

WHY USE FLEXIBLE WORK ARRANGEMENTS?: A POLICY CAPTURING
STUDY EXAMINING THE FACTORS RELATED TO FLEXIBLE WORK
ARRANGEMENT UTILIZATION

by

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DEDICATION

Once Again to Staci
(Maybe now I'll finally have time to read *The Great Gatsby*)

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ABSTRACT

WHY USE FLEXIBLE WORK ARRANGEMENTS?: A POLICY CAPTURING STUDY EXAMINING THE FACTORS RELATED TO FLEXIBLE WORK ARRANGEMENT UTILIZATION

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George Mason University, 2015

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The purpose of this study is to examine the decision-making process that goes into whether or not an employee enrolls in a flexible work arrangement (FWA). The effects of five work and life factors (having a family, having a stressful commute, having supervisor support for FWAs, having less interdependent work tasks, and having fewer workplace friendships) on an individual's decision to enroll in a FWA are examined. Additionally, unlike in previous studies, four specific FWAs (full-time telework, part-time telework, flextime, and compressed work schedule) are considered independently via a policy capturing methodology. Results (n=241) suggest that individuals evaluate all FWAs similarly, regardless of the FWA about which they are responding. Supervisor support for FWA use is by far the strongest predictor of likely FWA use. A final issue addressed in this paper is whether actual experience with the work and life factors under investigation impact participants' responses to the hypothetical scenarios presented in the

policy capturing study. Results showed that actual experience with the factors did not impact the substantive results of this policy capturing study. Discussion focuses on the contributions of the study to the FWA and policy capturing literature and implications of the results for practitioners.

INTRODUCTION

Flexible work arrangements (FWAs) are human resource practices that have been increasing in popularity over the past 80 years (Hunnicut, 1996). Currently, 27% of employees in the U.S. use flextime and 30% are able to telework occasionally (McGuire, Kenney, & Brashler, 2010). Despite the increasing popularity of FWAs, few studies have directly examined the decision-making process of enrolling in a FWA. Of the limited number of studies that have addressed FWA utilization (as opposed to examining how FWAs impact employee behaviors or attitudes) several notable limitations exist (see Butts, Casper, & Yang, 2013, or Gajendran and Harrison, 2007 for reviews of general FWA practices). First, previous research has focused on a very limited number of factors that could be related to FWA use (Almer, Cohen, Single, 2003; Grover & Crooker, 1995; Kossek, Lautsch, & Eaton, 2006). Specifically, this stream of research concludes that FWAs are more beneficial, and are more frequently used by employees who have a family (Kossek, Lautsch, & Eaton, 2006). Although this conclusion might be true, it does not negate the possibility that several other factors could influence an employee's enrollment in a FWA program. Second, previous research methodologies have focused solely on current FWA enrollment, as opposed to the desire, or intention, to use a FWA (Almer, Cohen, & Single, 2003). This type of methodology potentially confounds employees' desires to use a FWA and the organization's willingness to let them enroll.

For example, the previously discussed research finding that employees with a family are more likely to use FWAs could be an artifact of organizations being more likely to allow employees with a family to use them, not a lack of interest for employees without a family. Third, and finally, previous research has only investigated the characteristics that are related to FWA use in general, but not with regard to using specific types of FWAs (Almer, Cohen, & Single, 2003; Grover & Crooker, 1995; Kossek, Lautsch & Eaton, 2006). In other words, studies have not compared the decision to enroll in one type of FWA versus another one. However, research has shown that different types of FWAs have unique characteristics that affect work differently (Shockley & Allen, 2010). As such, an investigation of FWA utilization should take into account the nuances of different types of FWAs. These three limitations hinder the practical usefulness of previous research on FWA use.

The present study aims to address these limitations by using a policy capturing methodology to examine how individuals evaluate their likelihood of using four FWAs (full-time telework, part-time telework, flextime, and a compressed work schedule) as a function of five work and life factors (presence/absence of a family, presence/absence of a stressful commute, a supervisor who supports/does not support FWA use, interdependent work tasks/independent work tasks, and having workplace friendships/not having workplace friendships). A policy capturing methodology allows this study to make two major contributions to the FWA utilization literature. First, the results will speak to the desire to use a FWA, as opposed to current FWA enrollment, which has been the focus of previous research. Second, this methodology will begin to uncover the

decision-making process that goes into enrolling in specific FWAs, as opposed to the broader focus of previous research on FWA in general utilization. The use of policy capturing in this study does raise a methodological issue about policy capturing, that of the potential impact of participants' actual reality. Participants could have differential amounts of real world experience with the work and life factors in turn, potentially impacting their responses to the scenario. Policy capturing requires participants to imagine they are in the scenario that is being presented (Karren & Barringer, 2002; Rao, 2014). For instance, participants who have strong experiences with the factors in their lives might rate those factors as the most important, regardless of the levels of the other factors that are presented in a scenario. To my knowledge, the policy capturing literature has not examined this issue, which could, potentially, have a meaningful impact on policy capturing results. The present research effort will seek to address the decision-making process of enrolling in a FWA as a primary focus, with an investigation into the methodological effect on policy capturing as a secondary focus.

This paper will proceed in the following way. First, I present an overview of the four FWAs under investigation and provide an overview of the theory of planned behavior which will serve as the theoretical basis for the hypotheses. Next, hypotheses regarding the relationship between the five work and life factors and the likelihood of using the four FWAs will be made incorporating the theory of planned behavior. Then, I present methodological research questions regarding the impact of individuals' actual experience with the five work and life factors under investigation on their ratings of the likelihood of using FWAs in general. After that, I present the method and results of a pre-

test study ensuring that the manipulations are equal in strength across factors. I then describe the method and results of the primary study and conclude with a discussion of these results. The successful completion of this study will allow human resource managers to more accurately predict FWA use by understanding the complex decision-making process that goes into the decision to use a FWA. In turn, organizations will be able to more accurately predict the anticipated enrollment and financial cost of implementing a flexible work arrangement and which employees will choose what type of FWA.

Types of Flexible Work Arrangements

A FWA has been defined as a human resource policy that employees choose to enroll in that creates flexibility in the time, location, amount, or continuity of employee work (Kossek & Michel, 2011). Employee choice is an important part of a FWA, as other types of work arrangements can be alternative, but are mandatory (for example, when organizations require an employee to telecommute full-time due to space constraints). Beyond that stipulation, the definition is very broad, encompassing such diverse practices as compressed work schedules, sabbaticals, or even part-time work.

For this study, I will focus on two broad classifications of FWAs, those involving flexibility in the location and flexibility in the timing of work, respectively. These two classifications were chosen for two reasons. First, work arrangements that provide flexibility in location and timing of work are the most popular types of flexible work arrangements that still allow an employee to be classified as full-time (SHRM, 2011; Shockley & Allen, 2010). Second, employees can enroll in a FWA that provides

flexibility in the location and timing of work and expect to continue to receive the same, or very comparable, pay and benefits as the employee may when working in the office during standard hours (SHRM, 2008). In other types of FWAs, employees often are changing the total number of hours they work in a pay period, thus allowing the organization to adjust the employees' pay and benefits in a comparable way. In the following section, I review the literature about the four types of FWAs that will be considered in this study: part-time telecommuting, full-time telecommuting, compressed work schedules, and flextime.

Worth emphasizing is that, although this study is examining the decision-making process for each of these FWAs independently, it is of course possible for an employee to utilize multiple FWAs simultaneously. For example, a person might use a flextime schedule to work from 6-2 while teleworking. The present study is attempting to disentangle the decision-making process about how employees decide to use specific FWAs. Based on the results of this study, future research can address the decision-making processes used for utilizing multiple FWAs.

Part-time telecommuting

The first two FWAs that I discuss involve offering flexibility in the location of work, specifically part-time and full-time telecommuting. Telecommuting is a FWA policy that allows employees who traditionally work from a centralized work location to work away from the office (Gajendran & Harrison, 2007; Noonan & Glass, 2012; Shin, Sawy, Sheng, & Higa, 2000). For clarification, this definition excludes jobs in which

working outside the office is necessary for job performance (i.e. travelling salespeople, those who work at a client site, truck drivers, etc.).

Part-time telecommuting refers to a broad range of time spent teleworking, anywhere from once per month to several times per week (Gajendran & Harrison, 2007). For the purpose of this study, part-time telecommuting will be operationally defined as telecommuting 1 or 2 days per week. Telecommuting is the second most frequently offered flexible work arrangement in the US, with 45% of organizations offering some form of telecommuting (i.e. as needed, part-time, or full-time; SHRM, 2011). Furthermore, over one third of all organizations offer regularly scheduled part-time teleworking, and 15% of all employees report telecommuting at least one day per week, with this number expected to rise in the coming years (Noonan & Glass, 2012; SHRM, 2011).

The research literature on part-time telecommuting is generally positive. Employees who telecommute regularly on a part-time basis have less work-family conflict and job stress (Golden, Veiga, & Dino, 2008; Golden, Veiga, & Simsek, 2006). Additionally, part-time telecommuting is related to higher levels of job performance and job satisfaction (Gajendran & Harrison, 2007; Golden & Veiga, 2005). On days that employees telework, as compared to working in the traditional office, employees report performing better, having more satisfaction with their job and more positive affect (Anderson, Kaplan, & Vega, 2015; Vega, Anderson, & Kaplan, 2015). Organizations with telecommuting policies also have better “triple bottom lines” which measures not only financial performance but also social and environmental responsibility (Allenby &

Richards, 1999). In summary, part-time telecommuting is a viable organizational policy that can enhance employee outcomes and organizational performance.

Full-time telecommuting

Employees utilizing full-time telecommuting programs work away from a centralized work location as their primary work location (Gajendran & Harrison, 2007; SHRM, 2011). Full-time telecommuters only come into the office for situations that cannot be handled remotely (i.e. presentations, some meetings, etc.). A recent survey from the Society for Human Resource Management estimates that 20% of organizations offer full-time telecommuting as an option for their employees (SHRM, 2011). Other estimates suggest that this number is rising, with several organizations utilizing this FWA as a way to cut overhead costs (Allenby & Richards, 1999; Noonan & Glass, 2012).

While the degree of telecommuting a person engages in could be considered on a continuum (from no telecommuting to full-time, with a part-time option somewhere in the middle), the research evidence for full-time and part-time telecommuting is in opposition. Although the research literature presents a generally positive view of part-time telecommuting, the limited research on full-time telecommuting suggests generally negative outcomes associated with this policy. In one of the first studies examining the downside of full-time telecommuting, Golden and Viega (2005) show a curvilinear relationship between the extent of telecommuting and job satisfaction, such that moderate or part-time telecommuting is most beneficial for job satisfaction, but full-time telecommuting is detrimental. Full-time telecommuting is also associated with increased levels of family-to-work conflict, social isolation and coworker resentment (Golden,

Veiga, & Dino, 2008; Golden, Veiga, & Simsek, 2006; Morganson, Major, Oborn, Virive, & Heelan, 2010). Because of the contradictory outcomes suggested by the research literature, treating this as a dichotomy seems appropriate when considering employee utilization.

Compressed Work Schedules

While the previous two FWAs offer flexibility in where employees work, the following two arrangements offer flexibility in when employees work. A compressed work schedule is a flexible work arrangement that allows an employee to work a 40-hour work week in a reduced number of longer days than the traditional 5-day, 8-hour/day work schedule (Pierce, Newstrom, Dunham, & Barber, 1989). The two most common types of compressed work schedules are 4 10-hour days with one day off per week or 9-hour days with either a half day off once a week or a full day off every two weeks (Kossek & Michel, 2011). In the United States, 40% of employers allowed employees to use a compressed work schedule (McGuire, Kenney, & Brashler, 2010).

In contrast to the research on telecommuting which is mostly relatively recent (i.e. within the past 15 years), research on arrangements that grant flexibility in time are typically older, in large part because these arrangements, unlike telework, were feasible before the great advances in technology that have occurred since 2000. In a meta-analytic investigation, Baltes and colleagues (1999) show that compressed work schedules are positively related to job satisfaction, satisfaction with one's schedule, and supervisor-rated performance. In a quasi-experimental investigation, employees who used a compressed work schedule achieved greater work-life balance (Dunham, Pierce, &

Castaneda, 1987). In general, then, compressed work schedules are related to positive employee outcomes.

Flextime

The final FWA examined here is flextime. A flextime arrangement grants employees the ability to choose when they work, typically incorporating an organization-wide specification of “core hours” (Baltes et al., 1999; Kossek & Michel, 2011). Employers offering flextime programs identify a common band of hours that all employees must be in the office, typically between 10 am and 2 or 3 pm. Employees then get to choose the 8 hours they will work while incorporating the organizationally mandated core hours. Using the example above, an employee could choose to work from 7 am until 3 pm, 10 am to 6 pm, or any 8 hour period in between 7am and 6 pm, for instance. Due to the flexibility granted to employees and the potential ease of implementation for the employer, flextime is the most popular flexible work arrangement in America, with recent estimates suggesting over 80% of employers offering flextime (World at Work, 2011).

In addition to being a popular program, research suggests that flextime is also a beneficial program for employee attitudinal and behavioral outcomes. Flextime use has been associated with increased employee productivity and job satisfaction and decreased absenteeism (Baltes et al., 1999). Additionally, flextime has been shown to decrease work interference with family matters and to have no effect on family interference with work matters (Allen, Johnson, Kiburz, & Shockley, 2012; Shockley & Allen, 2007). Overall, flextime programs appear to have beneficial relationships with employee outcomes.

Summary

Based on organizational usage statistics and previous research on FWAs, the four types of FWAs that will be examined in this study are part-time telework, full-time telework, compressed work schedule, and flextime. Different life circumstances might dictate a preference for one FWA over others. In the next section, the theory of planned behavior is introduced as a framework for understanding the subsequent hypotheses.

Overview of the theory of planned behavior

The basic premise behind the theory of planned behavior is that behavior is predicted by behavioral intentions, which in turn, are predicted by: the attitudes a person holds about that behavior, the perceived behavioral control over the behavior, and the subjective norms surrounding the behavior (Ajzen, 1991). The theory of planned behavior was chosen as an organizing framework for the present study because each of the work and life factors under investigation can be mapped on to at least one of the components of the theory. The rationale for the hypotheses will explicitly detail how the components are used in predicting employee utilization of FWAs. Below, I present a more detailed review of the three major components of the theory of planned behavior.

Perceived behavioral control

Perceived behavioral control is the belief that an individual has about whether he or she can successfully perform the behavior when considering both internal factors (like ability) and external factors (like having the appropriate tools for a job) (Ajzen, 2002). The internal aspect of perceived behavioral control is similar to the conception of self-efficacy proposed by Bandura (1982). The external aspects of this evaluation are any

facilitators that would enable, or impediments that would prevent, the actor from completing the behavior. As an example relevant to this paper (as well as an allusion to the hypotheses section), let us consider a situation where an organization has a formal policy that allows an employee to use a FWA, but in which his or her direct manager strongly discourages the practice. In this situation, the employee making the decision to use a FWA would weigh both of these external factors against each other and formulate a decision regarding the amount of control he or she has over the situation. On one hand, the employee should have complete control because of the formal policy. On the other hand, the manager of the employee might take retribution on the employee using a FWA by giving him or her a lower performance evaluation. The employee's final evaluation of his or her control over the situation likely will influence the individual's intention to use the FWA (or not).

While perceived behavioral control has an impact on performing a behavior, the actual control an individual has on the successful execution of a behavior also has a major impact. When discussing actual control, Ajzen (1991) states "the importance of actual behavioral control is self-evident: The resources and opportunities available to a person must to some extent dictate the likelihood of behavioral achievement" (p. 183). In other words, while perceived behavioral control is extremely important in the psychological evaluation of alternatives, actual behavioral control is important when determining whether a person will actually do the behavior.

In the context of the present study, actual control would be the organizational policy that enables employees to use a FWA, while, for example, supervisor support of

FWAs would impact the perceived behavioral control. If the organizational policy forbids FWA use, then, even if a supervisor was supportive of FWAs, the employee does not have control over that decision. On the other hand, in a situation where an organizational policy exists, but a supervisor does not support FWA use, the employee might feel like he/she does not have control over the decision, but the employee could go above the direct supervisor to get approval for using a FWA. In other words, the employee does have actual control over the outcome, but might feel like he/she does not because of the supervisor's discouragement of FWA use.

Attitudes

In the context of the theory of planned behavior, an attitude refers to an evaluation of whether the behavior in question is favorable or not (Ajzen, 1991). This conception of attitudes is most in line with the expectancy-value model of attitudes, which was originally developed by Fishbein and Ajzen (1975) in their seminal work on the theory of reasoned action. According to this model, attitudes are a summation of all the beliefs an individual holds about the behavior, outcomes of the behavior, or processes that go into performing the behavior multiplied by the strength of each of these beliefs. An example might help clarify this point. In making a decision about buying a new pair of shoes, an individual would have a specific attitude about this behavior. That attitude would be comprised of, among other things, the strong belief that his current shoes are no longer sufficient. Additionally, he might hold a weak belief that the shoe buying process is unpleasant. Finally, he might hold a strong belief that after doing this behavior, he would

look better. By weighing the relative merits/detriments of each of these beliefs against one another, he would arrive at an overall positive attitude about buying shoes.

Subjective norms

The final major component of the theory of planned behavior is the subjective norm of the behavior. Within the framework of the theory of planned behavior, the subjective norm is the perceived social pressure to either perform the behavior or not (Ajzen, 1991). Similar to the way that attitudes are created by the strength and evaluation of behavioral beliefs, subjective norms are determined by the strength of the norm and the motivation to adhere to that norm (also called normative beliefs; Ajzen, 1991). Because the theory of planned behavior is concerned with the psychological process used to determine performing a behavior, subjective norms need to be noticed and evaluated appropriately by the individual actor. Continuing with the shoe buying example, the individual might have a favorable attitude about a pair of bright orange dress shoes, but might not purchase this item because he works in a very formal workplace where orange shoes would not be considered appropriate. After considering the subjective norms, attitudes, and perceived behavioral control of a specific behavior, the individual decides to perform the behavior or not.

Application to the current study

In order to apply the theory of planned behavior to the prediction of FWA use based on work and life factors, a standard format will be used to make hypotheses. First, I will review previous literature that speaks to the relationship between each work or life factor and the use of FWAs. Next, I will discuss the relationship between the factor and

FWA utilization through the lens of the theory of planned behavior. The rationale for each relationship will highlight the applicable components of the theory of planned behavior. Worth noting is that all components of the theory might not apply to each relationship. For example, having a family will likely impact the attitudes and subjective norms in regard to FWA utilization, but the presence of a family will be unlikely to impact the perceived behavioral control.

Also worth mentioning is that, in some cases the hypothesized relationship between a given factor and the various FWAs might all be in the same direction. In these situations, the hypotheses will be discussed in a general manner, only highlighting specific FWAs when one component of the theory of planned behavior would be evaluated differently. Despite being in the same direction, though, there could still be an expected difference in the magnitude of the relationships. For example, a stressful commute might make all participants more likely to use any of the FWAs, but avoiding the commute completely (full-time telework) would likely have the strongest effect.

For this reason, I also offer predictions ranking the impact of the factors on use of the FWAs. The rationale for the rankings will not be covered in text below, but will generally follow Shockley and Allen's (2010) conceptualization of flextime and flexplace. This conceptualization suggests that flexplace policies are more disruptive to an employee's work day than flextime policies and the level of disruption is dependent on the degree to which that FWA is used. Following this rationale, full-time telework will be predicted to have the strongest relationship with all of the work and life factors under investigation because it is the most disruptive to "typical" work flow (i.e. flexplace policy

and is used for all work hours). Part-time telework will be predicted to have the second strongest relationship with all of the work and life factors. A compressed work schedule and flextime will have the least disruption, and thus the weakest relationship with the work and life factors.

Factors influencing flexible work arrangement use

In the next section, I follow the framework presented above in hypothesizing how five work and life factors influence FWA utilization (see table 1 for a graphical summary of the hypotheses). The factors are the presence of a family, a stressful commute, supervisor support of FWA use, interdependence of work tasks, and workplace friendships. These factors were chosen for two reasons. First, some of the factors were chosen because they have been examined in conjunction with FWA utilization in general (Almer, Cohen, & Single, 2003; Shockley & Allen, 2007). Second, the other factors represent daily stressors or sources of support that could impact the decision to utilize FWAs. Although no empirical research has examined how this subset factors influence FWA utilization, previous research has found that changing these factors could result in a large change in daily happiness (Haidt, 2006). By demonstrating how these factors influence FWA utilization, employers can begin to assess the potential utilization of a newly implemented FWA program, as well as recognizing when the impact of a FWA program would be maximized.

Presence of a family

Given that much of the research about FWA utilization is in the work-life family literature, it is unsurprising that the presence of a family has received the most empirical

attention (Butts, Casper, & Yang, 2013). According to the 2010 decennial U.S. Census, the average family household size with two parents is approximately 4 people (2 adults and 2 children) (Lofquist, Lugaila, O'Connell, & Feliz, 2012). Having a family often fundamentally changes an individual's time use (Offer & Schneider, 2011). Specifically, individuals with families tend to shift the time spent on leisure activities (i.e. hobbies, entertainment, etc.) to childcare and relationship maintenance (Offer & Schneider, 2011). Although gender differences exist in the extent of this shift, both men and women experience an absolute shift toward child care (Yeung, Sandberg, Davis-Kean, & Hofferth, 2011).

These changes in priorities for time use may also result in a reappraisal of the components of the theory of planned behavior with respect to FWA use. Parents generally begin to value time spent with their children over time spent at work and time spent on leisure activities (Offer & Schneider, 2011). This priority shift should, in turn, make attitudes toward flexplace FWAs generally more positive because parents can increase their time spent with their children, both during work hours, and during the time they would spend commuting. However, this attitudinal shift may not occur for flextime FWAs because the absolute amount of time spent in the workplace is not changing (i.e. employees are still spending 40 hours per week in the office plus commute time). In other words, employees with a family may want to spend more time at home with their children and still be able to work. Flexplace policies allow the employee to do that, but flextime policies do not. Additionally, employees with families could experience a shift in the norms they perceive toward FWA utilization. Because employees with a family use all

FWAs at a higher rate than other employees (Almer, Cohen, & Single, 2003), employees might feel it is more acceptable to use a FWA when one has a family (Konrad & Yang, 2012; Kossek & Michel, 2011). The presence of a family will likely not affect perceived behavioral control.

