddleston, K.A. (2004). Toward understanding employee reluctance to participate in family-friendly programs. *Human Resource Management Review*, 14, 337-351.

Veroff, J., & Veroff, J.B. (1980). *Social incentives: A life span developmental approach*.
New York: Academic Press.

Vroom, V.H. (1964). *Work and motivation*. New York: Wiley.

Wainer, H.A., & Rubin, I.M. (1969). Motivation of research and development
entrepreneurs. *Journal of Applied Psychology*, 53, 178-184.

Zerubavel, E. (1991). *The fine line: Making distinctions in everyday life*. New York: The
Free Press.

Appendices

Appendix A

Need for Affiliation at Work Scale Items

1. I spend a lot of time talking to co-workers during work.
2. It is important for me to feel like I am part of a work community.
3. I am concerned with the well-being of my co-workers.
4. I like to feel that I have meaningful relationships with my co-workers.
5. At work, I am most content when surrounded by others.
6. I prefer to work alone than with others. ®
7. If don't feel the need to gain the acceptance and approval of my co-workers. ®

Appendix B

Need for Structure in the Workplace Scale Items*

1. It upsets me to go into a situation at work without knowing what I can expect from it.
2. I am not bothered by things that interrupt my daily work routine. ®
3. I enjoy having a clear and structured work routine.
4. I like to have a place for everything and everything in its place in my workspace.
5. When at work, I enjoy being spontaneous. ®
6. I find that a well-ordered work schedule with regular hours makes my life tedious. ®
7. I don't like work situations that are uncertain.
8. I hate to change my work plans at the last minute.
9. I hate to be with coworkers who are unpredictable.
10. I find that a consistent routine at work leads to greater job satisfaction.
11. I enjoy the exhilaration of being in unpredictable work situations. ®
12. I become uncomfortable when the rules in a work-related situation are not clear.

*adapted for Neuberg and Newsome (1993)

Appendix C

Need for Segmentation of Work from Other Life Roles Scale Items*

1. I don't like to have to think about work while I'm at home.
2. I prefer to keep work life at work.
3. I don't like work issues creeping into my home life.
4. I like to be able to leave work behind when I go home.

Appendix D

Need for Occupational Achievement*

1. I am pleased when I can take on added job responsibilities
2. I am always looking for opportunities to improve my skills on the job.
3. I like to set challenging goals for myself on the job.
4. I enjoy situations at work where I am personally responsible for finding solutions to problems.
5. I try very hard to improve on my past performance at work.
6. I get the most satisfaction when completing job assignments that are fairly difficult.
7. I want frequent feedback on how I am doing on the job.
8. I do my when work when my job assignments are fairly difficult.
9. I believe in taking moderate risks to get ahead at work.

* Eisenberger, Jones, Stinglhamber, Shanock, and Randall (2005)

Appendix E

Face-time Orientation Scale Items

1. My department values physical presence at work.
2. My co-workers are often in their offices.
3. Those who are usually physically present at work receive perks that others don't.
4. I am called out by my co-workers if I do not come to my office for a few days.
5. Everyone is judged on their output, regardless of where they conduct work. ®
6. I feel that I am free to choose when and where I work without fear of negative repercussions. ®
7. I think it would be better for my career if I was at the office most of the time.

Appendix F

Use of Flextime Scale Items

1. I usually work outside of "traditional" work hours.
2. My campus schedule varies from day to day.
3. My start and stop times on campus frequently change.
4. I tend to keep a consistent set of hours on campus. ®
5. Exploratory item: If you work consistent hours, what are your general start and stop times? (i.e., 9 to 5)

Appendix G

Use of Flexplace Item*

1. Please indicate the percent of your job that you currently perform away from your main work office during the spring and fall semesters.

* Kossek, Lautsch, and Eaton (2006).

Appendix H

Perceived Flexibility Available Scale Items*

1. I have the freedom to vary my work schedule.
2. I have the freedom to work wherever is best for me - either at home or at work.
3. I can change the times that I begin and end my workday to fit my personal preferences and needs.
4. I can change the location of where I conduct my work to fit my personal preferences and needs.

*Hyland (2000)

Appendix I

Family Responsibility Scale Items*

Indicate the number of dependents for which you assume responsibility in each category and whether or not they reside with you.

Child under age 1 ____ Living with you? Yes __ No ____

Child aged 1-2 years ____ Living with you? Yes __ No ____

Child aged 3-5 years ____ Living with you? Yes __ No ____

Child aged 6-9 years ____ Living with you? Yes __ No ____

Child aged 10-14 years ____ Living with you? Yes __ No ____

Child aged 15-18 years ____ Living with you? Yes __ No ____

Child over age 18 or any other adult ____ Living with you? Yes __ No ____

*Rothausen (1999)

Appendix J

Work-family Conflict Scale Items*

Work interfering with family:

1. The demands of my work interfere with my home and family life.
2. The amount of time my job takes up makes it difficult to fulfill family responsibilities.
3. Things I want to do at home do not get done because of the demands my job puts on me.
4. My job produces strain that makes it difficult to fulfill my family duties.
5. Due to work-related duties, I have to make changes to my plans for family activities.

Family interfering with work:

6. The demands of my family or spouse/partner interfere with work-related activities
7. I have to put off doing things at work because of demands on my time at home.
8. Things I want to do at work don't get done because of the demands of my family or spouse/partner.
9. My home life interferes with my responsibilities at work such as getting to work on time, accomplishing daily tasks, and working overtime.
10. Family-related strain interferes with my ability to perform job-related duties.

* Netemeyer, Boles, and McMurrian (1996).