Although there has been some research investigating how having a family affects using FWAs overall, few studies have looked at FWA adoption for employees with families in a more nuanced distinction by breaking down the investigation by FWA type. Using the flextime/flexplace classification, Shockley and Allen (2007) show positive, though non-significant, relationships between having a family and using flextime and flexplace policies. In another study not specifically focused on the presence of a family and FWA use, a curvilinear relationship was found between telework and work-family conflict and job satisfaction (Golden & Veiga, 2005). These results suggest that there is an optimal amount of teleworking that maximizes job satisfaction and work-family harmony. When considering how telecommuting use would relate to having a family, it appears that full-time telecommuting might be negatively related because that policy could increase work-family conflict. Part-time telecommuting, on the other hand, could alleviate some of that conflict and will, therefore, be utilized more when an individual has a family. Having a family should be unrelated to the policies that change the timing of the work (flextime and compressed work schedules) because these policies do not change the absolute amount of time an employee gets to spend with their children. Based on theoretical consideration and on the results of these empirical studies, as they relate to components of the theory of planned behavior, the following hypotheses are presented:

Hypothesis 1a: Familial presence will be negatively related to the likelihood of full-time teleworking utilization (rank order prediction: 1)¹

Hypothesis 1b: Familial presence will be positively related to the likelihood of part-time teleworking utilization (rank order prediction: 2)

Hypothesis 1c: Familial presence will be unrelated to the likelihood of flextime utilization (rank order prediction: t-3)

Hypothesis 1d: Familial presence will be unrelated to the likelihood of compressed work schedule utilization (rank order prediction: t-3)

Stressful Commute

The second factor hypothesized to affect FWA use is having a stressful commute. For the purpose of this study, a stressful commute is defined as a commute that induces emotional or physiological strain (Gerrig & Zimbardo, 2002; Hennessy & Wiesenhal, 1997; Lucas & Heady, 2002). Previous research has shown that commuting to and from one's job is one of the most unpleasant daily behaviors (Kahneman & Krueger, 2006; Schwarz, Kahneman, & Xu, 2009). Kahneman and Krueger (2006) showed that the peak of people's negative emotions for a day occurred during their commute. In addition to the most negative emotions, people also felt the fewest positive emotions resulting in the lowest affect balance score (Schwarz, Kahneman, & Xu, 2009). Previous research has also shown that even while role-playing, participants showed higher performance levels and lower cortisol levels when navigating less, versus more, difficult commutes (Wener,

¹ As previously specified, rank order predictors refer to the relative magnitude of the relationship (i.e. largest absolute value). Rank order of 1 indicates strongest relationship between the factor and the FWA, while a rank order of 4 indicates weakest or zero.

Evans, Phillips, & Nadler, 2003). Clearly, commutes are often an unpleasant daily occurrence that an individual might want to use FWAs to avoid, especially when particularly stressful.

Although largely ignored in the I/O literature, several studies in transportation research and environmental research have examined the effect and utilization of FWAs when employees have a stressful commute. In one study, researchers found that telecommuters reduced the time spent commuting, thus also significantly reducing their carbon emissions for the week (Henderson & Mokhtarian, 1996). In another study, employees using flextime experienced more commute satisfaction and less stress by being allowed to commute on hours that are not aligned with traditional work schedules (Lucas & Heady, 2002). Given that affective reactions carry over from the home to work and vice-versa, reducing the stress caused by a frustrating commute should greatly benefit the overall wellness of an employee (Haidt, 2006; Judge & Ilies, 2004).

Integrating research on stressful commutes into the components of the theory of planned behavior, an individual who has a stressful commute might change his or her attitudes and subjective norms toward FWA use. Employees with a stressful commute should hold more favorable attitudes toward policies that allow them to avoid that commute. Although a stressful commute is expected to predict both flextime and flexplace policy utilization, the relationship with flexplace policy endorsement utilization should be stronger. While flextime utilization has been found to decrease commute stress (Lucas & Heady, 2002), flexplace policies effectively eliminate the possibility of stress caused by a commute because they eliminate the need for a commute. For this reason,

flexplace utilization should be more strongly predicted by having a stressful commute, although flextime use will also have a positive relationship with a stressful commute.

Considering the previous research on stressful commutes and the application of the theory of planned behavior, the relationship between an individual's stressful commute and the utilization of FWA's will be dependent on how effective the FWA is at allowing the individual to avoid or alter his or her commute. Full-time telecommuting allows an individual to avoid a stressful commute completely, and thus the relationship between full-time telecommuting utilization and having a stressful commute should be strongest. Part-time telecommuting and flextime give an individual the option to avoid the commute on some days or change the times of the commute and should have a moderate strength relationship with a stressful commute. A compressed work schedule presents the fewest opportunities to alter the commute, although the individual will still avoid the commute once every week or 2 weeks depending on his or her format of the compressed work schedule. For this reason, it should have the weakest relationship with a stressful commute. To summarize:

Hypothesis 2a: A stressful commute will be positively related to the likelihood of full-time telecommuting utilization (rank order prediction: 1)

Hypothesis 2b: A stressful commute will be positively related to the likelihood of part-time telecommuting utilization (rank order prediction: 2)

Hypothesis 2c: A stressful commute will be positively related to the likelihood of flextime utilization (rank order prediction: 3)

Hypothesis 2d: A stressful commute will be positively related to the likelihood of compressed work schedule utilization (rank order prediction: 4)

Supervisor support for FWA use

Supervisor support for FWA use is a positive attitude that a supervisor has towards his or her subordinates using FWA programs (Lewis, 2003). Previous research on the effectiveness of FWA programs on reducing work-life conflict has consistently demonstrated that FWA granting policies in and of themselves are not sufficient for more work-life balance (Lewis, 2003). In order for these policies to be effective, the first line supervisor must also be supportive of FWA use (Powell & Mainiero, 1999). Although an organization might have a FWA policy, ultimately, an employee's direct supervisor is the person to grant a request to enroll in a FWA. In a study examining the relationship between work-life balance and FWA availability, employees' perceptions about how supportive their supervisors were of subordinate FWA use moderated the relationship such that low support nearly eliminated the relationship entirely (Shockley & Allen, 2007). In another study where all participants had access to an organizational policy of FWA use, the relationship between supervisor support for FWA's and FWA use was positively correlated (Thomas & Ganster, 1995). This result indicates that even when an organizational policy is available, supervisor support of that policy is the ultimate driver of employee use.

Incorporating this previous research with the theory of planned behavior, supervisor support for FWA use should most directly impact an individual's perceived behavioral control over the decision about whether or not the individual will enroll in a

FWA. Employees might feel that they are not allowed to use a FWA (despite the organization's official policy) if their supervisors are not supportive of FWA use. Additionally, supervisor support for FWA use might impact employees' subjective norms about using FWA's. Although the focal employee might be allowed to use a FWA, that person may be less inclined to do so if his or her coworkers and fellow subordinates are not permitted to use FWA's.

This rationale leads to a hypothesis of supervisor support for FWAs being positively related to the likelihood of using all types of FWAs. The strength of the relationship, though, should depend on the amount of disruption to the typical work flow that the FWA causes. Previous research has shown that supervisors are more likely to grant FWA use when the disruption to the work flow is most minimal (Powell & Mainiero, 1999). Based on Shockley and Allen's (2010) conceptualization of the disruption to workflow of flextime and flexplace policies, the rank ordering hypotheses mirror the amount of disruption that the policy creates. To state as formal hypotheses:

Hypothesis 3a: Supervisor support for FWA use will be positively related to the likelihood of full-time telecommuting utilization (rank order prediction: 1)

Hypothesis 3b: Supervisor support for FWA use will be positively related to the likelihood of part-time telecommuting utilization (rank order prediction: 2)

Hypothesis 3c Supervisor support for FWA use will be positively related to the likelihood of flextime utilization (rank order prediction: 3)

Hypothesis 3d: Supervisor support for FWA use will be positively related to the likelihood of compressed work schedules utilization (rank order prediction: 4)

Interdependence of work tasks

The next factor is interdependence of work tasks. Interdependence is the connectedness of team members required to complete a task (Wageman, 1995). The level of interdependence of a work team is on a continuum from completely independent work to an intensive form of interdependence where all team members must interact throughout the work process. When considering the impact of an interdependent work task on the likelihood of using different types of FWAs, one important factor to consider is the impact of the policy on the timing and coordination of the work. Interdependent work tasks require team members to continuously coordinate with each other (Marks, Mathieu, & Zaccaro, 2001). If an interdependent task is done successfully, team members often may experience greater group cohesion and, in turn, team member satisfaction with the work team (Dobbins & Zaccaro, 1986). When there is an impediment to the timing of the interdependent work task (for example one team member is using a FWA and unavailable at a specified time), team members may instead experience less cohesion and, relatedly, experience dissatisfaction with the work task. Thus, to the extent that members wish to achieve superior performance and also reap benefits such as increased cohesion and the like, employees who work on interdependent work task should be more likely to use FWAs that will not disrupt the timing of the work team. Employees who mostly have independent work tasks can choose any FWA without concern of disrupting other's work.

The amount of interdependent work that employees engage in could impact their use of FWAs. Employees might be less likely to enroll in flexplace FWA policies because of the potential disruption to the team's work flow. Previous research has shown that

geographically distributed work teams struggle to accomplish highly interdependent tasks and are more likely to encounter problems with coordination (Malhotra & Majchrzak, 2014; Olson & Olson, 1999). For this reason, teams that have a teleworking member may not experience group cohesion as strongly as collocated teams, and therefore that team's members may be less satisfied with the work experience.

Considering the utilization of a telework arrangement through the lens of the theory of planned behavior, employees will probably not be as likely to use a telework arrangement when they have highly interdependent work tasks because they will be less satisfied with their work tasks, and thus have a more negative attitude toward the behavior. Additionally, employees who use a telework arrangement when they have these types of tasks could be impeding their team members, and thus have a more negative perception of the normative beliefs toward using a telework arrangement. Employees who are considering enrolling in a flextime FWA can thoughtfully plan their schedules so they can coordinate with their team on interdependent tasks. Applying the theory of planned behavior to this rationale, employees might not be affecting their behavioral beliefs because their satisfaction with the task would not change if employees used the FWA or not. Furthermore, their normative beliefs would be less likely to change because they are not impacting the work flow of any of their team members. Based on the above rationale, I hypothesize the following relationships:

Hypothesis 4a: Highly interdependent work tasks will be negatively related to the likelihood of full-time telecommuting utilization (rank order prediction: 1)

Hypothesis 4b: Highly interdependent work tasks will be negatively related to the likelihood of part-time telecommuting utilization (rank order prediction: 2)

Hypothesis 4c: Highly interdependent work tasks will be unrelated to the likelihood of flextime utilization (rank order prediction: t-3)

Hypothesis 4d: Highly interdependent work tasks will be unrelated related to the likelihood of compressed work schedule utilization (rank order prediction: t-3)

Workplace friendship

A final factor that should predict whether or not an individual will utilize particular flexible work arrangements is the employee's relationships with his or her coworkers. Individuals with many workplace friendships, and thus many social interaction opportunities at work, are able to cope with stressors more effectively and experience less stress (Viswesvaran, Sanchez, & Fisher, 1999). Friendship at work also reduces role ambiguity and role conflict, which, in turn, contributes to increased job satisfaction (Chiaburu & Harrison, 2008). In summary, workplace friendship makes work a more satisfying and fulfilling experience.

By examining the presence of workplace friendship through the lens of the theory of planned behavior, we can hypothesize how workplace friendships will affect the FWA utilization. As previously mentioned, workplace friendships can make work a more satisfying experience. When employees are away from the central work location (in a telework arrangement, for example), one of the most consistent effects is a negative relationship with social connectedness (Gajendran & Harrison, 2007; Golden, Viega, & Dino, 2008). When employees do not feel emotionally connected with coworkers, they

may experience less fulfillment from their job. Work environments with high levels of workplace friendships should negatively relate to the likelihood of using FWAs that require the employee to be away from the office, because the employee is losing interactions with others and all of the benefits that come with those interactions.

Employees may reevaluate their attitudes toward using flexplace FWAs because they will lose the benefits of having friendships at work when they are not in the office. Because FWAs that only alter the timing of work still require employees to be in the office the same number of hours as employees that use no FWAs, a work environment with many workplace friendships will be less likely to affect an employee's attitudes toward flextime utilization and subsequently less likely to affect the decision of whether or not an employee will use these flextime policies. To state in formal hypotheses:

Hypothesis 5a: Workplace friendship will be negatively related to the likelihood of full-time telecommuting utilization (rank order prediction: 1)

Hypothesis 5b: Workplace friendship will be negatively related to the likelihood of part-time telecommuting utilization (rank order prediction: 2)

Hypothesis 5c: Workplace friendship will be unrelated to the likelihood of flextime utilization (rank order prediction: t-3)

Hypothesis 5d: Workplace friendship will be unrelated related to the likelihood of compressed work schedule utilization (rank order prediction: t-3)

Policy capturing methodological research questions

In addition to the primary goal of the study to examine how different work and life factors influence FWA utilization, a secondary goal of the study is to look at how an

individual's "real life" experience with the work and life factors interact with the hypothetical manifestations of these factors in the policy capturing study. Previous reviews of policy capturing methodology have emphasized the importance of selecting an appropriate sample to use in testing a study's hypotheses (Aiman-Smith, Scullen, & Barr, 2002; Karren & Barringer, 2002). However, no research has specifically examined how an individual's actual experience impacts his or her ratings in a policy capturing study. To theoretically understand the potential impact of an individual's reality on his or her policy capturing ratings, one can draw a parallel to the training transfer literature. In that research stream, research has shown that trainees are better able to transfer the skills learned in training to their work when the training has high psychological fidelity (Allen, Hays, & Buffardi, 1986). Specifically transfer is more successful when the training has "identical elements" as the job task (Burke & Hutchins, 2007; Thorndike & Woodworth, 1901). In a policy capturing study, a participant is expected to fully immerse him or herself in the presented scenario and respond as if that scenario were his or her actual reality (Rao, 2014). Participants are essentially asked to separate their own reality from the hypothetical reality presented to them.

Another field of research that could inform how participants' experience impacts their responses to a policy capturing study is the research about the psychology of survey response. Relevant research in this field has shown that participants' experience with an item makes their ratings of an attitude more consistent across items (Wilson, Kraft, & Dunn, 1989; Hoeffler & Ariely, 1999). The researchers interpreted these results as suggesting that participants' experience with an attitude or cue made that cue more

psychologically salient. Participants remembered their experience and made more stable ratings of the attitude across items. Applying this rationale to the present study, participants with experience with one of the work and life factors might continually refer to their own experience with the factor, instead of considering the scenario independently of their own experience. For example, a participant with a stressful commute in reality might be more inclined to use any FWA, regardless of the scenario they are presented, because they would like to use that FWA in reality.

Extending the general research evidence from the training transfer literature and survey response literature, it might be the case that participants who have experience with the work and life factors will have difficulty separating their reality from the hypothetical policy capturing situation. To phrase as a formal research question:

RQ1: Do participants' actual experience with a particular work and life factor impact their overall ratings of the likelihood of using FWA's in general?

One can address this question by looking at a level-2 effect of participants' actual rating of their likelihood to use a FWA. An affirmative answer to the above research question would indicate that participants' actual experience predicts participants' intercepts, but not alter the substantive level-1 coefficients that are typically of interest in a policy capturing study. Of more concern to researchers using a policy capturing methodology is whether participants' actual experience with the manipulated factors impact their perceptions of the importance of that factor. Again pulling from the survey response literature, participants with knowledge and a pre-existing attitude toward a politically charged issue are more likely to access that knowledge when responding to

attitudinal questions about related issues (Wilson, Kraft, & Dunn, 1989). Participant ratings are more stable and less receptive to change in experimental conditions. In policy capturing, this result might manifest itself as a participant making a stronger evaluation of one factor over the others. For example, if an individual has a stressful commute in reality, the manipulated “high” level of stressful commute might be more cognitively accessible resulting in the participant immediately identifying the “high” stressful commute manipulation and responding that he or she would be more likely to use a FWA regardless of the levels of other factors. When the manipulation was the “low” level, the participant might give a more balanced consideration of the other factors. Evidence of this occurrence would be a cross-level interaction between an individual’s (level-2) actual standing on the work and life factors (e.g., whether or not he or she actually have a stressful commute) and the manipulated (level-1) scenarios (e.g., a stressful commute or not in the scenarios) in predicting FWA utilization. Evidence of such a cross-level interaction would indicate that participants’ ratings to policy capturing scenarios incorporate their experience with that factor and, in turn, differentially weigh it. To state as a research question:

RQ2: Do participants’ actual experience with a particular work and life factor interact with their hypothetical level of the factor in predicting their likelihood of using a FWA in general?

METHOD AND RESULTS

In order to examine the above hypotheses and research questions, I used a policy capturing methodology. In this methodology, participants are presented with a hypothetical situation and asked to make a decision regarding that situation (Karren & Barringer, 2002). When designing this type of study, several considerations need to be made, principal among them: the number of factors under investigation, the levels of those factors, and the realism of the scenarios (for a more complete overview see Aiman-Smith, Scullen, & Barr, 2002 or Karren & Barringer, 2002). In the present study, five work and life factors will be under investigation, with two levels per factor. The design will be fully-crossed, resulting in orthogonal factors. These decisions result in 32 scenarios for each participant to respond to, thus meeting the suggested minimum ratio of five scenarios per factor under investigation (Cooksey, 1996).

One issue that is critical to the success of a policy capturing study concerns the strength, or distance, between the two levels for each factor (Cooksey, 1996). This issue is relevant to both the statistical results and the external validity of the study. Ideally, each factor should have an equivalent distance between the strength ratings for the “high” and “low” levels and the scenarios will be realistic. In other words, participants will evaluate all of the “high” levels as equally “high” and the “low” levels as equally “low”.

To ensure that the present study meets these requirements, a pre-test study was conducted.

Pre-test study method

The goal of the pre-test study was to determine pairs of high and low levels for each factor that were equal in distance across factors, thus indicating comparable ranges of strength for the factors. For each factor, four statements were generated to reflect the “high” level of each factor by reviewing the literature and looking at the definition of each factor. The statements were then edited to reflect equally “low” levels of each factor. This process resulted in the 40 statements that were presented to participants in the pre-test study.

After obtaining institutional review board approval, 103 participants were recruited from Amazon Mechanical Turk (mturk). The participants had to be at least 18, work at least 20 hours per week, live in America, and speak English fluently. Participants that did not meet these inclusion criteria were not permitted to participate in the study. Previous research has shown that mturk can be a useful tool for social science research, however, data quality needs to be monitored (Paolacci, Chandler, & Ipeirotis, 2010). Participants were paid \$.50 for their participation, regardless of whether or not their data were used as part of the final analyses.

Participants were presented with definitions for each of the factors. They were then asked to rate if they agreed or disagreed with the statement “this statement reflects a ‘high’ level of each factor” (1 – strongly disagree, 7 – strongly agree). To control for

ordering effects, the order of the statements were randomized across participants. Finally, participants were asked to provide demographic information.

After determining the final statements for the primary study (one “high” and one “low” for each factor; see results below), 5 subject matter experts (SME) on workplaces with FWAs rated the realism of the fully-crossed combination of 32 scenarios. Each SME had at least five years of work experience in an occupation where it is possible to use a FWA and has had the opportunity to enroll in a FWA. The SME’s were asked to rate how realistic each of the scenarios was on a scale from 1-5 (1 - not at all realistic, 5 – very realistic).

Pre-test study results

As per the recommendations of Paolacci and colleagues (2010), two metrics were used to examine the motivation of participants. First, participant responses were screened for straight line responding (i.e. using the same response option for all items). Second, the time of completion for the page of primary interest was examined. Responses from the nine participants who were below 1 standard deviation of the mean were further examined (overall $M = 554.33$ sec, $SD = 314.33$ sec). Based on this review, all participants appeared to respond in a serious and attentive manner.

To analyze the data, a t-test was conducted for each pairing of the high and low statements within a factor. For example, the first statement reflecting “high” for presence of a family was tested against the four “low” statements, the second statement reflecting “high” for presence of family was, again, tested against the four “low” statements, etc. (see table 2 for the mean and sd for each statement). In order to be selected for inclusion

in the primary study, the pair of high and low values had to be statistically significantly different from each other. Additionally, the differences between the high and low levels of each factor should be within a half of a scale point of each other (across factors). For example, the difference between the high and low mean values for the presence of family factor should be +/- a half scale point within the difference between the high and low value for the stressful commute factor.

The results of the t-tests from the retained statements are displayed in table 3. The results for the presence of a family, stressful commute, supervisor support of FWA, and workplace friendship factors all met the decision rules listed above. None of the statements for the interdependence of work factor met the decision rules listed previously. The means for the “high” statements were slightly too low, and the means for the “low” statements were slightly too high. Although they were statistically significantly different than each other, the difference between the high and low statements was smaller than the distance between the high and low statements of the other factors. To address the possible issue of range restriction for interdependence, Thorndike’s case 2 method was employed on the correlation coefficients in the primary study, and results were compared to the uncorrected estimates (Wiberg & Sundstrom, 2009).

Subject matter expert (SME) ratings were collected for the 32 scenarios that were created by fully crossing the two levels of each of the five factors. The SMEs rated the realism of each scenario as at least an average of 4, which reflected a rating of “realistic” (results displayed in table 4). The results of these two pre-test studies show that each factor has a high and low level statement that is statistically significantly different from

each other with values that generally consistent across the factors. Also, SMEs rated each scenario as realistic. This provides sufficient evidence to use these factors in the primary study.

Primary study method

After receiving institutional review board approval, 250 participants were recruited from mturk. Because the previously discussed research questions involved cross-level interactions, which would theoretically have the smallest effect size, a power analysis for cross-level interactions was conducted following the procedures outlined by Mathieu and colleagues (2012). With 32 participant responses (i.e. level-1 observations) and 250 participants, the power for a cross-level interaction in this study was above .9. Again, participants were required to be at least 18, work at least 20 hours per week, speak English fluently, and live in the US. Participants who did not meet these inclusion criteria were not permitted to participate in the study. Participants were paid \$2.00 for their participation, regardless of whether or not their data were used in the primary analyses. After responding to the policy capturing section, the participants were asked to respond to demographic questions and measures of their actual experience with the factors.

Measures and materials

Policy capturing scenarios. For the policy capturing methodology, for the 32 scenarios, participants were asked to rate how likely they would be use each of the 4 FWAs previously discussed and to use a FWA in general, all on a a1-7 scale (1 – very unlikely, 7 – very likely) To control for ordering effects, the order of the scenarios was randomized across participants. Additionally, the FWAs and order of the work and family

factors were randomized across participants (although full-time telework and part-time telework always were presented one after the other and FWA in general was presented last). The scenarios were presented in bulleted format mixing a high and low level of each of the five factors. This format was chosen because previous research on attention has suggested that anticipated changes (for example the changing levels of a factor always occurring on the same bullet point) reduce the cognitive effort required by participants (Egley, Driver, & Rafal, 1994; Rensink, 2002), a primary concern with policy capturing research. Additionally, two scenarios were repeated to assess test-retest reliability (Rao, 2014). The average test-retest reliability of the scenarios is .71.

Stressful commute scale. A review of the literature did not uncover a sufficient scale for measuring stress of commute. To measure this factor, a revised version of the stress subscale for the Depression, Anxiety, Stress, Scales (DASS) was used (Lovibond & Lovibond, 1995). Participants responded to 14 items with the common stem “During my commute...” and were then asked to rate the extent to which they agreed or disagreed with the items on a 1-7 scale (1 -strongly disagree, 7 - strongly agree). This Likert-type scale was used for all the scales listed below. This scale displayed sufficient reliability ($\alpha = .97$). An example item is “I found it difficult to relax” (for all of the full measures see Appendix “Measures”).

Supervisor support for flexible work arrangements use. A review of the literature did not uncover any scales examining supervisor support for flexible work arrangement use. To address this issue, a revised and shortened version of the perceived organizational support scale was used (Eisenberger, Huntington, Hutchison, & Sowa,

1986). Participants were asked the extent to which they agreed or disagreed with five items related to the support they felt from their supervisor in using a FWA. The scale demonstrated adequate reliability ($\alpha = .91$). An example item is “My supervisor is willing to help me use FWAs”.

Task interdependence scale. Participants were asked to respond to the task interdependence scale (Pearce & Gregersen, 1991). Participants were asked to rate the extent to which they agreed or disagreed with ten statements related to the interdependence of their work. The scale demonstrated adequate reliability ($\alpha = .91$). An example item is “I work closely with others in doing my work”.

Workplace friendship. Participants were asked to respond to Nielsen, Jex and Adam’s (2000) workplace friendship scale. Participants were asked to rate the extent to which they agreed or disagreed with twelve statements related to their friendship with coworkers. The scale demonstrated adequate reliability ($\alpha = .94$). An example item is “I have formed strong friendships at work”.

Primary study results

Preliminary analyses

As per the recommendation of Paolacci and colleagues (2010), data quality was examined by checking for straight line responding (i.e., a participant responding to all items with the same response option) and for unrealistically short response times on the key variables (i.e., unrealistically short response times on the policy capturing component of the survey) The standard deviation of the completion time was very large due to some participants staying on the page a very long time ($M = 1059.23$ sec, $SD = 823.05$ sec),

therefore a consideration of the distribution was not necessarily informative. A decision was made by the researcher to more closely examine any participant who responded in less than 10 seconds per scenario, on average (32 scenarios x 10 seconds = 320 seconds). This criterion resulted in 10 participants' responses being further scrutinized. Nine of the ten participants showed response patterns indicative of low effort responding, and these cases were subsequently dropped from the analysis. The response patterns reflected low levels of variability for FWAs within and between scenarios. For example, a participant rated all of the FWAs as a "4" within a scenario, and then the next scenario all "5's", and the following all "6's", etc. The final analysis sample size was 241.

Because participants were responding to all four of the DVs for each scenario, one concern might be that participants would not be differentiating between the types of FWAs in their responses. To test this notion, a multi-level confirmatory factor analysis (CFA) was conducted to test a model in which the four different FWAs loaded onto a single latent factor. The results of the CFA indicated that a one factor solution did not fit the data well, suggesting participants did differentiate between the FWAs and that the DVs can be analyzed independently ($RMSEA = .29$; $CFI = .92$; $TLI = .76$).

Because participant responses to the 32 scenarios were nested within participants, hierarchical linear modeling (HLM) was used to analyze the data in the statistics package Stata ver. 12.² For the hypotheses regarding the four FWA types, an HLM was run

² Because there were several hypotheses and research questions being analyzed in a single dataset, one concern might be an increased family wise error rate. To address this, the results were analyzed using a MANOVA in addition to the independent HLM models. The results were consistent among these two

independently for each FWA. Each analysis was run two ways, first with no control variables included, then with potentially relevant control variables (i.e. gender, whether the participant actually used FWAs) included in the model as level-2 predictors. The control variables did not change the study conclusions, so only the models with no control variables will be discussed here. In addition to the HLM analysis, a mixed level dominance analysis was conducted to determine how much within-person variance each of the work and life factors predicted and to provide a sense of the relative importance of each of the factors when deciding to use a specific FWA.

Results of focal hypotheses

In the next section, I present the results of the study. The results will be organized by FWA so one HLM will be presented per paragraph and the dependent variable will be the same within a paragraph. I first examined the results for hypotheses 1a, 2a, 3a, 4a, and 5a (hypotheses 1a-5a) focusing on the utilization of full-time telecommuting (see table 5 for results). Participants indicated they were more likely to enroll in a full-time telecommuting program when the scenarios suggested they had a family ($\gamma = .10$, standardized dominance weight = .00, $Z = 2.05$, $p < .05$), had a stressful commute ($\gamma = .16$, standardized dominance weight = .01, $Z = 4.91$, $p < .01$), and had supervisor support for using FWA's ($\gamma = 1.83$, standardized dominance weight = .88, $Z = 18.23$, $p < .01$). Participants were less likely to enroll when they had interdependent work tasks ($\gamma = -.48$, standardized dominance weight = .06, $Z = -11.06$, $p < .01$) and workplace friendships (γ

analyses and therefore the MANOVA results are only displayed in the additional analysis appendix (Appendix B).

= -.43, standardized dominance weight = .05, $Z = -9.31$, $p < .01$). These results support the hypotheses regarding the relationship between full-time telework and a stressful commute, supervisor support for FWAs, interdependent work tasks and workplace friendships (hypotheses 2a – 5a), but do not support hypothesis regarding the relationship between full-time telework and having a family (hypothesis 1a).

Next, I examined the results for hypotheses 1b-5b about the utilization of part-time telecommuting (see table 6 for results). Participants indicated they were more likely to enroll in a full-time telecommuting program when the scenarios suggested they had a family ($\gamma = .21$, standardized dominance weight = .08, $Z = 4.59$, $p < .01$), had a stressful commute ($\gamma = .21$, standardized dominance weight = .08, $Z = 6.14$, $p < .01$), and had supervisor support for using FWA's ($\gamma = 2.02$, standardized dominance weight = .68, $Z = 18.49$, $p < .01$). Participants were less likely to enroll when they had interdependent work tasks ($\gamma = -.30$, standardized dominance weight = .08, $Z = -8.17$, $p < .01$) and workplace friendships ($\gamma = -.27$, standardized dominance weight = .08, $Z = -7.09$, $p < .01$). These results fully support all hypotheses regarding the relationships with part-time telework and the five work and life factors (hypotheses 1b – 5b).

Then, I examined the results for hypotheses 1c-5c about the utilization of flextime (see table 7 for results). Participants indicated they were more likely to enroll in a full-time telecommuting program when the scenarios suggested they had a family ($\gamma = .17$, standardized dominance weight = .09, $Z = 3.28$, $p < .01$), had a stressful commute ($\gamma = .18$, standardized dominance weight = .09, $Z = 4.40$, $p < .01$), and had supervisor support for using FWA's ($\gamma = 2.07$, standardized dominance weight = .64, $Z = 18.89$, $p < .01$).

Participants were less likely to enroll when they had interdependent work tasks ($\gamma = -.12$, standardized dominance weight = .09, $Z = -4.46$, $p < .01$) and workplace friendships ($\gamma = -.12$, standardized dominance weight = .09, $Z = -3.74$, $p < .01$). These results support hypotheses regarding the relationship between flextime and a stressful commute and supervisor support for FWAs (hypotheses 2c and 3c), but do not support the hypotheses regarding the relationship between flextime and the presence of a family, interdependent work tasks, or workplace friendships (hypotheses 1c, 4c, and 5c).

Finally, I examined the results for hypotheses 1d-5d about the utilization of a compressed work schedule (see table 8 for results). Participants indicated they were more likely to enroll in a full-time telecommuting program when the scenarios suggested had a stressful commute ($\gamma = .14$, standardized dominance weight = .11, $Z = 3.89$, $p < .01$), and had supervisor support for using FWA's ($\gamma = 1.65$, standardized dominance weight = .58, $Z = 15.36$, $p < .01$). Participants were less likely to enroll when they had interdependent work tasks ($\gamma = -.12$, standardized dominance weight = .11, $Z = -3.66$, $p < .01$) and workplace friendships ($\gamma = -.12$, standardized dominance weight = .11, $Z = -3.79$, $p < .01$). For the presence of a family factor, the results suggest that it is unrelated to the likelihood of using a compressed work schedule ($\gamma = -.05$, standardized dominance weight = .10, $Z = -.81$, $p = .42$). Hypothesis 1d, which hypothesized the null, is supported.³ These results support the hypotheses regarding the relationship between a

³ In traditional statistical significance testing, it is inappropriate to hypothesize the null because there is no accepted way of proving it. When a null hypothesis is made, as is the case here, there are additional levels of scrutiny to demonstrate support for this kind of hypothesis (Cortina & Folger, 1998; Landis et al., 2014). First, a researcher must demonstrate that the study has a sufficient level of power. In the current study, a

compressed work schedule and a stressful commute and supervisor support for FWA (hypotheses 2d and 3d), but do not support the hypotheses regarding the relationship between a compressed work schedule and interdependent work tasks and workplace friendships (hypotheses 4d and 5d).

As was previously discussed, a Thorndike case 2 correction was applied to these results to determine whether the interdependence of work tasks factor showed artificially suppressed results because of a more restricted range than the other work and life factors (see table 9). The results of these analyses indicate that the interpretation of the above results would not change if the interdependence factor had a range that was comparable to the other four factors. In fact, the interdependence factor actually had a pooled variance that was larger than the other four factors, resulting in a decrease in the magnitude for these correlation coefficients. Additionally, the interdependence factor was statistically significant across all DVs. Based on this evidence, the uncorrected coefficients will be interpreted and discussed below.

In order to assess the rank order predictions made in the hypotheses across DVs (i.e. comparing the results of hypothesis 1a, 1b, 1c, and 1d), the confidence interval for the unstandardized gamma coefficients was examined. Although this approach would not

level-1 main effect at an alpha level of .05 and 241 participants has a power greater than .95 (Mathieu, Aguinis, Culpepper, & Chen, 2012). This level of power is far above the recommended level of .8 and thus a null effect would be more likely to be the outcome of two factors truly having no relationship. Second, the researcher should demonstrate that the variable of interest has other relationships. Although not directly relevant to hypotheses made in a policy capturing study, the same IVs that a null hypothesis is made for has hypothesized positive effects with other DVs. Again, this lends credence to the conclusion that a null hypothesis in this study truly has no relationship with the focal DV. Finally, the researcher should interpret the confidence interval around the statistic that shows a null effect. If the confidence interval is close to significant, then the null hypothesis should undergo additional scrutiny.

be appropriate under typical circumstances, the nature of the data in a policy capturing study made this direct comparison between coefficients on different DVs possible for two reasons (Cohen, Cohen, Aiken, & Smith, 2004). First, all of the HLM analyses have DVs on the same metric. Each DV was a 1-7 scale and thus the unstandardized coefficients for each of the IVs can be directly compared. Second, all of the IVs included in the analysis are uncorrelated. This feature is important because it removes multicollinearity, making the interpretation of the statistics more straightforward (see graphical results in Figures 1-5 and the summary of hypotheses in Table 1).

For three factors (presence of family, stressful commute, and supervisor support of FWAs), the ranking hypotheses were not supported because all four of the confidence intervals for each FWA are overlapping and the point estimates themselves are not in the hypothesized order (see Figures 1-3). Conversely, for the interdependence of work tasks factor, the results fully support the ranking hypotheses (see Figure 4). The coefficient for full-time telework is the strongest and does not overlap with the second strongest, part-time telework. The confidence interval for part-time telework does not overlap with flextime or compressed work schedule. Flextime and compressed work schedule have almost entirely overlapping confidence intervals, which was expected because they were hypothesized to be tied for the lowest rank. For workplace friendship, the results partially support the ranking hypotheses (see Figure 5). Similar to the results for interdependence of work tasks, full-time telework had the strongest relationship with workplace friendship, but the confidence interval slightly overlaps with the outcome with the second strongest relationship, part-time telework. Part-time telework does not overlap with the

confidence interval for flextime, or compressed work schedules, which again had nearly completely overlapping confidence intervals.

The results of the focal hypotheses suggest that participants' decision-making process about whether they would use a FWA was, generally, the same regardless of the type of FWA. Participants indicated they were more likely to use a FWA if they had a family, a stressful commute, and a supervisor that is supportive of FWA use, with supervisor support clearly being, the most important predictor. Participants were less likely to use a FWA if they had interdependent work tasks and workplace friendships. Although the decision-making process was, generally, the same across FWAs, the type of FWA did impact the magnitude of the relationship for two work and life factors. For interdependence of work tasks and workplace friendships, the results supported the notion that a more disruptive FWA (as conceptualized by Shockley and Allen (2007)) did impact participants' utilization of the FWA. Participants were much less likely to use a very disruptive FWA, like full or part time telecommuting, than they were to use a less disruptive FWA (like flextime or a compressed work schedule).

The results also suggested that supervisor support for FWA use was, by far, the strongest predictor of FWA utilization. Because this factor had such an overwhelming effect in terms of variance explained, the level-1 interactions between this factor and the other factors might shed light on how those other factors might moderate the effects of supervisor support for FWA use on the likelihood to use FWAs. The results for these analyses can be found in tables 10-14. For full-time telework use, a significant negative interaction existed between supervisor support and interdependent work tasks ($\gamma = -.42$, Z

= -6.39, $p < .01$) and supervisor support and workplace friendships ($\gamma = -.39$, $Z = -6.49$, $p < .01$). For part-time telework use, the only significant interaction was between supervisor support and interdependent work tasks ($\gamma = -.11$, $Z = -2.28$, $p < .05$). For flextime use, the only significant interaction was between supervisor support and presence of a family ($\gamma = -.14$, $Z = -2.80$, $p < .01$). Finally, for compressed work schedule use, the only significant interaction was, again, between supervisor support for FWA use and presence of family ($\gamma = -.18$, $Z = -3.20$, $p < .01$). In general, these results suggest that a) for the policies that provide flexibility in the timing of work, b) and when participants have a family, supervisor support for FWA use becomes less important. For the policies involving flexibility in the location of work, supervisor support for FWA use becomes less important when an employee has interdependent work tasks. Clearly, these results require further replication though.

Results for the research questions

To investigate the two methodological research questions, each of the measured work and family life factors were first grand-mean centered and then entered into the analyses as level 2 predictors. A cross level interaction term was created by multiplying the grand mean centered variable with the focal work and life factor. For example, when assessing stressful commute, a participant's actual level of commute stress was crossed with the stressful commute high or low levels for that factor in the scenarios. Because these research questions are more exploratory and no direct hypotheses were made, the DV for these 5 analyses will be the FWA in general prompt as opposed to the specific FWAs under investigation (see Tables 10-14 for complete results).

Turning to the results, for presence of a family, there was not a significant main effect if a participant actually had a family ($\beta = -.13$, $Z = -.58$, $p = .57$) and no interaction existed between actually having a family and the family prompt in the study ($\gamma = -.03$, $Z = -.32$, $p = .75$). These results indicate that having a family had no impact on a participant's ratings in the policy capturing methodology. For stressful commute, there was a marginally significant main effect, meaning that when a participant had a stressful commute in reality, the participant indicated that they would be more likely to use a FWA in general across scenarios ($\beta = .12$, $Z = 1.68$, $p = .09$). There was no interaction term between having a stressful commute in reality and the stressful commute prompt ($\gamma = .00$, $Z = .01$, $p = 1.00$). The nonsignificant interaction indicates that having a stressful commute in reality does not make the stressful commute prompt more or less important. For supervisor support of FWA use, there was no main effect for actually having a FWA supportive supervisor ($\beta = .09$, $Z = 1.38$, $p = .17$). Furthermore, no interaction existed between having a FWA supportive supervisor in reality and the supportive supervisor prompt ($\gamma = -.10$, $Z = -1.58$, $p = .11$). For interdependent work, a main effect existed for actually having interdependent work ($\beta = -.21$, $Z = -2.45$, $p = .01$). No interaction effect was found between actually having interdependent work and the interdependent work prompt ($\gamma = -.03$, $Z = -1.34$, $p = .18$). Similar to the result for stressful commute, this pattern of results indicate that when participants actually have interdependent work, they are less likely to endorse using a FWA across scenarios, but actually having interdependent work does not make the interdependence prompt more or less important. Finally, for workplace friendships, a significant main effect existed for actually having

friendships at work ($\beta = -.21$, $Z = -2.51$, $p = .01$). No significant interaction effect was found between actually having friendships at work and the friendship at work prompt ($\gamma = -.03$, $Z = -1.44$, $p = .15$). This pattern of results can be interpreted in the same way as the interdependence of work factor. In sum, it appears that an individual's actual experience with the work and life factors may influence level-2 main effects (i.e. participants' overall "average" likelihood of using a FWA, regardless of scenario), but did not results in any cross-level interactions (i.e. their likelihood to use a FWA based on a specific work or life factor).⁴

⁴ Several additional analyses were conducted as part of an exploratory investigation. These relationships were not hypothesized, but instead were suggested during the Dissertation Proposal meeting. The results of these analyses can be found in Appendix B – Additional Analyses.

DISCUSSION

The purpose of this study was to illuminate the decision-making process that employees go through when deciding whether or not to enroll in a FWA. To achieve this end, a policy capturing study was used to test how five work and life factors impacted the likelihood that participants would use four different FWAs. This type of methodology allowed for the first investigation of the impact of several work and life factors on the utilization of specific FWAs, as opposed to just one particular FWA or FWAs in general. In addition to this main purpose of the study, a secondary purpose to examine the impact of participants' actual work and life circumstances on their ratings of the policy capturing scenarios. The research questions examined above sought to determine whether participants' real situation impacted their responses in the study. In the following discussion, I elaborate on the applied and theoretical implications of the results. A limitations section will conclude.

The main hypotheses of the study predicted relationships between the work and life factors (presence of a family, stressful commute, supervisor support of FWAs, interdependence of work tasks, and workplace friendship) and an employee's utilization of four types of FWAs (full-time telework, part-time telework, flextime, and compressed work schedule). The results were largely invariant across the FWAs, indicating that participants had a very similar decision-making process, regardless of FWA. Given the

disruption to work flow was very different for each of FWAs, this result is surprising. Previous research has shown that the different FWAs have different outcomes for employees (for example, part-time telework increases work satisfaction, but full-time telework decreases it (Golden, Veiga, & Simsek, 2005) and the level of disruption to employee workflow is different across FWAs (Shockley & Allen, 2010). However, the current results suggest that individuals do not take into account the different ways that FWAs impact work. For example, theoretically, full-time telework should impact employees' ability to work interdependently more than flextime, but the results suggest that individuals assessed these FWA types in the same way with respect to their impact on working interdependently.

Interestingly, these results did not reflect that participants were simply indicating that they were equally likely to use all the FWA's. The average likelihood of using the FWAs was between 4.21 (for full-time telework) and 4.65 (for part-time telework) with a sufficient amount of variance in the dependent variable. Additionally, the factors actually predicted substantial within-person variance (between 19% and 39%). These results suggest that participants were considering the FWAs independently, but the factors impacted their decisions the same way. For organizations, this pattern of results suggests that management should give consideration to the work and life factors impacting their work force, and less consideration of the actual FWA being offered. This study suggests that regardless of the FWA, employees will have the same decision-making process.

In regard to the importance of the factors, the factor that was consistently the most important was having supervisor support for FWA use. This factor explained between

55%-88% of the within person variance that was predicted in the model. For organizations, the implication of this result is clear. When implementing a FWA policy, first-line supervisor support is critical to whether or not employees actually enroll in the program. Upper management who are committed to FWAs should train front-line managers to support FWA use across the company when establishing a new FWA policy. Without ensuring that front-line managers are supporting FWA use consistently across work teams, the organization risks employees feeling injustice and dissatisfaction if some teams have FWA supportive supervisors and some do not.

Because supervisor support for FWA use was the strongest predictor of FWA use likelihood, the interaction between this factor and the others was investigated further. Although these results were post-hoc in nature, the results suggested that for flextime policies having a family made supervisor support a less important factor in determining FWA use. For the flexplace policies, having interdependent work tasks made supervisor support for FWA use less important. Future research should investigate these relationships with a priori hypotheses and look for other, potentially 3 or 4 way interactions.

Another noteworthy result is that having a family was a relatively weak predictor of an individual's likelihood to enroll in a FWA and was actually not significant in predicting use of a compressed work schedule. This result is important because the vast majority of previous literature on FWAs has focused on or worked with the inherent assumption that people with families will be more likely to use FWAs (Kossek, Lautsch, & Eaton, 2006). While having a family was a significant predictor of three types of

FWAs, it was no greater than the third most important predictor of those FWAs. Future research should focus on examining the impact of FWAs on employees without a family. Additionally, this result is of interest to organizations because if management is working with the potentially faulty assumption that employees with a family would be more likely to use a FWA than employees without a family, the organization could greatly underestimate the enrollment in a new FWA program. An additional consideration for organizations would be alternative methods for reducing work-family conflict, such as on-site child care or child care stipends. Policies that support families, but do not change an employee's typical work schedule could be more desirable to an employee who is skeptical of FWAs, or has a direct supervisor who is unsupportive of FWAs.

For the rank order effect hypotheses, no differences were found for presence of family, stressful commute, and supervisor support of FWA use. For interdependence of work tasks and workplace friendship, however, the results were largely consistent with the hypotheses. The largest effect in magnitude was for these variables on full-time telework, followed by part-time telework, with the other two FWAs being tied for third. This pattern of results suggest that an employee's coworkers provide a great deal of social support, and an employee will consider potentially losing that support system very carefully before enrolling in a flexplace FWA. For example, full-time telework makes coordination between employees on work tasks more difficult and prevents the employee from casually interacting with workplace friends. For organizations, this means they should consider the type of work the organization does and the general atmosphere of the

office when estimating the proportion of the office that would use a full-time teleworking arrangement.

The results suggest a significant, or nearly significant, level 2 main effect for having a stressful commute, interdependence of work tasks, and workplace friendship. This result for the methodological research questions suggested that having actual experience with the various work and life factors could impact an individual's average rate of endorsing whether or not he or she would use a FWA , but it did not impact his or her evaluation of a factor relative to other factors. The significant main effect suggests that participants who experience the work and life factors are just generally more likely to indicate they would enroll in a FWA, but does not impact their evaluation of the importance of each factor. The absence of a cross-level interaction effect in this study is important, not only for these results, but for the policy capturing methodology as a whole. If the interaction existed, it could mean that participants have difficulty separating their own reality and the hypothetical scenario to which they are asked to respond. A significant interaction effect in this study would cast doubt over the rest of the results because participants could be biased to view the factor or factors that they experience in reality as the most important. Because this phenomenon has not been investigated in the policy capturing literature, this study represents a first step toward understanding the interplay between participants' actual experience and the hypothetical scenarios to which they are asked to respond. Future research should further investigate how reality impacts decision-making in a policy capturing study.

Limitations

As with any study, this research has some limitations. First, the consistency of the results across the four types of FWAs could be a function of the study design.

Participants were asked to respond to how likely they would be to use each of the FWAs in response to a single scenario prompt. It could be possible that participants rated their likelihood similarly for each of the FWAs because of lack of effort (i.e. straight-lining down for a scenario). Although a possibility, this pattern of responding is unlikely for three reasons. First, the data were cleaned, thus eliminating responses from participants who did not show a sufficient level of motivation. Second, the response patterns showed an adequate level of variability within a prompt (i.e. participants indicated they would be likely to use full-time telework but not compressed work schedules etc.). Third, the magnitude of the effects was different across FWAs and as hypothesized for interdependence of work tasks and workplace friendship. Future research could focus on an, arguably, cleaner investigation which would use four separate samples to investigate the hypotheses presented here.

A second limitation of this study, which could also apply to all policy capturing studies, is that asking participants to respond to how they would behave in a hypothetical scenario may feel, to some degree, contrived. In this study, an attempt to mitigate this issue was made by asking SMEs to rate how realistic each of the scenarios were with the average rating being at least “realistic”. Additionally, no interaction effects were found between the participants’ actual level of the work and life factors and those factors as presented in the prompts. The main effect that was found indicates a prediction of the “mean” level of likelihood, but that prediction is not a central question in policy

capturing. In order to address this issue, future research could attempt a large scale, survey weighted, effort of the working population to investigate FWA usage rates across the levels of these work and life factors.

A third limitation of this study is the number and levels of the work and life factors under investigation. Each factor only had two levels represented, thus making it impossible to investigate curvilinear effects between the work and life factors and FWA utilization. For example, there might be a level of supervisor support for FWA use that starts to drastically decrease an employee's likelihood to use a FWA (i.e. a negative ogive relationship). Future research efforts should consider the effects of multiple levels of each factor. Naturally, in a policy capturing study only a limited number of factors can be taken into consideration. Based on a review of the literature, the five most impactful work and life factors were chosen for investigation. There could be, however, potentially hundreds of other factors that play into the decision to use a FWA. Future research should consider these potential alternatives.

Conclusion

The main purpose of this study was to examine how employees decide whether or not to enroll in a FWA. A secondary purpose of this study was to begin to investigate how participants' reality impacts their ratings in a policy capturing study. The results of this study suggest that employees' decision-making processes are nearly the same for all four types of FWAs under investigation. Furthermore, supervisor support for FWA use is, by far, the most important factor on employees' decisions to use a FWA. This is, in some ways, contradictory to the majority of research on FWAs that suggest having a family

would be a major predictor of FWA use (Kossek, Lautsch, & Eaton, 2006). The results of the secondary investigation suggest that participants' actual experience with the work and life factors does not substantively impact the results of the policy capturing study.

Although personal experience with a factor does predict the intercept, there is no presence of a cross-level interaction. As previously discussed, this study has implications for the FWA literature, policy capturing methodological literature, and organizational policy making. By continuing to examine the factors predicting FWA use, organizations can begin to get a more accurate estimate of the proportion of their workforce that might enroll in a new FWA program.

Table 1

Summary of hypotheses

Note: Rank order predictions provided in parentheses. 1 indicates strongest predictor, 4 (or 3 when applicable) indicates weakest predictor.

	Full-time Telework (a)	Part-time Telework (b)	Flextime (c)	Compressed work schedule (d)
Familial presence	Negative (1)	Positive (2)	0 (t-3)	0 (t-3)
Stressful commute	Positive (1)	Positive (2)	Positive (3)	Positive (4)
Supervisor support for FWA use	Positive (1)	Positive (2)	Positive (3)	Positive (4)
Interdependent work tasks	Negative (1)	Negative (2)	0 (t-3)	0 (t-3)
Workplace friendships	Negative (1)	Negative (2)	0 (t-3)	0 (t-3)

Table 2

Means and standard deviations for pre-test study statements of high and low levels of factors

Factor	High/Low level	Statement	Mean	SD
Presence of family	High	You have a family that consists of a spouse/partner and two young children.	5.92	1.54
Presence of family	High	You have a family that consists of a spouse/partner and two dependents.	5.92	1.35
Presence of family	High	You have a family that consists of a spouse/partner and two children.	6.01	1.4
Presence of family	High	You have a family that consists of a spouse/partner and two kids.	6	1.36
Presence of family	Low	You are single, with no children.	2.29	1.66
Presence of family	Low	You have no spouse/partner and no children.	2.11	1.51
Presence of family	Low	You have no family responsibilities.	2.26	1.51
Presence of family	Low	You live alone with no spouse/partner and no children.	2.15	1.45
Stressful commute	High	You have a stressful commute to work.	5.95	1.44
Stressful commute	High	Your commute is very stressful.	6.22	1.24
Stressful commute	High	You dread your commute each day.	5.97	1.44
Stressful commute	High	The stress of your commute impacts other aspects of your life.	5.81	1.47
Stressful commute	Low	You have a stress-free commute to work.	2.09	1.66
Stressful commute	Low	Your commute is not at all stressful.	2.03	1.58
Stressful commute	Low	You look forward to your commute each day.	2.13	1.55
Stressful commute	Low	The stress of your commute does not impact other aspects of your life.	2.98	1.74
Supervisor support of FWA	High	Your supervisor is supportive of others using flexible work arrangements.	5.85	1.32
Supervisor support of FWA	High	Your supervisor encourages you to use flexible work arrangements.	6.11	1.14
Supervisor support of	High	Your supervisor believes that work can	6	1.42

FWA			be done from anywhere, at anytime.		
Supervisor support of FWA	High	Your supervisor does not penalize employees for using flexible work arrangements.	5.61	1.28	
Supervisor support of FWA	Low	Your supervisor is not supportive of others using flexible work arrangements.	2.18	1.55	
Supervisor support of FWA	Low	Your supervisor strongly discourages you from using flexible work arrangements.	2.1	1.42	
Supervisor support of FWA	Low	Your supervisor believes everyone should be in the office from 9 am until 5pm.	2.18	1.49	
Supervisor support of FWA	Low	You have a supervisor which penalizes employees for using flexible work arrangements.	2	1.52	
Interdependence of work tasks	High	Your work tasks require constant communication with team members.	5.4	1.99	
Interdependence of work tasks	High	You must communicate with coworkers to complete work tasks.	5.49	1.73	
Interdependence of work tasks	High	You cannot complete your work tasks without communicating with coworkers continually.	5.44	1.9	
Interdependence of work tasks	High	Your work requires you to coordinate with coworkers regularly.	5.32	1.72	
Interdependence of work tasks	Low	Your work tasks require almost no communication with other employees.	2.67	2.11	
Interdependence of work tasks	Low	Your work can be completed independently of others.	3.14	2.22	
Interdependence of work tasks	Low	You can complete your work tasks without communicating with coworkers continually.	3.11	1.97	
Interdependence of work tasks	Low	Your work does not require you to coordinate with coworkers regularly.	3.17	2	
Workplace friendships	High	You have formed close friendships with your coworkers.	6.04	1.34	
Workplace friendships	High	You enjoy informally talking and visiting with coworkers.	5.58	1.34	
Workplace friendships	High	You socialize with coworkers outside of the workplace.	5.64	1.54	
Workplace friendships	High	You consider your coworkers friends.	5.74	1.41	
Workplace friendships	Low	You have not formed any friendships with your coworkers.	2.27	1.55	

Workplace friendships	Low	You do not enjoy informally talking and visiting with coworkers at all.	2.23	1.55
Workplace friendships	Low	You never socialize with coworkers outside of the workplace.	2.43	1.58
Workplace friendships	Low	You do not consider your coworkers friends.	2.08	1.45

Table 3

T-test results for final selected statements

Factor	Statement	Mean	SD	t-test
Presence of family	You have a family that consists of a spouse/partner and two young children	5.92	1.54	14.15*
Presence of family	You have no spouse/partner and no children	2.11	1.51	
Stressful commute	You have a stressful commute to work	5.95	1.44	14.13*
Stressful commute	You have a stress-free commute to work	2.09	1.66	
Supervisor support of FWA	Your supervisor is supportive of others using flexible work arrangements	5.85	1.32	15.91*
Supervisor support of FWA	Your supervisor strongly discourages others from using flexible work arrangements	2.1	1.42	
Interdependence of work tasks	You must communicate with coworkers to complete work tasks	5.49	1.73	8.22*
Interdependence of work tasks	Your work tasks require almost no communication with other employees	2.67	2.11	
Workplace friendship	You have formed close friendships with your coworkers	6.04	1.34	16.69*
Workplace friendship	You do not consider your coworkers friends	2.08	1.43	

* $p < .001$

Table 4

SME ratings of realism

Note: 1 refers to the high level of the factor listed, 0 refers to the low level. All 32 of the fully-crossed scenarios are displayed in this table.

Family Presence	Stressful Commute	Supervisor Support of FWA	Interdependence of work tasks	Workplace Friendship	Mean	SD
1	1	1	1	1	4.8	0.45
1	1	1	1	0	4.4	0.89
1	1	1	0	1	4.2	1.3
1	1	1	0	0	4.6	0.55
1	1	0	1	1	4.8	0.45
1	1	0	1	0	4.2	1.3
1	1	0	0	1	4	1.41
1	1	0	0	0	4.6	0.89
1	0	1	1	1	4.8	0.45
1	0	1	1	0	4.4	0.89
1	0	1	0	1	4	1.73
1	0	1	0	0	4.4	0.89
1	0	0	1	1	4.4	0.55
1	0	0	1	0	4	1.73
1	0	0	0	1	4	1.41
1	0	0	0	0	4.6	0.89
0	1	1	1	1	4.6	0.55
0	1	1	1	0	4.4	0.45
0	1	1	0	1	4.4	0.89
0	1	1	0	0	4.8	0.45
0	1	0	1	1	5	0
0	1	0	1	0	4.4	0.89
0	1	0	0	1	4.2	0.84
0	1	0	0	0	5	0
0	0	1	1	1	4.6	0.89
0	0	1	1	0	4.4	0.89
0	0	1	0	1	4.2	0.84

0	0	1	0	0	4.4	0.89
0	0	0	1	1	4.6	0.89
0	0	0	1	0	4.4	1.34
0	0	0	0	1	4	1.22
0	0	0	0	0	4.4	1.34

Table 5

HLM results for full-time telecommuting

Note: 1 indicates high levels of each factor, 0 indicates low level

	Unstandardized coefficient	SE	Z	p- valu e	Standardize d dominance weight	Dominanc e ranking
Presence of family	0.10	0.05	2.05	0.04	0.00	5
Stressful commute	0.16	0.03	4.91	0.00	0.01	4
Supervisor support of FWA	1.83	0.10	18.23	0.00	0.88	1
Interdependent work tasks	-0.48	0.04	-11.06	0.00	0.06	2
Workplace friendships	-0.43	0.05	-9.31	0.00	0.05	3
Intercept	3.63	0.12	30.50	0.00		

Table 6

HLM results for part-time telecommuting

Note: 1 indicates high levels of each factor, 0 indicates low level

	Unstandardized coefficient	SE	Z	p- value	Standardize d dominance weight	Dominance ranking
Presence of family	0.21	0.04	4.59	0.00	0.08	4
Stressful commute	0.21	0.03	6.14	0.00	0.08	5
Supervisor support of FWA	2.02	0.11	18.49	0.00	0.68	1
Interdependent work tasks	-0.30	0.04	-8.17	0.00	0.08	2
Workplace friendships	-0.27	0.04	-7.09	0.00	0.08	3
Intercept	3.72	0.11	32.92	0.00		

Table 7

HLM results for flextime

Note: 1 indicates high levels of each factor, 0 indicates low level

	Unstandardized coefficient	SE	Z	p- value	Standardized dominance weight	Dominance ranking
Presence of family	0.17	0.05	3.28	0.00	0.09	3
Stressful commute	0.18	0.04	4.40	0.00	0.09	2
Supervisor support of FWA	2.07	0.11	18.89	0.00	0.64	1
Interdependent work tasks	-0.12	0.03	-4.46	0.00	0.09	4
Workplace friendships	-0.12	0.03	-3.74	0.00	0.09	5
Intercept	3.56	0.11	32.86	0.00		

Table 8

HLM results for compressed work schedule

Note: 1 indicates high levels of each factor, 0 indicates low level

	Unstandardized coefficient	SE	Z	p- value	Standardized dominance weight	Dominance ranking
Presence of family	-0.05	0.06	-0.81	0.42	-	-
Stressful commute	0.14	0.04	3.89	0.00	0.01	2
Supervisor support of FWA	1.65	0.11	15.36	0.00	0.98	1
Interdependent work tasks	-0.12	0.03	-3.66	0.00	0.00	4
Workplace friendships	-0.12	0.03	-3.79	0.00	0.01	3
Intercept	3.83	0.11	34.29	0.00		

Table 9

Thorndike Case 2 restriction of range correction for correlations

FWA (DV)	Work life factor (IV)	Uncorrected r	Corrected r
Full-time telework			
	Family Presence	0.024	0.024
	Stressful commute	0.037	0.037
	Supervisor support of FWA	0.410	0.457
	Interdependence	-0.108	-0.088
	Workplace friendship	-0.097	-0.109
Part-time telework			
	Family Presence	0.051	0.052
	Stressful commute	0.050	0.050
	Supervisor support of FWA	0.484	0.536
	Interdependence	-0.071	-0.058
	Workplace friendship	-0.064	-0.073
Flextime			
	Family Presence	0.042	0.043
	Stressful commute	0.043	0.043
	Supervisor support of FWA	0.511	0.563
	Interdependence	-0.031	-0.025
	Workplace friendship	-0.028	-0.032
Compressed work schedule			
	Family Presence	-0.011	-0.012
	Stressful commute	0.033	0.033
	Supervisor support of FWA	0.402	0.450
	Interdependence	-0.027	-0.022
	Workplace friendship	-0.029	-0.032

Table 10

Level-1 interactions between supervisor support and the other factors predicting likelihood to use full-time telework

Note: 1 indicates high levels of each factor, 0 indicates low level

	Unstandardized coefficient	SE	Z	p-value
Presence of family	.06	.05	1.17	.24
Stressful commute	.14	.04	3.68	.00
Supervisor support of FWA	2.16	.11	18.97	.00
Interdependent work tasks	-.27	.04	-6.78	.00
Workplace friendships	-.24	.05	-5.05	.00
Supervisor support X family	.10	.06	1.49	.14
Supervisor support X stressful commute	.05	.05	0.93	.35
Supervisor support X interdependence	-.42	.07	-6.39	.00
Supervisor support X workplace friendships	-.39	.06	-6.49	.00
Intercept	3.46	.12	28.48	.00

Table 11

Level-1 interactions between supervisor support and the other factors predicting likelihood to use part-time telework

Note: 1 indicates high levels of each factor, 0 indicates low level

	Unstandardized coefficient	SE	Z	p-value
Presence of family	.19	.05	4.07	.00
Stressful commute	.20	.04	5.14	.00
Supervisor support of FWA	2.10	.12	17.89	.00
Interdependent work tasks	-.24	.14	-5.92	.00
Workplace friendships	-.24	.04	-5.46	.00
Supervisor support X family	.03	.05	0.52	.61
Supervisor support X stressful commute	.01	.05	0.18	.86
Supervisor support X interdependence	-.11	.05	-2.28	.02
Supervisor support X workplace friendships	-.07	.05	-1.48	.14
Intercept	3.68	.11	32.38	.00

Table 12

Level-1 interactions between supervisor support and the other factors predicting likelihood to use flextime

Note: 1 indicates high levels of each factor, 0 indicates low level

	Unstandardized coefficient	SE	Z	p-value
Presence of family	.24	.05	4.39	.00
Stressful commute	.19	.04	4.47	.00
Supervisor support of FWA	2.18	.12	18.60	.00
Interdependent work tasks	-.14	.03	-3.93	.00
Workplace friendships	-.09	.04	-2.38	.02
Supervisor support X family	-.14	.05	-2.80	.01
Supervisor support X stressful commute	-.03	.05	-0.64	.52
Supervisor support X interdependence	.02	.05	0.45	.65
Supervisor support X workplace friendships	-.05	.04	-1.21	.23
Intercept	3.51	.11	32.17	.00

Table 13

Level-1 interactions between supervisor support and the other factors predicting likelihood to use a compressed work schedule

Note: 1 indicates high levels of each factor, 0 indicates low level

	Unstandardized coefficient	SE	Z	p-value
Presence of family	.04	.06	0.76	.45
Stressful commute	.11	.04	2.77	.01
Supervisor support of FWA	1.75	.11	15.29	.00
Interdependent work tasks	-.10	.04	-2.68	.01
Workplace friendships	-.09	.04	-2.46	.01
Supervisor support X family	-.18	.06	-3.20	.00
Supervisor support X stressful commute	.06	.05	1.14	.26
Supervisor support X interdependence	-.03	.05	-0.65	.52
Supervisor support X workplace friendships	-.05	.04	-1.14	.26
Intercept	3.78	.11	33.69	.00

Table 14

Cross level interaction between actual presence of family and family factor predicting likelihood of using FWAs in general

Note: 1 indicates high levels of each factor, 0 indicates low level

Note: Level-2 variable is participants measured level of that factor

	Unstandardized coefficient	SE	Z	p-value
Presence of family	0.15	0.08	1.84	0.07
Stressful commute	0.16	0.03	6.17	0.00
Supervisor support of FWA	2.21	0.11	20.87	0.00
Interdependent work tasks	-0.19	0.03	-7.01	0.00
Workplace friendships	-0.15	0.03	-4.90	0.00
Family (level-2)	-0.13	0.22	-0.58	0.57
Family (level-2) X Presence of family	-0.03	0.10	-0.32	0.75
Intercept	3.71	0.18	20.35	0.00

Table 15

Cross level interaction between actual commute stress and stressful commute factor predicting likelihood of using FWAs in general

Note: 1 indicates high levels of each factor, 0 indicates low level

Note: Level-2 variable is participants measured level of that factor

	Unstandardize d coefficient	SE	Z	p-value
Presence of family	0.13	0.05	2.66	0.01
Stressful commute	0.17	0.03	6.40	0.00
Supervisor support of FWA	2.26	0.11	21.05	0.00
Interdependent work tasks	-0.18	0.03	-6.64	0.00
Workplace friendships	-0.14	0.03	-4.85	0.00
Stressful commute (level-2)	0.12	0.07	1.68	0.09
Stressful commute (level-2) X Stressful commute	0.00	0.02	0.01	1.00
Intercept	3.58	0.11	33.00	0.00

Table 16

Cross level interaction between actual supervisor support for FWA use and supervisor support factor predicting likelihood of using FWAs in general

Note: 1 indicates high levels of each factor, 0 indicates low level

Note: Level-2 variable is participants measured level of that factor

	Unstandardize d coefficient	SE	Z	p- value
Presence of family	0.14	0.05	2.74	0.01
Stressful commute	0.18	0.03	6.87	0.00
Supervisor support of FWA	2.20	0.11	20.87	0.00
Interdependent work tasks	-0.18	0.03	-6.85	0.00
Workplace friendships	-0.15	0.03	-4.92	0.00
Supervisor support of FWA use (level-2)	0.09	0.06	1.38	0.17
Supervisor support of FWA use (level-2) X Supervisor support of FWA	-0.10	0.06	-1.58	0.11
Intercept	3.64	0.11	33.78	0.00

Table 17

Cross level interaction between actual interdependence of work tasks and work interdependence factor predicting likelihood of using FWAs in general

Note: 1 indicates high levels of each factor, 0 indicates low level

Note: Level-2 variable is participants measured level of that factor

	Unstandardized coefficient	SE	Z	p- value
Presence of family	0.14	0.05	2.77	0.01
Stressful commute	0.18	0.03	6.98	0.00
Supervisor support of FWA	2.24	0.11	20.83	0.00
Interdependent work tasks	-0.19	0.03	-7.28	0.00
Workplace friendships	-0.15	0.03	-4.87	0.00
Interdependence (level-2)	-0.21	0.09	-2.45	0.01
Interdependence (level-2) X Interdependent work tasks	-0.03	0.02	-1.34	0.18
Intercept	3.60	0.11	33.64	0.00

Table 18

Cross level interaction between actual workplace friendship and workplace friendships factor predicting likelihood of using FWAs in general

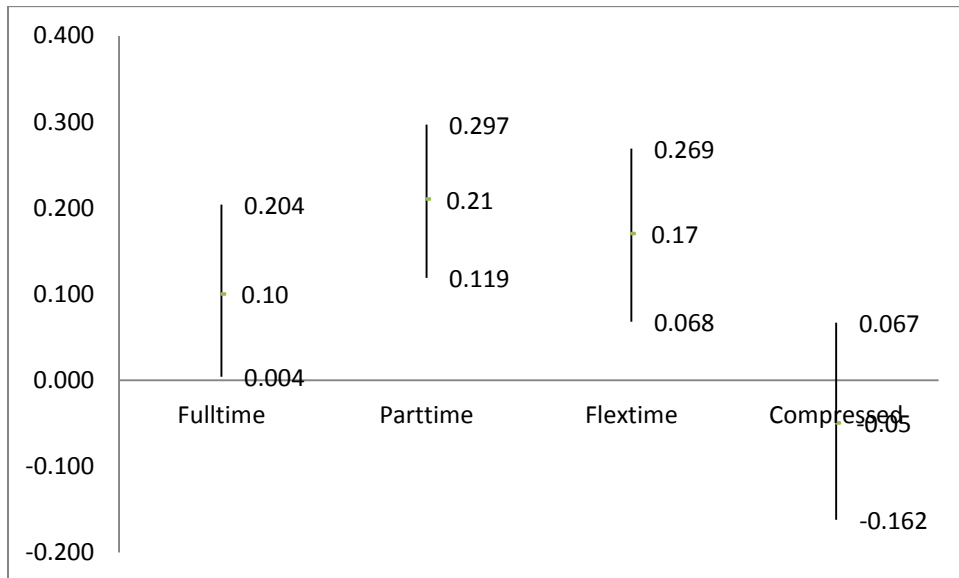
Note: 1 indicates high levels of each factor, 0 indicates low level

Note: Level-2 variable is participants measured level of that factor

	Unstandardiz ed coefficient	SE	Z	p- value
Presence of family	0.13	0.05	2.78	0.01
Stressful commute	0.16	0.03	5.79	0.00
Supervisor support of FWA	2.18	0.11	20.42	0.00
Interdependent work tasks	-0.18	0.03	-6.79	0.00
Workplace friendships	-0.15	0.03	-5.05	0.00
Workplace friendship (level-2)	-0.21	0.09	-2.51	0.01
Workplace friendship (level-2) X Workplace friendships	-0.03	0.02	-1.44	0.15
Intercept	3.65	0.11	34.19	0.00

Figure 1

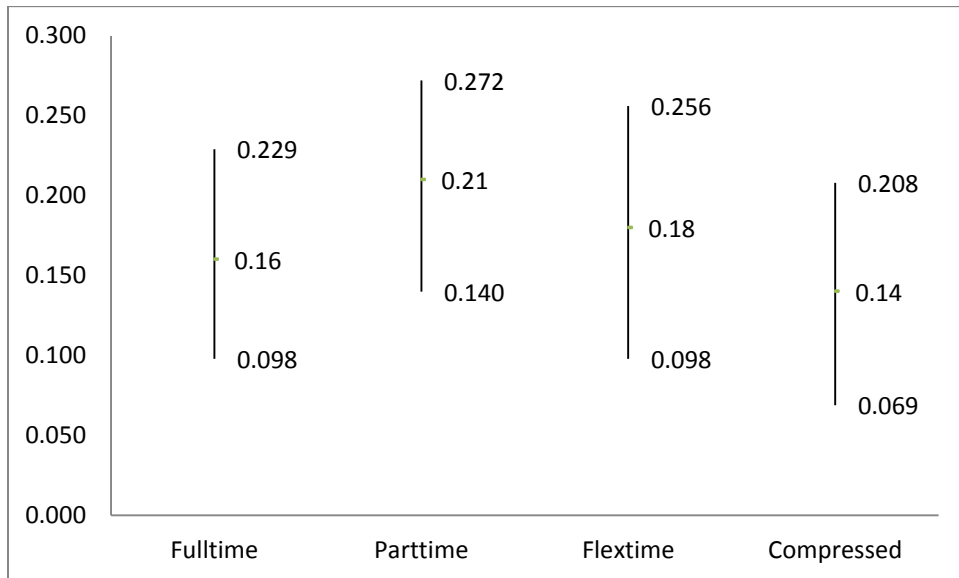
Comparison of coefficients for presence of family across FWAs



Note: Lines represent coefficient in middle with the upper and lower bounds of the 95% confidence interval. Non-overlapping lines indicate that coefficient is statistically significantly higher/lower than other coefficients.

Figure 2

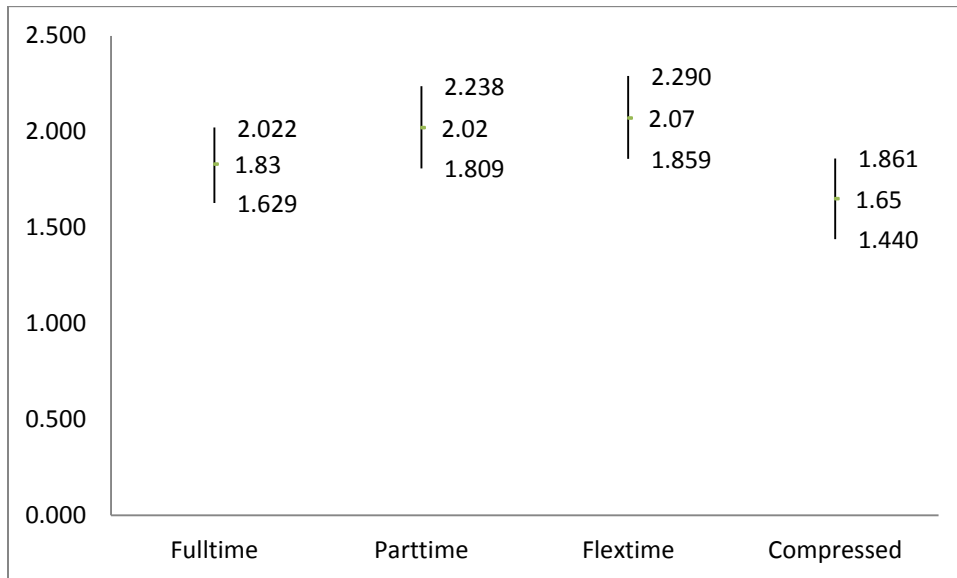
Comparison of coefficients for stressful commute across FWAs



Note: Lines represent coefficient in middle with the upper and lower bounds of the 95% confidence interval. Non-overlapping lines indicate that coefficient is statistically significantly higher/lower than other coefficients.

Figure 3

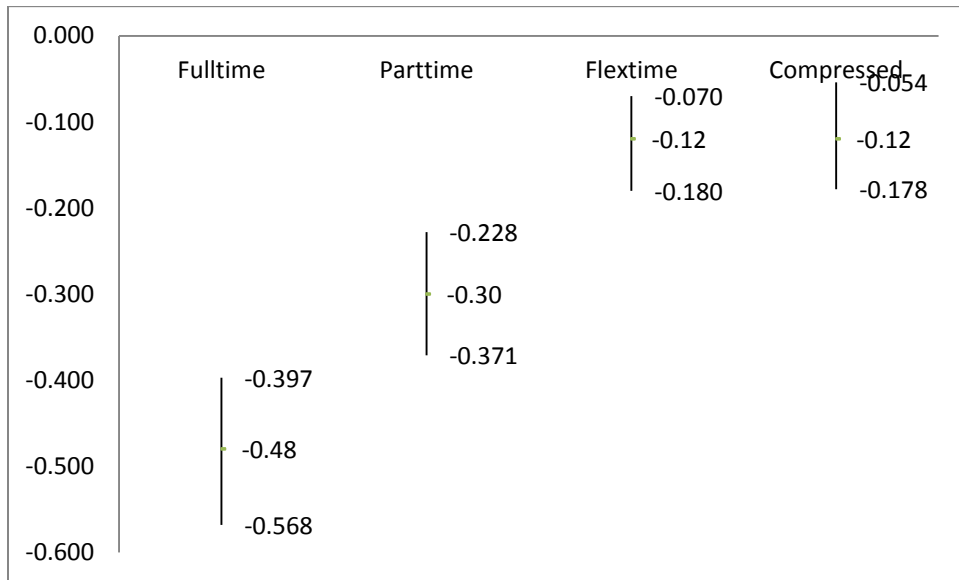
Comparison of coefficients for supervisor support for FWA use across FWAs



Note: Lines represent coefficient in middle with the upper and lower bounds of the 95% confidence interval. Non-overlapping lines indicate that coefficient is statistically significantly higher/lower than other coefficients.

Figure 4

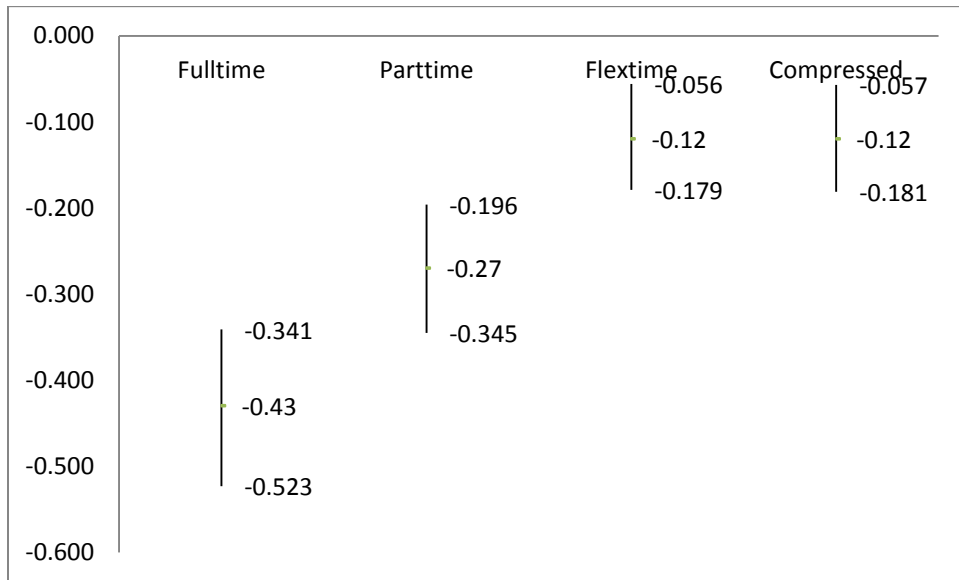
Comparison of coefficients for interdependence of work tasks across FWAs



Note: Lines represent coefficient in middle with the upper and lower bounds of the 95% confidence interval. Non-overlapping lines indicate that coefficient is statistically significantly higher/lower than other coefficients.

Figure 5

Comparison of coefficients for workplace friendships across FWAs



Note: Lines represent coefficient in middle with the upper and lower bounds of the 95% confidence interval. Non-overlapping lines indicate that coefficient is statistically significantly higher/lower than other coefficients.

APPENDIX A. FULL LIST OF MEASURES

Demographics:

Gender (Male, Female, Other (e.g. Transgender, Intersex))

Highest level of education completed (Grade school, high school, junior college, technical school, some college (but did not graduate with Bachelor's degree), College graduate (e.g. B.A., B.S. B.Sc., B. Tech), post graduate (e.g. M.A. Ph.D. M.B.A. M.Tech J.D. LL.M. M.D.))

Race/Ethnicity (White nonHispanic, Black non-Hispanic, Hispanic, Asian, Native American, Other)

Current country of residence (U.S. India, China, Other)

Age

Hours worked/week

Is English your first language (If not, what is)

How would you describe your English fluency? (Not at all fluent, somewhat fluent, moderately fluent, fluent)

Describe your favorite memory in two sentences

Do you currently use a FWA? (Yes/No)

If yes, what type of FWA do you use (select all that apply)? (part-time telework, full-time telework, flextime, compressed work schedule, other (please specify))

If no, how interested would you be in enrolling in the following FWA's, in your current situation? [asked for full-time telework, part-time telework, flextime, compressed work schedule] (Not at all interested, somewhat interested, moderately interested, interested, very interested)

Are you married or cohabitating? (Yes/No)

Do you have any children? (Yes/No)

If yes, how many?

Stressful Commute Scale (adapted from the stress sub-scale of the DASS)

Please rate how much you agree/disagree (1 being strongly disagree, 7 being strongly agree) with the following statements about your commute.

During my commute...

- 1) I found myself getting upset by quite trivial things
- 2) I tended to over-react to situations
- 3) I found it difficult to relax
- 4) I found myself getting upset rather easily
- 5) I felt that I was using a lot of nervous energy
- 6) I found myself getting impatient when I was delayed in any way
- 7) I felt that I was rather touchy
- 8) I found it hard to wind down
- 9) I found that I was very irritable
- 10) I found it hard to calm down after something upset me
- 11) I found it difficult to tolerate interruptions to what I was doing
- 12) I was in a state of nervous tension
- 13) I was intolerant of anything that kept me from getting on with what I was doing
- 14) I found myself getting agitated

Supervisor support for FWA use (adapted from POS measure substituting “organization” for “supervisor” and making it relevant for FWA)

Please rate the extent to which you agree/disagree (1 being strongly disagree, 7 being strongly agree) with the following statements about your supervisor's support of flexible work arrangement (FWA) use.

- 1) My supervisor strongly considers my goals and values in regard to FWA use
- 2) My supervisor is willing to help me use FWA's
- 3) My supervisor cares about my general satisfaction with FWA use
- 4) My supervisor disregards my best interests when he/she makes decisions that affect my FWA use (R)
- 5) My supervisor would grant a reasonable request for a change in my work time and/or location

Task Interdependence Scale – From Pearce & Gregersen 1991

Please rate the extent to which you agree/disagree (1 being strongly disagree, 7 being strongly agree) with the following statements about the interdependence of your work tasks.

- 1) I work closely with others in doing my work
- 2) I frequently must coordinate my efforts with others
- 3) My own performance is dependent on receiving accurate information from others
- 4) The way I perform my job has a significant impact on others
- 5) My work requires me to consult with others fairly frequently
- 6) I work fairly independently of others in my work (r)
- 7) I can plan my own work with little need to coordinate with others (r)
- 8) I rarely have to obtain information from others to complete my work(r_)
- 9) In order to do my job, I need to spend most of my time talking to other people
- 10) In my job I am frequently called on to provide information and advice

Workplace friendship – From Nielsen and colleagues 2000

Please rate the extent to which you agree/disagree (1 being strongly disagree, 7 being strongly agree) with the following statements about your friendship at work.

- 1) I have the opportunity to get to know my coworkers
- 2) I am able to work with my coworkers to collectively solve problems
- 3) In my organization, I have the chance to talk informally and visit with others
- 4) Communication among employees is encouraged by my organization
- 5) I have the opportunity to develop close friendships at my workplace
- 6) Informal talk is tolerated by my organization as long as the work is completed
- 7) I have formed strong friendships at work
- 8) I socialize with coworkers outside of the workplace
- 9) I can confide in people at work
- 10) I feel I can trust many coworkers a great deal
- 11) Being able to see my coworkers is one reason why I look forward to my job
- 12) I do not feel that anyone I work with is a true friend (R)

APPENDIX B. UNREPORTED ANALYSES

Table a. Within-person MANOVA results

	Statistic	df	F	p-value
Wilks' Lambda	.004	1445	13.24	0.00
Pillai's Trace	2.95		12.20	0.00
Lawley-Hotelling Trace	13.53		14.60	0.00
Roy's Largest Root	6.50		28.09	0.00

Table b. Extraversion main effects and cross-level interactions predicting FWA use in general

	Unstandardized coefficient	SE	Z	p-value
Presence of family	.32	.13	2.45	.01
Stressful commute	.20	.07	2.79	.01
Supervisor support of FWA	2.94	.28	10.51	.00
Interdependent work tasks	-.16	.07	-2.29	.02
Workplace friendships	-.23	.08	-2.91	.00
Extraversion	.19	.07	2.76	.01
Extraversion X Presence of family	-.05	.03	-1.56	.12
Extraversion X Stressful commute	-.01	.02	-0.54	.59
Extraversion X Supervisor support of FWA	-.19	.07	-2.79	.01
Extraversion X Interdependent work tasks	-.01	.02	-0.42	.67
Extraversion X Workplace friendships	.02	.02	1.08	.28
Intercept	2.89	.29	10.23	.00

Table c. Agreeableness main effects and cross-level interactions predicting FWA use in general

	Unstandardize d coefficient	SE	Z	p- value
Presence of family	.43	.38	1.15	.25
Stressful commute	.48	.20	2.32	.02
Supervisor support of FWA	1.87	.81	2.30	.02
Interdependent work tasks	-.33	.20	-1.62	.11
Workplace friendships	.03	.23	0.14	.89
Agreeableness	.18	.16	1.07	.28
Agreeableness X Presence of family	-.06	.08	-0.79	.43
Agreeableness X Stressful commute	-.06	.04	-1.51	.13
Agreeableness X Supervisor support of FWA	.07	.16	0.44	.66
Agreeableness X Interdependent work tasks	.03	.04	0.69	.59
Agreeableness X Workplace friendships	-.04	.05	-0.81	.42
Intercept	2.73	.82	3.34	.00

Table d. Openness main effects and cross-level interactions predicting FWA use in general

	Unstandardize d coefficient	SE	Z	p- value
Presence of family	-.32	.42	-0.76	.45
Stressful commute	.36	.23	1.60	.11
Supervisor support of FWA	1.56	.90	1.73	.09
Interdependent work tasks	-.17	.23	-0.76	.45
Workplace friendships	.08	.25	0.30	.78
Openness	.23	.18	1.28	.20
Openness X Presence of family	.09	.08	1.09	.28
Openness X Stressful commute	-.04	.04	-0.91	.37
Openness X Supervisor support of FWA	.13	.18	0.71	.48
Openness X Interdependent work tasks	-.00	.04	-0.03	.97
Openness X Workplace friendships	-.04	.05	-0.91	.36
Intercept	2.48	.91	2.72	.01

Table e. Parent role salience (PRS) main effects and cross-level interactions predicting FWA use in general

	Unstandardize d coefficient	SE	Z	p- value
Presence of family	.49	.49	1.00	.32
Stressful commute	.47	.27	1.75	.08
Supervisor support of FWA	3.05	1.07	2.85	.00
Interdependent work tasks	-.36	.27	-1.34	.18
Workplace friendships	-.35	.30	-1.17	.24
PRS	.16	.24	0.65	.52
PRS X Presence of family	-.08	.11	-0.73	.46
PRS X Stressful commute	-.07	.06	-1.14	.26
PRS X Supervisor support of FWA	-.19	.24	-0.77	.44
PRS X Interdependent work tasks	.04	.06	0.64	.52
PRS X Workplace friendships	.05	.07	0.69	.49
Intercept	2.91	1.08	2.69	.01

Table f. Primary analysis for full-time telework with any FWA experience as a control variable

	Unstandardized coefficient	SE	Z	p- value
Presence of family	.10	.05	2.05	.04
Stressful commute	.16	.03	4.91	.00
Supervisor support of FWA	1.83	.10	18.23	.00
Interdependent work tasks	-.48	.04	-11.06	.00
Workplace friendships	-.43	.05	-9.32	.00
Used FWAs	.36	.24	1.47	.14
Intercept	3.49	.15	23.33	.00

Table g. Primary analysis for part-time telework with any FWA experience as a control variable

	Unstandardized coefficient	SE	Z	p- value
Presence of family	.21	.05	4.60	.00
Stressful commute	.21	.03	6.13	.00
Supervisor support of FWA	2.02	.11	18.49	.00
Interdependent work tasks	-.30	.04	-8.17	.00
Workplace friendships	-.27	.04	-7.10	.00
Used FWAs	.44	.23	1.90	.06
Intercept	3.55	.14	25.07	.00

Table h. Primary analysis for flextime with any FWA experience as a control variable

	Unstandardized coefficient	SE	Z	p- value
Presence of family	.17	.05	3.28	.00
Stressful commute	.18	.04	4.39	.00
Supervisor support of FWA	2.07	.11	18.89	.00
Interdependent work tasks	-.12	.03	-4.47	.00
Workplace friendships	-.12	.03	-3.75	.00
Used FWAs	.57	.22	2.60	.01
Intercept	3.35	.14	24.78	.00

Table i. Primary analyses for compressed work schedule with any FWA experience as a control variable

	Unstandardized coefficient	SE	Z	p- value
Presence of family	-.05	.06	-0.81	.42
Stressful commute	.14	.04	3.89	.00
Supervisor support of FWA	1.65	.11	15.36	.00
Interdependent work tasks	-.12	.03	-3.66	.00
Workplace friendships	-.12	.03	-3.79	.00
Used FWAs	.53	.23	2.34	.02
Intercept	3.63	.14	26.00	.00

Table j. Primary analyses for full-time telework with full-time telework experience as a control variable

	Unstandardized coefficient	SE	Z	p- value
Presence of family	.10	.05	2.05	.04
Stressful commute	.16	.03	4.91	.00
Supervisor support of FWA	1.83	.10	18.23	.00
Interdependent work tasks	-.48	.04	-11.06	.00
Workplace friendships	-.43	.05	-9.32	.00
Used full-time telework	.36	.24	1.47	.14
Intercept	3.44	.13	25.72	.00

Table k. Primary analyses for part-time telework with part-time telework experience as a control variable

	Unstandardized coefficient	SE	Z	p- value
Presence of family	.21	.05	4.60	.00
Stressful commute	.21	.03	6.13	.00
Supervisor support of FWA	2.02	.11	18.49	.00
Interdependent work tasks	-.30	.04	-8.17	.00
Workplace friendships	-.27	.04	-7.10	.00
Used part-time telework	.26	.30	0.87	.39
Intercept	3.67	.12	29.80	.00

Table l. Primary analyses for flextime with flextime experience as a control variable

	Unstandardized coefficient	SE	Z	p- value
Presence of family	.17	.05	3.28	.00
Stressful commute	.18	.04	4.39	.00
Supervisor support of FWA	2.07	.11	18.89	.00
Interdependent work tasks	-.12	.03	-4.47	.00
Workplace friendships	-.12	.03	-3.75	.00
Used flextime	.40	.25	1.60	.11
Intercept	3.46	.12	28.06	.00

Table m. Primary analyses for compressed work schedule with compressed work schedule experience as a control variable

	Unstandardized coefficient	SE	Z	p- value
Presence of family	-.05	.06	-0.81	.42
Stressful commute	.14	.04	3.89	.00
Supervisor support of FWA	1.65	.11	15.36	.00
Interdependent work tasks	-.12	.03	-3.66	.00
Workplace friendships	-.12	.03	-3.79	.00
Used compressed work schedule	.51	.43	1.18	.24
Intercept	3.80	.12	32.86	.00

Table n. Average within-person correlations between dependent variables

	1	2	3	4	5
1) Full-time telework	-				
2) Part-time telework	.76	-			
3) Flextime	.52	.66	-		
4) Compressed work schedule	.50	.56	.65	-	
5)FWA in general	.55	.69	.81	.68	-

APPENDIX C. DISSERTATION PROPOSAL

Why use flexible work arrangements?: A policy capturing study examining the factors related FWA utilization proposal

Flexible work arrangements (i.e. flextime, compressed work schedules, or telework) are human resource practices that have been increasing in popularity over the past 80 years (Hunnicutt, 1996). Currently, 27% of employees in the U.S. use flexible work arrangements and another 30% are able to telework occasionally (McGuire, Kenney, & Brashler, 2010). Despite the increasing popularity of FWA's, few studies have examined the decision-making process employees engage in when deciding whether to enroll in an FWA. In the studies that do consider how these decisions are made (see Butts, Casper, & Yang, 2013, or Gajendran and Harrison, 2007 for reviews), three notable limitations exist. First, the studies focus on FWA's as a broad category without considering specific types of FWA's. These studies conclude that employees who are tolerant of role ambiguity, have a flexible work arrangement supportive supervisor, and have lower career aspirations are more likely to enroll in these programs (Almer, Cohen, & Single, 2003; Grover & Crooker, 1995; Kossek, Lautsch & Eaton, 2006). For this information to be useful for organizations, research needs to investigate the decision making process that goes into enrolling in specific FWA's. Second, the studies that have looked at specific types of FWA's have overwhelmingly focused on employees that have a family. The conclusion from this category of studies is that women and parents are especially likely to use all types of flexible work arrangements (Almer, Cohen, & Single, 2003). Third, the current literature only examines past FWA use, not the desire to enroll in an FWA given an individual's current situation. This trend in the literature might present a conflated view of FWA use, with the desire to use an FWA. For example, there might be a bias toward allowing parents to use FWA's, despite a much broader desire to enroll in the programs when there is no formal company policy. These three limitations minimize the usefulness of this information to organizations deciding whether or not to implement an FWA. Without knowledge of how employees want to enroll in an FWA, organizations that start offering an FWA policy could open themselves to financial risk, if a large percentage of employees do decide to enroll. The present study hopes address these limitations by considering additional factors that could influence the decision making process and examining how these factors influence 4 different FWA policies.

This dissertation proposal will proceed in the following way. First, I will discuss four types of flexible work arrangements that fall on the flextime and flexplace continuum presented by Shockley and Allen (2010). This section will describe how these flexible work arrangements are similar and, more importantly, how they differ. Next, an

overview of the theory of planned behavior (Ajzen, 2002; Ajzen, 1991) will be presented as a common framework to understand the decision to enroll in a FWA, based upon the factors manipulated in the study. Through the lens of the theory of planned behavior, I will then make formal hypotheses about the factors being manipulated. Finally, I will propose a policy-capturing methodology to examine these hypotheses including a pilot study to ensure appropriate scenario strength and an analysis plan. The successful completion of this study will allow human resource managers to more accurately predict flexible work arrangement use by understanding the complex decision-making process that goes into the decision to use a FWA. In turn, organizations will be able to more accurately predict the anticipated enrollment and financial cost of implementing a flexible work arrangement and which employees will choose what type of FWA.

Types of Flexible Work Arrangements

A flexible work arrangement has been defined as a human resource policy that employees choose to enroll in that creates flexibility in the time, location, amount, or continuity of employee work (Kossek & Michel, 2011). Employee choice is an important part of an FWA, as other types of work arrangements can be alternative, but are mandatory (for example, when organizations require an employee to telecommute full-time). Beyond that stipulation, the definition is very broad, encompassing such diverse practices as compressed work schedules, sabbaticals, or even part-time work.

In order to limit the scope of this proposal, I will focus on two broad classifications of flexible work arrangements, those involving flexibility in the location and flexibility in the timing of work, respectively. These two classifications were chosen for two reasons. First, work arrangements that provide flexibility in location and timing of work are the most popular types of flexible work arrangements (SHRM, 2011; Shockley & Allen, 2010). Second, flexibility in the location and timing of work are the only two classifications that require the same commitment in resources from the organization and employee as a traditional 40-hour work week schedule (SHRM, 2008). If an employee wants to opt-in to flexible work arrangement that provides flexibility in amount or continuity of work, the organization can grant these requests while reducing the benefits and salary provided to these employees. For example, if an employee is moving from full-time to part-time the expectation would be for the employee to earn less yearly salary, and potentially have reduced benefits, though this would still fit the broad definition of a flexible work arrangement. Keeping in mind these two reasons, the present study focuses on work arrangements that provide flexibility in the timing and/or location of work for the sake of comparability to a traditional work arrangement and to align with typical expectations of flexible work arrangements. In the following section, I review the literature about the four types of flexible work arrangements that will be considered in this study: part-time telecommuting, full-time telecommuting, compressed work schedules, and flextime.

Worth emphasizing is that, although this study is examining the decision-making process for each of these FWA's independently, it is of course possible for an employee to utilize multiple FWA's simultaneously. For example, a person might use a flexible work schedule to work from 6-2 while teleworking. The present study is attempting to

disentangle the decision-making process about how employees decide to use specific FWA's. Based on the results of this study, future research can address the decision-making processes used for utilizing multiple FWA's.

Part-time telecommuting

The first two flexible work arrangements that will be discussed involve offering flexibility in the location of work, specifically part-time and full-time telecommuting. Telecommuting is a flexible work arrangement policy that allows employees who traditionally work from a centralized work location to work away from the office (Gajendran & Harrison, 2007; Noonan & Glass, 2012; Shin, Sawy, Sheng, & Higa, 2000). For clarification, this definition excludes jobs in which the working outside the office takes the form of travel (i.e. travelling salespeople, working at a client site, truckers, etc.). Telecommuting is the second most frequently offered flexible work arrangement in the US, with 45% of organizations offering some form of telecommuting (i.e. as needed, part-time, or full-time) (SHRM, 2011). Furthermore, over a third of all organizations offer regularly scheduled part-time teleworking, and 15% of all employees report telecommuting at least one day per week, with this number expected to rise in the coming years (Noonan & Glass, 2012; SHRM, 2011).

The research literature on part-time telecommuting is generally positive. Employees who telecommute regularly on a part-time basis have less work-family conflict and job stress (Golden, Veiga, & Dino, 2008; Golden, Veiga, & Simsek, 2006). Additionally, part-time telecommuting is related to higher levels of job performance and job satisfaction (Gajendran & Harrison, 2007; Golden & Veiga, 2005). Organizations with telecommuting policies also have better "triple bottom lines" which measures not only financial performance but also social and environmental responsibility (Allenby & Richards, 1999). In summary, part-time telecommuting is a viable organizational policy that can benefit employee outcomes and organizational performance.

Full-time telecommuting

Employees utilizing full-time telecommuting programs work away from a centralized work location as their primary work location (Gajendran & Harrison, 2007; SHRM, 2011). Full-time telecommuters only come into the office for situations that cannot be handled remotely (i.e. presentations, some meetings, etc.). A recent survey from the Society for Human Resource Management estimates that 20% of organizations offer full-time telecommuting as an option for their employees (SHRM, 2011). Other estimates suggest that this number is rising, with several organizations utilizing this flexible work arrangement as a way to cut overhead costs (Allenby & Richards, 1999; Noonan & Glass, 2012).

While the degree of telecommuting a person engages in could be considered on a continuum (from no telecommuting to full-time, with a part-time option somewhere in the middle), the research evidence for full-time and part-time telecommuting is in opposition. Although the research literature presents a generally positive view of part-time telecommuting, the limited research on full-time telecommuting suggests generally negative outcomes associated with this policy. In one of the first studies examining the downside of full-time telecommuting, Golden and Viega (2005) show a curvilinear

relationship between the extent of telecommuting and job satisfaction, such that moderate or part-time telecommuting is most beneficial for job satisfaction, but full-time telecommuting is detrimental. Full-time telecommuting is also associated with increased levels of family-to-work conflict, social isolation and coworker resentment (Golden, Veiga, & Dino, 2008; Golden, Veiga, & Simsek, 2006; Morganson, Major, Oborn, Virive, & Heelan, 2010). Because of the contradictory nature of the outcomes suggested by the research literature and the prevalence of organizations offering this type of flexible work arrangement examination of full versus part time telecommuting (versus considering them on a continuum) seems appropriate when considering employee utilization.

Compressed Work Schedules

While the previous two alternative work arrangements offer flexibility in where employees work, the following two arrangements offer flexibility in when employees work. A compressed work schedule is a flexible work arrangement that allows an employee to work a 40-hour work week in a shorter number of longer days than the traditional 5-day 8 hour/day work schedule (Pierce, Newstrom, Dunham, & Barber, 1989). The two most common types of compressed work schedules are 4 10-hour days with one day off per week or 9-hour days with either a half day off once a week or a full day off every two weeks (Kossek & Michel, 2011). In the United States, 21% of employees have access to compressed work schedules (Baltes, Briggs, Huff, Wright, & Neuman, 1999).

In contrast to the research on telecommuting which is mostly relatively recent (i.e. within the past 15 years), research on arrangements that grant flexibility in time are typically older, in large part because these arrangements, unlike telework, were feasible before the great advances in technology that have occurred since 2000. In a meta-analytic investigation, Baltes and colleagues (1999) show that compressed work schedules are positively related to job satisfaction, satisfaction with one's schedule, and supervisor-rated performance. In a quasi-experimental investigation, employees who used a compressed work schedule achieved greater work-life balance (Dunham, Pierce, & Castaneda, 1987). In general, compressed work schedules are related to positive employee outcomes.

Flextime

The final FWA examined here is flextime. A flextime arrangement grants employees the ability to choose when they work, typically incorporating an organization-wide specification of "core hours" (Baltes et al., 1999; Kossek & Michel, 2011). Employers offering flextime programs identify a common band of hours that all employees must be in the office, typically between 10 am and 2 or 3 pm. Employees then get to choose the 8 hours they will work while incorporating the organizationally mandated core hours. Using the example above, an employee could choose to work from 7 am until 3 pm, 10 am to 6 pm, or any 8 hour period in between. Due to the flexibility granted to employees and the potential ease of implementation for the employer, flextime is the most popular flexible work arrangement in America, with recent estimates suggesting over 80% of employers offering flextime (World at Work, 2011).

In addition to being a popular program, research suggests that flextime is also a beneficial program for employee attitudinal and behavioral outcomes. Flextime use has been associated with increased employee productivity, job satisfaction, and decreased absenteeism (Baltes et al., 1999). Additionally, flextime has been shown to have beneficial effects on work interference with family matters, but no effect on family interference with work matters (Allen, Johnson, Kiburz, & Shockley, 2012; Shockley & Allen, 2007). Overall, flextime programs appear to have beneficial relationships with employee outcomes.

Summary

Based on organizational usage statistics and previous research on flexible work arrangements, the four types of flexible work arrangements that will be examined in this dissertation are part-time telework, full-time telework, compressed work schedule, and flextime. These four arrangements described above map on to Shockley and Allen's (2012) flextime (flextime and compressed work schedules) and flexplace (part and full time telecommuting) distinction. Within those two distinctions, different life circumstances might dictate a preference for one flexible work arrangement over others. By examining these FWA policies and the factors discussed previously discussed, organizations will be able to use this information to more accurately predict how many employees will enroll in FWA programs, thus giving them more information when deciding if they should offer a specific FWA policy. In the next section, I present an overview of the theory of planned behavior followed by hypotheses regarding life circumstances that could influence an individual's likelihood to enroll in a given FWA.

Theory of planned behavior

The theory of planned behavior and its precursor, the theory of reasoned action, are arguably the most influential theories in psychology. Based on a recent study on the impact of psychological papers, the primary author behind these two theories, Icek Ajzen, holds three of the top 5 spots for the most cited articles in psychology (Nosek, Graham, Lindner, Kesebir, Hawkins, Hahn, Schmidt, Joy-Gaba, Frazier, & Tenney, 2010). The popularity of this theory is due to the general nature that makes it applicable to disparate subject areas.

The basic premise behind the theory of planned behavior is that behavior is predicted by behavioral intentions, which in turn, are predicted by the attitudes a person holds about that behavior, the perceived behavioral control over the behavior, and the subjective norms surrounding the behavior (Ajzen, 1991). The theory of planned behavior differs from previous theories attempting to predict behavior generally in that the theory is focused on the prediction of a specific behavior, as opposed to the prediction of an aggregate behavior over time (Ajzen, 1991). An example might prove helpful in demonstrating this concept. Previous theories of behavior would make a hypothesis such as, in general, people who are more conscientious will perform better. This hypothesis is in the aggregate. The theory of planned behavior is designed to predict specific behavior in specific situations. So a person would work harder when he/she has favorable attitudes toward hard work, perceives the control to work hard, and feels that working hard is a socially valued behavior. The situational prediction of behavior makes the theory of

planned behavior a useful framework for understanding why employees choose to opt in to one type of FWA versus another.

Before elaborating on the major components of the theory, I briefly review previous research and the behaviors that were predicted using the theory of planned behavior. The majority of previous research has focused on the application of the theory of planned behavior to behaviors that require self-control. In Armitage and Conner's (2001) meta-analysis of the efficacy of the theory, they list behaviors such as voting, daily exercising, using contraceptives, and volunteering. In general, these behaviors all require an individual to use some degree of self-regulation to complete. Although these types of behaviors represent the majority of research, several studies have recently applied the theory of planned behavior to determine topics like why consumers choose one brand over another and in the evaluation of alternatives (Armitage & Conner, 2001). The decisions investigated in this context include, for example, the decision to buy a specific brand of toothpaste, buying laundry detergent, choosing a credit union for a loan, and choosing a brand of automobile to buy (Armitage & Conner, 2001). These behaviors differ from those typically examined with respect to TPB because they represent a choice among alternatives, not a dichotomous, "should I" or "shouldn't I" decision to engage or abstain from executing a behavior that requires a degree of self-control. The present study draws from the decision-making category of studies to determine the factors employees consider when deciding to enroll in an FWA.

Behavioral intentions. One of the fundamental components of the theory of planned behavior is the strong relationship between behavioral intentions and actual behavior (Fishbein & Ajzen, 1975; Ajzen, 1991). A behavioral intention is the amount of energy and motivation an individual is anticipating using to actually do a behavior (Ajzen, 1991). One of the key differences between the theory of reasoned action and the theory of planned behavior was an updated conception of the outcome of intention (Ajzen, 1991). Originally, intention was theorized to predict an individual trying to do a behavior (Fishbein & Ajzen, 1975). After several years of empirical research showed a very strong correlation between intention and actual behavior (as opposed to just trying to do the behavior), the reconceptualized theory now predicts that behavioral intentions will result in actual behavior (Ajzen, 1991).

Perceived behavioral control. Another change between the original conception and the reformulated theory is the role of perceived behavioral control. Perceived behavioral control is the belief that an individual has about whether he or she can successfully perform the behavior when considering both internal factors (like ability) and external factors (like having the appropriate tools for a job) (Ajzen, 2002). The internal aspect of perceived behavioral control is similar to the conception of self-efficacy proposed by Bandura (1982). The external aspects of this evaluation are any impediments that would prevent the actor from completing the behavior. As an example relevant to this paper (as well as an allusion to the hypotheses section), let us consider a situation where an organization has a formal policy that allows employees to use FWA's, but that a direct manager that strongly discourages the practice. In this situation, the employee making the decision to use an FWA would weigh both of these external factors against

each other and formulate a decision regarding the amount of control he or she has over the situation. On one hand, the employee should have complete control because of the formal policy. On the other hand, the manager of the employee might take retribution on the employee using an FWA by giving him or her a lower performance evaluation. The employee's final evaluation of his or her control over the situation likely will influence the individual's intention to use the FWA (or not).

While perceived behavioral control has an impact on the psychological evaluation of behavioral intentions, the actual control an individual has on the successful performance of a behavior also has a major impact. When discussing actual control, Ajzen (1991) states "the importance of actual behavioral control is self-evident: The resources and opportunities available to a person must to some extent dictate the likelihood of behavioral achievement" (p. 183). In other words, while perceived behavioral control is extremely important in the psychological evaluation of alternatives, actual behavioral control is important when determining whether a person will actually do the behavior.

Attitudes. In the context of the theory of planned behavior, an attitude is referring to the individual's evaluation of whether the behavior in question is favorable or not (Ajzen, 1991). This conception of attitudes is most in line with the expectancy-value model of attitudes, which was originally developed by Fishbein and Ajzen (1975) in their seminal work on the theory of reasoned action. According to this model, attitudes are a summation of all of evaluations of the beliefs an individual holds about the behavior, outcome of the behavior, or processes that go into performing the behavior multiplied by the strength of each of these beliefs. Again, an example might help clarify this point. In making a decision about buying a new pair of shoes, an individual would have a specified attitude about this behavior. That attitude would be comprised of, among other things, the strong belief that his current shoes are no longer sufficient. Additionally, he might hold a weak belief that the shoe buying process is unpleasant. Finally, he might hold a strong belief that after doing this behavior, he would look better. By weighing the relative merits/detriments of each of these beliefs against one another, he would arrive at an overall positive attitude about buying shoes.

Subjective norms. The final major component of the theory of planned behavior is the subjective norm of the behavior. Within the framework of the theory of planned behavior, the subjective norm is the perceived social pressure to either perform the behavior or not (Ajzen, 1991). Similar to the way that attitudes are created by the strength and evaluation of behavioral beliefs, subjective norms are determined by the strength of the norm and the motivation to adhere to that norm (also called normative beliefs) (Ajzen, 1991). Because the theory of planned behavior is concerned with the psychological process used to determine performing a behavior, subjective norms need to be noticed and evaluated appropriately by the individual actor. Continuing with the shoe buying example, the individual might have a favorable attitude about a pair of bright orange dress shoes, but might not purchase this item because of a very formal workplace where he would be shunned for wearing those shoes. After considering the subjective norms, attitudes, and perceived behavioral control of a specific behavior, the individual

arrives at a behavioral intention. That behavioral intention would, in turn, predict actual behavior/performance.

Factors influencing flexible work arrangement use

In the next section, I apply the theory of planned behavior to hypothesize how five work and family factors should influence FWA utilization. The factors are the presence of a family, driver stress, unsupportive FWA climate, interdependence of work tasks, and social interaction. These factors were chosen for two reasons. First, some of the factors were chosen because they have been examined in conjunction with FWA utilization overall (Almer, Cohen, & Single, 2003; Shockley & Allen, 2007). Drawing on previous research on general FWA utilization gives the current study a basis for making hypotheses when considering specific FWA's. Second, the other factors represent daily stressors that could impact the decision to utilize FWA's. Although no empirical research has examined how these factors influence FWA utilization, previous research has found that changing these factors could result in a large change in daily happiness (Haidt, 2006). By demonstrating how these factors influence FWA attractiveness, employers can begin to assess the potential utilization of a newly implemented FWA program, as well as recognizing when the impact of an FWA program would be maximized.

Presence of a family

Given that much of the research about FWA's is in the work-life family literature, it is unsurprising that the presence of a family has received the most empirical attention (Butts, Casper, & Yang, 2013). According to the decennial U.S. Census, the average family household size with two parents is approximately 4 people (2 adults and 2 children) (Lofquist, Lugaila, O'Connell, & Feliz, 2012). For the purpose of this discussion, familial presence will be operationalized as this average 4 member household. Having a family often fundamentally changes an individual's time use (Offer & Schneider, 2011). Specifically, individuals with families tend to shift the time spent on leisure activities (i.e. hobbies, entertainment, etc.) to childcare and relationship maintenance (Offer & Schneider, 2011). Although gender differences exist in the extent of this shift, both men and women experience an absolute shift toward child care (Yeung, Sandberg, Davis-Kean, & Hofferth, 2011).

These changes in priorities for time use also may result in a reappraisal of the components of the theory of planned behavior in respect to FWA use. Parents generally begin to value time spent with their children over time spent at work and time spent on leisure activities (Offer & Schneider, 2011). This priority shift makes attitudes toward flexplace FWA's more positive. However, this may not occur for flextime FWA's because the absolute amount of time spent in the workplace is not changing. In other words, employees with a family may want to spend more time at home with their children, and still be able to work. Flexplace policies allow the employee to do that, but flextime policies do not. Additionally, employees with families could experience a shift in the norms they perceive toward FWA utilization. Because employees with a family use FWA's more frequently than other employees (Almer, Cohen, & Single, 2003), employees might feel it is more acceptable to use a FWA when one has a family (Konrad

& Yang, 2012; Kossek & Michel, 2011). The presence of a family will likely not affect perceived behavioral control.

Although there has been some research investigating how having a family affects using FWA's overall, few studies have looked at FWA adoption for employees with families in a more nuanced distinction by breaking down the investigation by FWA type. Using the flextime/flexplace classification, Shockley and Allen (2007) show positive, though non-significant, relationships between having a family and using flextime and flexplace policies. In another study not specifically focused on the presence of a family and FWA use, a curvilinear relationship was found between telework and work-family conflict and job satisfaction (Golden & Veiga, 2005). These results suggest that there is an optimal amount of teleworking that maximizes job satisfaction and work-family harmony. When considering how telecommuting use would relate to having a family, it appears that full-time telecommuting might be negatively related because that policy could increase work-family conflict. Part-time telecommuting, on the other hand, could alleviate some of that conflict and will, therefore, be utilized more when an individual has a family. Because no relationship is expected to exist between flextime policies (flexible work schedules and compressed work schedules), I only make hypotheses regarding flexplace policies. Based on theoretical consideration and on the results of these empirical studies, as they relate to components of the theory of planned behavior, the following hypotheses are presented:

Hypothesis 1a: Familial presence will be negatively related to likelihood of full-time teleworking utilization (rank order prediction: 1)⁵

Hypothesis 1b: Familial presence will be positively related to likelihood of part-time teleworking utilization (rank order prediction: 2)

Driver Stress

The second factor hypothesized to affect FWA use is driver stress. Driving is by far the most common way people get to work (Florida, 2011). Recent estimates suggest that 86% of the working population drive to work, as opposed to using other forms of transportation (Florida, 2011). For this reason, driving will be the only form of transportation considered as part of commuting stress, though other forms may also cause negative emotional experiences (i.e. missing the bus, raining while walking to work, etc.).

Driver stress has previously been defined as an experience of emotional or physiological strain associated with driving (Hennessy & Wiesenenthal, 1997; Lucas & Heady, 2002). Previous research has found that many factors predict driving stress such as time urgency, work or home life stress, and (negatively) listening to music while driving (Hennessy, Wiesenenthal, & Kohn, 2000). Consistently, however, the strongest predictor of state driver stress is traffic congestion (Hennessy, Wiesenenthal, & Kohn, 2000). In the present study, driver stress will be operationalized as a function of two factors that have been found to multiplicatively predict state driver stress, traffic

⁵ Rank order predictors refer to the relative magnitude of the relationship (i.e. largest absolute value). Rank order of 1 indicates strongest relationship between the factor and the FWA, while a rank order of 4 indicates weakest or zero.

congestion and time urgency (Hennessy & Jakubowski, 2008; Hennessy & Wiesenthal, 1999). For example, when an individual is required to arrive at work precisely by a certain time, but experiences a lot of traffic congestion, it creates a lot of driver stress.

Although largely ignored in the I/O literature, several studies in transportation research and environmental research have examined the effect and utilization of FWA's when employees have a frustrating commute resulting in driver stress. In one study, researchers found that telecommuters reduced the time spent commuting, thus significantly reducing their carbon emissions for the week (Henderson & Mokhtarian, 1996). In another study, employees using flextime experienced more commute satisfaction and less stress from driving by being allowed to commute on hours that are not aligned with traditional work schedules (Lucas & Heady, 2002). Given that affective reactions carryover from the home to work and vice-versa, reducing the stress caused by a frustrating commute should greatly benefit the overall wellness of an employee (Judge & Ilies, 2004).

Integrating this research into the components of the theory of planned behavior, individuals could change their attitudes and subjective norms toward FWA's when they experience driver stress. Employees with a stressful commute should hold more favorable attitudes toward policies that allow them to avoid that commute. Although high driver stress is expected to predict both flextime and flexplace policy utilization, the relationship with flexplace policy endorsement utilization should be stronger. While flextime utilization has been found to decrease driver stress (Lucas & Heady, 2002), flexplace policies effectively eliminate the possibility of state driver stress because the employee is able to work from home or a location closer to home. For this reason, flexplace utilization should be more strongly predicted by high driver stress, although flextime use will, generally, also be predicted.

Considering the previous research on driver stress and the application of the theory of planned behavior, the relationship between an individual's stressful commute and the utilization of FWA's will be dependent on how effective the FWA is at allowing the individual to avoid or alter their commute. Full-time telecommuting allows an individual to avoid a stressful commute completely, and should have the strongest relationship with FWA utilization. Part-time telecommuting and flextime give an individual the option to miss the commute on some days or change the times of their commute and should have a moderate strength relationship with a stressful commute. A compressed work schedule has the fewest opportunities to alter the commute, though the individual will still avoid the commute once every 2 weeks. For this reason, it will have the weakest relationship with a stressful commute. To summarize:

Hypothesis 2a: A stressful commute will be positively related to the likelihood of full-time telecommuting utilization (rank order prediction: 1)

Hypothesis 2b: A stressful commute will be positively related to the likelihood of part-time telecommuting utilization (rank order prediction: 2)

Hypothesis 2c: A stressful commute will be positively related to the likelihood of flextime utilization (rank order prediction: 3)

Hypothesis 2d: A stressful commute will be positively related to the likelihood of compressed work schedule utilization (rank order prediction: 4)

FWA unsupportive climate

Another factor that should influence whether employees utilize FWA's is whether or not they work in an organization with an FWA supportive climate. Organizational climate is the collective perception of organizational practices and policies by the people that work at the organization (Cooke & Rousseau, 1988). Although an organization might have a formal written policy regarding FWA use, it could be contradicted by the actual norms of the organization (Blair-Loy & Wharton, 2002).

Employees working in organizations with a formal FWA supportive policy could have a climate that is either reflective of that formal written policy or one that is not supportive of FWA use. The presence or absence of an FWA supportive climate would correspond to the normative beliefs employees holds regarding their decision to use an FWA (Ajzen, 2002). In cases where the organization has a formal policy supporting FWA use, the employee should have both perceived and actual behavioral control over the decision to use an FWA. Their actual intention would then be greatly impacted by the subjective norm of enrolling in an FWA. In situations where the organizational climate is unsupportive of using an FWA, employees should be less likely to enroll in a FWA. If an employee does decide to enroll in a program, he or she might be less likely to use a policy that reduces their visibility in the office (like telecommuting), because those types of policies are more obvious to coworkers (Kossek, Lautsch, & Eaton, 2006). For this reason, employees should be more likely to enroll in flextime policies than flexplace policies when working in an organization with a climate unsupportive to FWA's. When using either a flextime or compressed work schedule, employees would overlap with coworkers and their manager for the majority of the day, making it appear that they are not violating the subjective norm of not using FWA policies, even though the employee would be using flextime or a compressed work schedule. Flexplace policies require the employee to not be in the office one, or more, days per week making the utilization of these types of policies unlikely. For these reasons, the following hypotheses are proposed:

Hypothesis 3a: An unsupportive FWA climate will be negatively related to the likelihood of full-time telecommuting utilization (rank order prediction: 1)

Hypothesis 3b: An unsupportive FWA climate will be negatively related to the likelihood of part-time telecommuting utilization (rank order prediction: 2)

Hypothesis 3c: An unsupportive FWA climate will be negatively related to the likelihood of flextime utilization (rank order prediction: 3)

Hypothesis 3d: An unsupportive FWA climate will be negatively related to the likelihood of compressed work schedules utilization (rank order prediction: 4)

Interdependence of work tasks

Interdependence is the connectedness of team members required to complete a task (Wageman, 1995). The level of interdependence of a work team is on a continuum from completely independent work to an intensive form of interdependence where all team members must interact throughout the work process. For the purpose of this

proposal, I consider situations on the ends of this continuum. When discussing hypotheses regarding an interdependent situation, a highly intensive interdependence should be assumed. When discussing the contrary, a situation where employees work completely independently should be assumed.

When considering the impact of an interdependent work task on the likelihood of using different types of FWA's, one important factor to consider is the impact of the policy on the timing and coordination of the work. Interdependent work tasks require team members to continuously coordinate on how the work will be done (Marks, Mathieu, & Zaccaro, 2001). If an interdependent task is done successfully, team members will experience group cohesion which will increase a team member's satisfaction with the work team (Dobbins & Zaccaro, 1986). When there is an impediment to the timing of the interdependent work task (for example one team member is using a FWA), team members will experience less cohesion and, relatedly, experience dissatisfaction with the work task. Thus, to the extent that members wish to achieve cohesion and the like, employees who work on interdependent work task should be more likely to use FWA's that will not disrupt the timing of the work team. Employees who mostly on independent work tasks can choose any FWA without concern of disrupting other's work.

Employees who use a compressed work schedule or a flexible work schedule can plan their time in the office to coordinate with team members. Employees who are considering enrolling in a flextime FWA can thoughtfully plan their schedules so they can coordinate with their team on interdependent tasks and thus still feel satisfied with their job. Applying the theory of planned behavior to this rationale, employees would not be affecting their behavioral beliefs because their satisfaction with the task would not change if employees used the FWA or not. Furthermore, their normative beliefs would not change because they aren't impacting the work flow of any of their team members.

On the other hand, employees might be less likely to enroll in flexplace FWA policies because of the potential disruption to the team's work flow. Previous research has shown that geographically distributed work teams struggle to accomplish highly interdependent tasks and, generally, have problems with coordination (Malhotra & Majchrzak, 2014; Olson & Olson, 1999). For this reason, teams that have a teleworking member will not experience group cohesion as strongly as collocated teams, and therefore that team's members will not be as satisfied with the work experience. Considering the utilization of a telework arrangement through the lens of the theory of planned behavior, employees will probably not be as likely to use a telework arrangement when they have highly interdependent work tasks because they will be less satisfied with their work tasks, and thus have a more negative attitude toward the behavior. Additionally, an employee who uses a telework arrangement when they have these types of tasks could be impeding their team members, and thus have a more negative perception of the normative beliefs toward using a telework arrangement.

Based on the above rationale, I hypothesize the following relationships:

Hypothesis 4a: Highly interdependent work tasks will be negatively related to the likelihood of full-time telecommuting utilization (rank order prediction:1)

Hypothesis 4b: Highly interdependent work tasks will be negatively related to the likelihood of part-time telecommuting utilization (rank order prediction: 2)

Hypothesis 4c: Highly interdependent work tasks will be unrelated to the likelihood of flextime utilization (rank order prediction: t-3)

Hypothesis 4d: Highly interdependent work tasks will be unrelated related to the likelihood of compressed work schedule utilization (rank order prediction: t-3)

Quality positive social interactions at work

A final factor that should predict whether or not an individual will utilize particular flexible work arrangements is the quality of social interactions at work. Previous research has shown that social interactions predict job satisfaction, lower levels of stress and higher positive affective well-being (Chiaburu & Harrison, 2008; Lee, Dean, & Jung, 2008; Viswesvaran, Sanchez, & Fisher, 1999). Individuals with many social interaction opportunities at work are able to cope with stressors more effectively and experience less stress (Viswesvaran et al., 1999). Contributing to the increase in job satisfaction, social interaction at work reduces role ambiguity and role conflict (Chiaburu & Harrison, 2008). In summary, positive social interaction makes work a more satisfying and fulfilling experience.

By examining the presence of social interaction at work through the lens of the theory of planned behavior, we can hypothesize how social interactions will affect the FWA utilization. As previously mentioned, high quality positive social interaction makes work a more satisfying experience. When employees are away from the central work location (in a telework arrangement, for example), one of the most consistent effects is a negative relationship with social connectedness (Gajendran & Harrison, 2007; Golden, Viega, & Dino, 2008). As previously mentioned, when employees do not feel connected with coworkers, they get less fulfillment out of their job. Work environments with high levels of social interaction should negatively relate to the likelihood of using FWA's that require the employee to be away from the office, because the employee is losing interaction with others and all of the benefits that come with those interactions. Because FWA's that only alter the timing of work still require employees to be in the office the same number of hours as employees that use no FWA's, a workplace with high positive social interaction will be less likely to affect the decision of whether or not an employee will use these flextime policies. To state in formal hypotheses:

Hypothesis 5a: Frequent positive social interactions will be negatively related to the likelihood of full-time telecommuting utilization (rank order prediction: 1)

Hypothesis 5b: Frequent positive social interactions will be negatively related to the likelihood of part-time telecommuting utilization (rank order prediction: 2)

Hypothesis 5c: Frequent positive social interactions will be unrelated to the likelihood of flextime utilization (rank order prediction: t-3)

Hypothesis 5d: Frequent positive social interactions will be unrelated related to the likelihood of compressed work schedule utilization (rank order prediction: t-3)

In the next section of this proposal, I propose a method for testing the above hypotheses. Table 1 presents a summary of the hypotheses with the anticipated direction for the relationships.

Proposed Method

Because the hypotheses outlined in this study involve a participant's judgment of the favorability of flexible work arrangements based on the consideration of various work and life factors, a policy-capturing methodology will be utilized to test the hypotheses. When designing a policy-capturing study, several factors should be considered to maximize the effectiveness of the method. In the section below, I will present an overview of policy-capturing. After this, I will discuss issues that should be considered when designing a policy capturing study, along with how these issues will be dealt with in this study. Finally, the proposed method section will conclude with a discussion of a proposed analysis section, including a discussion of statistical power needed for policy-capturing studies.

Overview of policy-capturing studies

The general purpose of a policy-capturing study is to determine how people make decisions. To achieve this, participants are asked to evaluate how likely they would perform a particular behavior in different scenarios (Aiman-Smith, Scullen, & Barr, 2002; Karren & Barringer, 2002). The scenarios reflect different levels of predictors of interest. The evaluation is then used as the dependent variable in a process that is comparable to a regression that is run for each participant with the different factors included as dummy coded independent variables. In a very simplistic example, a researcher could be interested in the desirability of an ice cream sundae with two factors, flavor (chocolate and vanilla) and presence of nuts (yes or no). The design, if fully factorial, would then present all possible choices (vanilla without nuts, vanilla with nuts, chocolate without nuts, chocolate with nuts), and participants would rate the desirability of each scenario. The data then can be examined using multilevel analyses (e.g., a hierarchical linear model; HLM) to examine both within- and between-person predictors of this decision.

Considerations when designing a policy-capturing study

Aiman-Smith, Scullen, and Barr (2002) and Karren and Barringer (2002) outline several practical and theoretical considerations that need to be made when designing a policy-capturing study. In this section, I will discuss how this proposed method will address these issues (for a more in depth review of these issues, refer to the primary studies).

Number of levels per factor. One of the first decisions that needs to be made in the method of a policy-capturing study is the number of levels per factor being analyzed (Aiman-Smith, Scullen, & Barr, 2002). This decision should be based on the realistic representation of the factors in question, as well as previous research examining those factors. In the present investigation, all five of the factors examined will be operationalized as having two levels. This decision was made with the consideration of the participants' cognitive effort required in mind. Specifically, when participants are asked to make too many decisions, they may revert to a strategy that minimizes effort (i.e. "careless responding" Aiman-Smith, Scullen, & Barr, 2002). Because participants will be asked to respond to five unique dependent variables (four FWA's and one overall use of FWA item) for each scenario, even the increase of a single level for any predictor

would increase the total number of decisions a participant needs to make by 40. Based on this rationale, the decision was made to only include two levels of each variable for a total of $2^5=32$ unique scenarios, thus meeting the suggested requirement of having at least 5 scenarios per factor (Aiman-Smith, Scullen, & Barr, 2002; Karren & Barringer, 2002).

Design type. There are several different types of design that could be used in a policy-capturing study. The most popular and advantageous, from a statistical standpoint, is a fully-factorial design (Karen & Barringer, 2002). In this design type, all participants are asked to respond to every possible combination of factors. For example, if the study had five two-level factors, with a single question for a dependent variable, each participant would be asked to make ($2^5 \times 1 = 32$ decisions). This design type has several methodological strong points. First, it guarantees that each factor is statistically uncorrelated with all other factors (though each factor should also be uncorrelated in reality as well, which will be addressed at a later point in this section) (Karren & Barringer, 2002). This property of a full-factorial design allows the effect of each factor to be independently assessed. Second, a full-factorial design allows for the analysis of all interactions and higher order effects (Karen & Barringer, 2002). The primary drawback of using a full-factorial design is the potential for cognitive overload for participants (Karen & Barringer, 2002). To reduce participant cognitive effort, other experimental designs have been used to replicate the benefits of a full-factorial design, but have their own drawbacks (i.e. more participants are needed to match the power of a full-factorial design, possibility for non-orthogonal factors, etc).

Realism of scenarios. Another concern of policy-capturing studies is external validity (Karren & Barringer, 2002). This concern is particularly relevant for policy capturing studies because levels of two factors could be combined to create a scenario that is impossible or unbelievable in reality. For example, in a study examining the favorability of moose hunting locations, Boxall and colleagues (1996) had levels of factors that could be combined to create a hypothetical hunting location where more than four moose pass per day, with no other hunters around, which also has new paved roads passable by a regular car. The authors of this study deemed this to be an unbelievable scenario and thus eliminated it from consideration resulting in an unbalanced experimental design (i.e. not full-factorial). In order to examine the realism and appropriateness of the scenarios presented in this dissertation, a pilot study will be conducted to provide a quantitative indicator of realism (additional details follow).

Pilot study

A pilot study will be conducted to obtain a quantitative indicator of two metrics that are of importance to the effectiveness of the study. First, participants will be asked to rate whether each of the levels of factors represents high or low levels of that factor. This will ensure that the levels of each factor are indicative of high and low values on that factor and that each factor's high and low scenario are equally distant. Second, participants will be presented with all combinations of factors and asked to rate the realism of that scenario.

Participants. Because participants will need to be familiar with the demands of a workplace, participants will be recruited through Mturk with an incentive of between 50

cents and a dollar, depending on a preliminary investigation of data quality with lower incentives. The participants will be required to speak English and work at least 20 hours/week. Based on estimates from G*Power (ver 3.1.7), a sample size of 199 will be required to detect a small effect size for a paired t-test to determine the strength of the two-levels of each factor. Because the factors are going to be designed to represent two ends of a continuum, a medium or strong effect size is more likely, but assuming a small effect size will guarantee the pilot study has enough power. For this reason, approximately 200 participants will be recruited from Mturk.

Stimuli. All pilot study data will be collected via the website Qualtrics. After agreeing to the informed consent, participants will be presented items in two main sections. First, participants will be shown each statement indicating a high or low level of each of the five predictors (Appendix A presents proposed statements to be used in study). Participants will then be asked to rate how strong each statement reflects a high or low level of each factor. In the second part of the study, participants will be asked to rate the realism for each scenario (which is created from a combination of all possible levels of factors). Participants will be paid the amount specified above.

Proposed analysis. To analyze the data from the first section, a paired group t-test will be conducted comparing participants' responses on the relevant factor for the high and low level of that factor. Results should demonstrate that participants rate the high level, higher on the factor strength than the low level. For the realism of each scenario, participants should rate each scenario as higher than the midpoint of the scale (i.e. realistic or very realistic) at a rate of at least 80 percent, with fewer than 5 percent of the sample indicating the scenario as not realistic. If the scenario has been found to be not realistic, not strong enough, or too related to other factors the scenarios will be modified with a smaller pilot study to check their adequacy.

Primary Study

Participants. Because the analyses in a policy capturing study are run for each participant, the power in the analyses are determined by the number of scenarios in the study. In this study, there are 32 scenarios. Previous research has suggested a minimum threshold of 5 scenarios per factor (Cooksey, 1996), because this study has 5 factors, it meets this threshold with a ratio of 6.4 scenarios:1 factor. Compared to other types of analyses, the number of participants required for a policy capturing study is generally lower. For example, Karen and Barringer (2002) refer to a sample size of 93 as "large". Based on a review of the literature, and accounting for nonresponse and missing data, the sample will be composed of 250 participants.

The sample will be collected from Mturk with a participation incentive between 2 and 4 dollars based on a preliminary examination of data quality with lower incentives. The participants will be required to speak English and work at least 20 hours/week. Because of the uncertainty of who exactly is participating in research studies using Mturk, I will conduct a series of steps to ensure high data quality based on personal experience using mturk and previous research (Paolacci, Chandler, & Ipeirotis, 2010). First, the survey time will be tracked and response times outside of three standard deviations above or below the mean will be investigated with additional scrutiny for

aberrant responses. Second, all responses will be examined to eliminate obvious low effort response patterns (i.e. straight lining, Christmas treeing). Third, although speaking English and part-time working will be required as a precondition for participation, two questions will be asked confirming this status. Finally, a couple of questions will be included to make sure participants are paying attention (i.e. “please mark a “4” for this question). Participants that have not met these standards will be removed from the analysis.

Proposed Analysis. After ensuring realism and manipulation strength in the primary study, a policy capturing analysis will be conducted following the suggestions of Karen and Barringer (2002) and Aiman-Smith, Scullen, and Barr (2002). To analyze this type of data, a hierarchical linear model (HLM) will be used with the likelihood to use each FWA as the dependent variable. The responses will be grouped by participant, with the factors being within-person (i.e., level 1 variable) and any relevant inter-individual variables (such as demographics as control variables) as level 2 variables. The relative strength statements presented in each hypothesis will be analyzed by comparing the size of the gamma coefficient in an analysis with the other gamma coefficients for the other FWA’s. This comparison is possible because each of the factors and DV’s have the same range of possible values. Although this approach is far from perfect, it does allow for a more precise test of the hypotheses beyond being statistically significant in a positive or negative direction, something that management and workplace research should strive toward (Edwards & Berry, 2010).

References

- Aiman-Smith, L., Scullen, S. E., & Barr, S. H. (2002). Conducting studies of decision making in organizational contexts: A tutorial for policy-capturing and other regression-based techniques. *Organizational Research Methods*, 5, 388-414.
- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, 32, 665-683.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Process*, 50, 179-211.
- Allen, T. D., Johnson, R. C., Kiburz, K. M. & Shockley, K. M. (2012). Work-family conflict and flexible work arrangements: Deconstructing flexibility. *Personnel Psychology*, 66, 345-376. doi: 10.1111/peps.12012
- Allenby, B. R., & Richards, D. J. (1999). Applying the triple bottom line: Telework and the environment. *Environmental Quality Management*, 8, 3-10.
- Almer, E. D., Cohen, J. R., & Single, L. E. (2003). Factors affecting the choice to participate in flexible work arrangements. *Auditing: A journal of practice and theory*, 22, 1-23.
- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *The British Journal of Social Psychology*, 40, 471-499.
- Baltes, B.B., Briggs, T. E., Huff, J. W., Wright, J.A., & Neuman, G.A. (1999). Flexible and compressed workweek schedules: A meta-analysis of their effects on work-related criteria. *Journal of Applied Psychology*, 84, 496-513.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37, 122-147.
- Blair-Loy, M. & Warton, A. S. (2002). Employees' use of work-family policies and the workplace social context. *Social Forces*, 80, 813-845.
- Boxall, P. C., Adamowicz, W. L., Swait, J., Williams, M., & Louviere, J. (1996). A comparison of stated preference methods for environmental valuation. *Ecological Economics* (18), 243-253.
- Butts, M. M., Casper, W. J., & Yang, T. S. (2013). How important are work-family support policies?: A meta-analytic investigation of their effects on employee outcomes. *Journal of Applied Psychology*, 98, 1-25.
- Chiaburu, D. S. & Harrison, D. A. (2008). Do peers make the place?: Conceptual synthesis and meta-analysis of coworker effects on perceptions, attitudes, OCBs, and Performance. *Journal of Applied Psychology*, 93, 1082-1103.
- Cooksey, R. (1996). *Judgement analysis: Theory, methods, and applications*. San Diego, CA: Academic Press.
- Cooke, R. A., & Rousseau, D. M. (1988). Behavioral norms and expectations: A quantitative approach to the assessment of organizational culture. *Group and Organization Studies*, 13, 245-273.
- Dobbins, G. H., & Zaccaro, S. J. (1986). The effects of group cohesion and leader behavior on subordinate satisfaction. *Group and Organization Studies*, 11, 203-219.
- Dunham, R. B., Pierce, J. L., & Castaneda, M. B. (1987). Alternative work schedules: Two field quasi-experiments. *Personnel Psychology*, 40, 215-242.

- Edwards, J. R., & Berry, J. W. (2010). The presence of something or the absence of nothing: Increasing theoretical precision in management research. *Organizational Research Methods, 13*, 668-689.
- Fishbein, M., & Ajzen, I., (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Florida, R. (2011, July 13). The geography of how we get to work. *The Atlantic*. Retrieved from <http://www.theatlantic.com/national/archive/2011/07/the-geography-of-how-we-get-to-work/240258/>
- Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology, 92*, 1524-1541. doi: 10.1037/0021-9010.92.6.1524
- Golden, T.D., & Veiga, J.F. (2005). The impact of extent of telecommuting on job satisfaction: Resolving inconsistent findings. *Journal of Management, 31*, 301-318. doi: 10.1177/0149206304271768
- Golden, T. D., Veiga, J. F., & Dino, R. N. (2008). The impact of professional isolation on teleworker job performance and turnover intentions: Does time spent teleworking, interacting face-to-face, or having access to communication-enhancing technology matter? *Journal of Applied Psychology, 93*, 1412-1421. doi: 10.1037/a0012722
- Golden, T. D., Veiga, J. F., & Simsek, Z. (2006). Telecommuting's differential impact on work-family conflict: Is there no place like home? *Journal of Applied Psychology, 91*, 1340-1350. doi: 10.1037/0021-9010.91.6.1340
- Grover, S. L. & Crooker, K. J. (1995). Who appreciates family-responsive human resource policies: The impact of family-friendly policies on the organizational attachment of parents and non-parents. *Personnel Psychology, 48*, 271-288.
- Haidt, J. (2006). *The happiness hypothesis: Finding modern truth in ancient wisdom*. New York, NY: Basic Books.
- Henderson, D. & Mokhtarian, P. (1996). Impacts of center-based telecommuting on travel and emissions: Analysis of the Puget Sound demonstration project. *Transportation Research D, 1*, 29-45.
- Hennessy, D. A., & Jakubowski, R. (2008). The impact of stressful commuting on subsequent performance during low versus high congestion. In A. M. Columbus (Ed.), *Advances in Psychology Research, Vol. 54* (pp. 263-277). New York, NY: Nova Science Publishers.
- Hennessy, D. W., Wiesenthal, D. L., & Kohn, P. M. (2000). The influence of traffic congestion, daily hassles, and trait stress susceptibility on state driver stress: An interactive perspective. *Journal of Applied Behavioral Research, 5*, 162-179.
- Hennessy, D. A., & Wiesenthal, D. L. (1999). Traffic congestion, driver stress, and driver aggression. *Aggressive Behavior, 25*, 409-423.
- Hennessy, D. A., & Wiesenthal, D. L. (1997). The relationship between traffic congestion, driver stress, and direct versus indirect coping behaviours. *Ergonomics, 40*, 348-361.

- Hunnicutt, B. K. (1996). *Kellogg's six-hour day*. Philadelphia, PA: Temple University Press.
- Judge, T. A., & Ilies, R. (2004). Affect and job satisfaction: A study of their relationship at work and at home. *Journal of Applied Psychology*, 89, 661-673.
- Karren, R. J., & Barringer, M. W. (2002). A review and analysis of the policy-capturing methodology in organizational research: Guidelines for research and practice. *Organizational Research Methods*, 5, 337-361. doi: 10.1177/109442802237115
- Konrad, A. M., & Yang, Y. (2012). Is using work-life interface benefits a career-limiting move? An examination of women, men, lone parents, and parents with partners. *Journal of Organizational Behavior*, 33, 1095-1119.
- 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., & Michel, J. S. (2011). Flexible work arrangements. In S. Zedeck (Ed.), *APA Handbook of Industrial and Organizational Psychology*. Vol. 1, Washington, DC: American Psychological Association.
- Lee, R. M., Dean, B. L., & Jung, K.-R. (2008). Social connectedness, extraversion, and subjective well-being: Testing a mediation model. *Personality and Individual Differences*, 45, 414-419.
- Lofquist, D., Lugaila, T., O'Connell, M., & Feliz, S. (2012). Households and families: 2010. Retrieved from <http://www.census.gov/prod/cen2010/briefs/c2010br-14.pdf>
- Lucas, J. L., & Heady, R. B. (2002). Flextime commuters and their driver stress, feelings of time urgency, and commute satisfaction. *Journal of Business and Psychology*, 16, 565-571.
- Malhotra, A., & Majchrzak, A. (In press). Predicting performance of geographically distant teams based on electronic dependence. *Human Relations*, online first.
- McGuire, J. F., Kenney, K., & Brashler, P. (2010). Flexible work arrangements: The fact sheet. *Memos and fact sheets*, 13. Retrieved from <http://scholarship.law.georgetown.edu/legal/13>
- Marks, M. A., Mathieu, J. E., & Zaccaro, S. J. (2001). A temporally based framework and taxonomy of team processes. *Academy of management review*, 26, 356-376.
- Morganson, V. J., Major, D. A., Oborn, K. L., Verive, J. M., & Heelan, M. P. (2010). Comparing telework locations and traditional work arrangements: Differences in work-life balance support, job satisfaction, and inclusion. *Journal of Managerial Psychology*, 25, 578-595. doi: 10.1108/02683941011056941
- Noonan, M.C., & Glass, J.L. (2012). The hard truth about telecommuting. *Monthly Labor Review*, 135, 38-45.
- Nosek, Graham, Lindner, Kesebir, Hawkins, Hahn, Schmidt, Joy-Gaba, Frazier, & Tenney, (2010).
- Offer, S., & Schneider, B. (2011). Revisiting the gender gap in time-use patterns: Multitasking and well-being among mothers and fathers in dual-earner families. *American Sociological Review*, 76, 809-833. doi: 10.1177/0003122411425170

- Olson, G. M., & Olson, J. S. (1999). Distance matters. *Human-Computer Interaction*, 15, 139-178.
- Paolacci, G., Chandler, J., & Ipeirotis, P. G. (2010). Running experiments on Amazon mechanical turk. *Judgment and Decision Making*, 5, 411-419.
- Pierce, J. L., Newstrom, J. W., Dunham, R. B., & Barber, A. E. (1989). *Alternative work schedules*. Needham Heights, MA: Allyn & Bacon.
- Shin, B., El Sawy, O. A., Sheng, O. R. L. & Higa, K. (2000). Telework: Existing research and future directions. *Journal of Organizational Computing and Electronic Commerce*, 10, 85-101. doi: 10.1207/S15327744JOCE1002 2
- Shockley, K. M., & Allen, T. D. (2012). Motives for flexible work arrangement use. *Community, Work, & Family*, 15, 217-231. doi: 10.1080/13668803.2011.609661
- Shockley, K. M., & Allen, T. D. (2010). Investigating the missing link in flexible work arrangement utilization: An individual difference perspective. *Journal of Vocational Behavior*, 76, 131-142.
- Shockley, K. M., & Allen, T. D. (2007). When flexibility helps: Another look at the availability of flexible work arrangements and work-family conflict. *Journal of Vocational Behavior*, 71, 479-493.
- Society for Human Resource Management, (2011). SHRM research spotlight: Flexible work arrangements. Retrieved from www.shrm.org/research
- Society for Human Resource Management. (2008). Workplace flexibility in the 21st century: Meeting the needs of the changing workforce. Retrieved from http://www.shrm.org/research/surveyfindings/articles/documents/09-0464_workplace_flexibility_survey_report_inside_finalonline.pdf
- Viswesvaran, C., Sanchez, J. I., & Fisher, J. (1999). The role of social support in the process of work stress: A meta-analysis. *Journal of Vocational Behavior*, 54, 314-334.
- Wageman, R. (1995). Interdependence and group effectiveness. *Administrative Science Quarterly*, 40, 145-180.
- World at work. (2011). *Telework 2011: A world at work special report*. Retrieved from <http://www.worldatwork.org/waw/adimLink?id=53034>
- Yeung, W. J., Sandberg, J. F., Davis-Kean, P. E. & Hofferth, S. L. (2011). Children's time with fathers in intact families. *Journal of Marriage and Family*, 63, 136-154.

REFERENCES

- Aiman-Smith, L., Scullen, S. E., & Barr, S. H. (2002). Conducting studies of decision making in organizational contexts: A tutorial for policy-capturing and other regression-based techniques. *Organizational Research Methods*, 5, 388-414.
- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, 32, 665-683.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Process*, 50, 179-211.
- Allen, J. A., Hays, R. T., & Buffardi, L. C. (1986). Maintenance training simulator fidelity and individual differences in transfer of training. *Human Factors*, 28, 497-509.
- Allen, T. D., Johnson, R. C., Kiburz, K. M. & Shockley, K. M. (2012). Work-family conflict and flexible work arrangements: Deconstructing flexibility. *Personnel Psychology*, 66, 345-376. doi: 10.1111/peps.12012
- Allenby, B. R., & Richards, D. J. (1999). Applying the triple bottom line: Telework and the environment. *Environmental Quality Management*, 8, 3-10.
- Almer, E. D., Cohen, J. R., & Single, L. E. (2003). Factors affecting the choice to participate in flexible work arrangements. *Auditing: A journal of practice and theory*, 22, 1-23.
- Anderson, A. J., Kaplan, S. A., & Vega, R. P. (2015). The impact of telework on emotional experience: When, and for whom, does telework improve daily affective well-being? *European Journal of Work and Organizational Psychology*. Advance online publication. doi: 10.1080/1359432X.2014.966086
- Baltes, B.B., Briggs, T. E., Huff, J. W., Wright, J.A., & Neuman, G.A. (1999). Flexible and compressed workweek schedules: A meta-analysis of their effects on work-related criteria. *Journal of Applied Psychology*, 84, 496-513.

- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37, 122-147.
- Burke, L. A., & Hutchinson, H. M. (2007). Training transfer: An integrative review. *Human Resource Development Review*, 6, 263-296. doi: 10.1177/1534484307303035
- Butts, M. M., Casper, W. J., & Yang, T. S. (2013). How important are work-family support policies?: A meta-analytic investigation of their effects on employee outcomes. *Journal of Applied Psychology*, 98, 1-25.
- Chiaburu, D. S. & Harrison, D. A. (2008). Do peers make the place?: Conceptual synthesis and meta-analysis of coworker effects on perceptions, attitudes, OCBs, and Performance. *Journal of Applied Psychology*, 93, 1082-1103.
- Cooksey, R. (1996). *Judgement analysis: Theory, methods, and applications*. San Diego, CA: Academic Press.
- Cortina, J. M., & Folger, R. G. (1998). When is it acceptable to accept a null hypothesis: No way, Jose? *Organizational Research Methods*, 1, 334-350. doi: 10.1177/109442819813004
- Dobbins, G. H., & Zaccaro, S. J. (1986). The effects of group cohesion and leader behavior on subordinate satisfaction. *Group and Organization Studies*, 11, 203-219. doi: 10.1177/105960118601100305
- Dunham, R. B., Pierce, J. L., & Castaneda, M. B. (1987). Alternative work schedules: Two field quasi-experiments. *Personnel Psychology*, 40, 215-242.
- Egley, R., Driver, J., & Rafal, R. D. (1994). Shifting visual attention between objects and locations: Evidence from normal and parietal lesion subjects. *Journal of Experimental Psychology: General*, 123, 161-177.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71, 500-507.
- Fishbein, M., & Ajzen, I., (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology*, 92, 1524-1541. doi: 10.1037/0021-9010.92.6.1524

- Gerrig, R., & Zimbardo, P. G. (2002). *Psychology and Life* (16th ed.). Boston: Allyn & Bacon.
- Golden, T.D., & Veiga, J.F. (2005). The impact of extent of telecommuting on job satisfaction: Resolving inconsistent findings. *Journal of Management*, 31, 301-318. doi: 10.1177/0149206304271768
- Golden, T. D., Veiga, J. F., & Dino, R. N. (2008). The impact of professional isolation on teleworker job performance and turnover intentions: Does time spent teleworking, interacting face-to-face, or having access to communication-enhancing technology matter? *Journal of Applied Psychology*, 93, 1412-1421. doi: 10.1037/a0012722
- Golden, T. D., Veiga, J. F., & Simsek, Z. (2006). Telecommuting's differential impact on work-family conflict: Is there no place like home? *Journal of Applied Psychology*, 91, 1340-1350. doi: 10.1037/0021-9010.91.6.1340
- Grover, S. L. & Crooker, K. J. (1995). Who appreciates family-responsive human resource policies: The impact of family-friendly policies on the organizational attachment of parents and non-parents. *Personnel Psychology*, 48, 271-288.
- Haidt, J. (2006). *The happiness hypothesis: Finding modern truth in ancient wisdom*. New York, NY: Basic Books.
- Henderson, D. & Mokhtarian, P. (1996). Impacts of center-based telecommuting on travel and emissions: Analysis of the Puget Sound demonstration project. *Transportation Research D*, 1, 29-45.
- Hennessy, D. A., & Wiesensthal, D. L. (1997). The relationship between traffic congestion, driver stress, and direct versus indirect coping behaviours. *Ergonomics*, 40, 348-361.
- Hoeffler, S., & Ariely, D. (1999). Constructing stable preferences: A look into dimensions of experience and their impact on preference stability. *Journal of Consumer Psychology*, 8, 113-139.
- Hunnicut, B. K. (1996). *Kellogg's six-hour day*. Philadelphia, PA: Temple University Press.
- Judge, T. A., & Ilies, R. (2004). Affect and job satisfaction: A study of their relationship at work and at home. *Journal of Applied Psychology*, 89, 661-673.

- Kahneman, D., & Krueger, A. B. (2006). Developments in the measurement of subjective well-being. *Journal of Economic Perspectives*, 20, 3-24. doi: 10.1257/089533006776526030
- Karren, R. J., & Barringer, M. W. (2002). A review and analysis of the policy-capturing methodology in organizational research: Guidelines for research and practice. *Organizational Research Methods*, 5, 337-361. doi: 10.1177/109442802237115
- Konrad, A. M., & Yang, Y. (2012). Is using work-life interface benefits a career-limiting move? An examination of women, men, lone parents, and parents with partners. *Journal of Organizational Behavior*, 33, 1095-1119.
- 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., & Michel, J. S. (2011). Flexible work arrangements. In S. Zedeck (Ed.), *APA Handbook of Industrial and Organizational Psychology*. Vol. 1, Washington, DC: American Psychological Association.
- Landis, R. S., James, L. R., Lance, C. E., Pierce, C. A., & Rogelberg, S. G. (2014). When is nothing something? Editorial for the null results special issue of *Journal of Business and Psychology*. *Journal of Business and Psychology*, 29, 163-167. doi: 10.1007/s10869-014-9347-8
- Lewis, S. (2003). Flexible work arrangements: Implementation, outcomes, and management. In C. L. Cooper & I. T. Robertson (Eds.), *International Review of Industrial and Organizational Psychology 2003 Volume 18* (pp. 1-28). New York: Wiley.
- Lofquist, D., Lugaila, T., O'Connell, M., & Feliz, S. (2012). Households and families: 2010. Retrieved from <http://www.census.gov/prod/cen2010/briefs/c2010br-14.pdf>
- Lovibond, S. H., & Lovibond, P. F. (1995). *Manual for the Depression Anxiety Stress Scales*. Sydney: Psychology Foundation.
- Lucas, J. L., & Heady, R. B. (2002). Flextime commuters and their driver stress, feelings of time urgency, and commute satisfaction. *Journal of Business and Psychology*, 16, 565-571.
- Malhotra, A., & Majchrzak, A. (In press). Predicting performance of geographically distant teams based on electronic dependence. *Human Relations*, online first.

- Mathieu, J. E., Aguinis, H., Culpepper, S. A., & Chen, G. (2012). Understanding and estimating the power to detect cross-level interaction effects in multilevel modeling. *Journal of Applied Psychology*, 97, 951-966. doi: 10.1037/a0028380
- McGuire, J. F., Kenney, K., & Brashler, P. (2010). Flexible work arrangements: The fact sheet. *Memos and fact sheets*, 13. Retrieved from <http://scholarship.law.georgetown.edu/legal/13>
- Marks, M. A., Mathieu, J. E., & Zaccaro, S. J. (2001). A temporally based framework and taxonomy of team processes. *Academy of management review*, 26, 356-376.
- Morganson, V. J., Major, D. A., Oborn, K. L., Verive, J. M., & Heelan, M. P. (2010). Comparing telework locations and traditional work arrangements: Differences in work-life balance support, job satisfaction, and inclusion. *Journal of Managerial Psychology*, 25, 578-595. doi: 10.1108/02683941011056941
- Nielsen, I. K., Jex, S. M., & Adams, G. A. (2000). Development and validation of scores on a two-dimensional workplace friendship scale. *Educational and Psychological Measurement*, 60, 628-643. doi: 10.1177/00131640021970655
- Noonan, M.C., & Glass, J.L. (2012). The hard truth about telecommuting. *Monthly Labor Review*, 135, 38-45.
- Offer, S., & Schneider, B. (2011). Revisiting the gender gap in time-use patterns: Multitasking and well-being among mothers and fathers in dual-earner families. *American Sociological Review*, 76, 809-833. doi: 10.1177/0003122411425170
- Olson, G. M., & Olson, J. S. (1999). Distance matters. *Human-Computer Interaction*, 15, 139-178.
- Paolacci, G., Chandler, J., & Ipeirotis, P. G. (2010). Running experiments on Amazon mechanical turk. *Judgment and Decision Making*, 5, 411-419.
- Pearce, J. L., & Gregersen, H. B. (1991). Task interdependence and extrarole behavior: A test of the mediating effects of felt responsibility. *Journal of Applied Psychology*, 76, 838-844.
- Pierce, J. L., Newstrom, J. W., Dunham, R. B., & Barber, A. E. (1989). *Alternative work schedules*. Needham Heights, MA: Allyn & Bacon.
- Powell, G. N., & Mainiero, L. A. (1999). Managerial decision making regarding alternative work arrangements. *Journal of Occupational and Organizational Psychology*, 72, 41-56.

- Rao, V. R. (2014). *Applied conjoint analysis* (1st ed.). Berlin: Springer.
- Rensink, R. A. (2002). Change detection. *Annual Review of Psychology*, 53, 245-277.
- Schwarz, N., Kahneman, D., & Xu, J. (2009). Global and episodic reports of hedonic experience. In R. Belli, D. Alwin, & F. Stafford (Eds.), *Using Calendar and Diary Methods in Life Events Research* (pp. 157-174). Newbury Park, CA: Sage.
- Shin, B., El Sawy, O. A., Sheng, O. R. L. & Higa, K. (2000). Telework: Existing research and future directions. *Journal of Organizational Computing and Electronic Commerce*, 10, 85-101. doi: 10.1207/S15327744JOCE1002 2
- Shockley, K. M., & Allen, T. D. (2010). Investigating the missing link in flexible work arrangement utilization: An individual difference perspective. *Journal of Vocational Behavior*, 76, 131-142.
- Shockley, K. M., & Allen, T. D. (2007). When flexibility helps: Another look at the availability of flexible work arrangements and work-family conflict. *Journal of Vocational Behavior*, 71, 479-493.
- Society for Human Resource Management, (2011). SHRM research spotlight: Flexible work arrangements. Retrieved from www.shrm.org/research
- Society for Human Resource Management. (2008). Workplace flexibility in the 21st century: Meeting the needs of the changing workforce. Retrieved from http://www.shrm.org/research/surveyfindings/articles/documents/09-0464_workplace_flexibility_survey_report_inside_finalonline.pdf
- 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, 6-15.
- Thorndike, E. L., & Woodworth, R. S. (1901). The influence of improvement in one mental function upon the efficiency of other functions. *Psychological Review*, 8, 247-261.
- Vega, R. P., Anderson, A. J., & Kaplan, S. A. (2015). A within-person examination of the effects of telework. *Journal of Business and Psychology*. Advance online publication. doi: 10.107/s10869-014-9359-4

- Viswesvaran, C., Sanchez, J. I., & Fisher, J. (1999). The role of social support in the process of work stress: A meta-analysis. *Journal of Vocational Behavior*, 54, 314-334.
- Wageman, R. (1995). Interdependence and group effectiveness. *Administrative Science Quarterly*, 40, 145-180.
- Wener, R. E., Evans, G. W., Phillips, D., & Nadler, N. (2003). Running for the 7:45: The effects of public transit improvements on commuter stress. *Transportation*, 30, 203-220.
- Wiberg, M., & Sundstrom, A. (2009). A comparison of two approaches to correction of restriction of range in correlation analysis. *Practical Assessment Research & Evaluation*, 14, 1-9.
- Wilson, T. D., Kraft, D., & Dunn, D. S. (1989). The disruptive effects of explaining attitudes: The moderating effect of knowledge about the attitude object. *Journal of Experimental Social Psychology*, 25, 379-400.
- World at work. (2011). *Telework 2011: A world at work special report*. Retrieved from <http://www.worldatwork.org/waw/adimLink?id=53034>
- Yeung, W. J., Sandberg, J. F., Davis-Kean, P. E. & Hofferth, S. L. (2011). Children's time with fathers in intact families. *Journal of Marriage and Family*, 63, 136-154.

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