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Marvin Bontrager

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# AN EXAMINATION OF THE INFLUENCES OF ORGANIZATIONAL, SUPERVISOR, AND COWORKER SUPPORT ON THE RELATIONSHIP BETWEEN FLEXIBLE WORK ARRANGEMENTS AND TURNOVER INTENTION OF CIVILIAN FEDERAL EMPLOYEES

by

### MARVIN BONTRAGER

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy

Department of Human Resource Development and Technology

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College of Business and Technology

The University of Texas at Tyler May 2018

## The University of Texas at Tyler Tyler, Texas

This is to certify that the Doctoral Dissertation of

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### **Abstract**

AN EXAMINATION OF THE INFLUENCES OF ORGANIZATIONAL, SUPERVISOR, AND COWORKER SUPPORT ON THE RELATIONSHIP BETWEEN FLEXIBLE WORK ARRANGEMENTS AND TURNOVER INTENTION OF CIVILIAN FEDERAL EMPLOYEES

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The University of Texas at Tyler May 2018

Technological advancements and a rapidly changing workforce have created the need for researchers and practitioners to continually examine how work is designed, managed, and accomplished. As increased work demands have blurred the lines between work and family domains, stressors can create conflict between these environments.

Flexible work arrangements (FWAs) represent one of the work-family benefit programs offered by employers to alleviate work-family conflict and provide flexibility to workers.

This study examined the relationships between multiple support measures (organizational, supervisor, and coworker) and turnover intention in the context of FWAs. The study's hypotheses predicted negative relationships between the support measures and turnover intention with positive relationships between individual support measures. Responding to the call of researchers to consider multiple support levels in future research (e.g., Abendroth & den Dulk, 2011; Allen, 2001; Ng & Sorensen, 2008), distinct sources of support were considered in a single study design.

A survey of 1,172 respondents found statistically significant relationships between the study's constructs. The findings suggest that the culture and support systems

that exist within the organization influence employee outcomes such as turnover intention. Organizations that desire to achieve a dynamic work environment recognize the importance of providing the resources necessary to reduce employee turnover and enhance the work experience. The implications for research, practice, and organizations are discussed, including pathways for future research.

### **Chapter 1: Introduction**

### **Background to the Problem**

Many organizations competing in an expanding global economy seek to adapt to changes in how work is designed and accomplished. Work design methods have evolved significantly over time from initial conceptualizations by organizational forerunners.

Adam Smith (1776) introduced the division of labor as a means to simplify tasks and Frederick Taylor (1911) advocated for scientific management approaches to engineer work processes. Over the last several decades, rapid technological advancements have provided opportunities for workers to fulfill job requirements outside of the traditional physical work location. Subsequently, these technological changes have allowed tasks to be completed at off-site locations that include the home environment. As market competition requires that organizations become more efficient, increasingly demanding workloads are often put on employees.

Workers in the United States now work more hours in comparison to other wealthy countries (Hamermesh & Stancanelli, 2015). The United States ranks highest among the G7 countries (United States, Canada, France, Germany, Italy, Japan, and the United Kingdom) for hours worked (OECD, 2015). Increasing demands on employees have led to concerns about how work design should be approached in the future as organizations operate in a global competitive marketplace. Human resource development (HRD) practitioners face challenging expectations as more is being asked of workers and motivational resources may be in shorter supply. However, work design changes are not

limited to the number of hours worked. Other significant changes in recent years have affected how work is accomplished.

Social and demographic changes have led to an increasing number of women in the workforce and dual-earners who reside in the same household (Kinnunen, Geurts, & Mauno, 2004). The phenomenon of both parents working now makes up more than half of married couples with children (U.S. Department of Labor, 2012). The gender composition of the current workforce has changed dramatically during the last several decades. In 1970, women's representation in the labor force was 38.0%; the number of women in the workforce increased to 47.2% by 2010 (U.S. Census Bureau, 2012). The growing number of single parents, dual-earner couples, co-parenting individuals, and caregivers has created dramatic shifts in how time and energy are allocated between the work and family domains (Sok, Blomme, & Tromp, 2014).

In dual-career households, the demands of two careers can generate conflict, stress, and overload that are compounded when children or other family responsibilities are involved (Elloy & Smith, 2003). Researchers found that a higher number of children at home increases the amount of work-family conflict (Hammer, Allen, & Grigsby, 1997; Premeaux, Adkins, & Mossholder, 2007) or lowers family satisfaction (Beutell & Wittig-Berman, 1999). Consequently, these changing family dynamics are an important consideration related to work-family policies in the organization. Employers concerned about the job satisfaction of their employees seek to provide opportunities to enrich the workplace experience (Nicklin & McNall, 2013). As changes in technology and logistical capabilities increase, the work design options available to employers increase as well.

Technological changes enable individuals to complete tasks outside of the physical workplace, often in the home environment. As a result, the lines between work and family domains are increasingly blurred. Border theory was introduced by Clark (2000) to argue that the connection between the work and family domains is human, not emotional. As a result, people who make daily transitions between the two domains are referred to as border crossers. In many ways, technology has brought the work and family domains closer such that individuals participating in FWAs may cross borders multiple times each day. These types of changes have directly impacted the family domain and how workers respond to the combination of work and family roles (Clark, 2000).

The challenge of balancing competing work and family responsibilities can create sources of stress in households. The resulting stressors may impact how individuals accomplish tasks while meeting the demands of both their work and family lives (Greenhaus & Parasuraman, 1987). Conflict between work and family roles may ensue as competing priorities in the work and family domains are realized (Carlson, Kacmar, & Williams, 2000). Furthermore, each domain can interfere the other in an unequal manner (Pleck, 1977). As the professional and personal roles become more intertwined, workfamily conflict (WFC) can arise. WFC has been defined as "a form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect" (Greenhaus & Beutell, 1985, p. 77). Scholars and practitioners who are concerned with WFC have advocated for changes in the workplace social structure to enact meaningful changes (Kelly et al., 2014).

Many employers are offering policies and programs to assist employees in balancing work and family responsibilities in response to these changing dynamics (Blair-Loy & Wharton, 2004). The prevalence of flexible work arrangements (FWAs) has dramatically increased in recent years (Leslie, Park, & Mehng, 2012). FWAs represent one of the work-family benefit programs utilized by organizations to alleviate WFC and provide flexibility to workers (Brough, O'Driscoll, & Kalliath, 2005). However, adoption of these programs can be difficult if perceived usability is low or if employees fear reprisals for participating (Hayman, 2009). Human resource development (HRD) practitioners face challenges when attempting to implement these programs if the leadership, culture, and management of the organization are not supportive of these efforts. How work is structured and accomplished in the workplace is an important consideration for researchers (Hill, Ferris, & Martinson, 2003). Organizational leaders who seek to create a dynamic work environment recognize the importance of providing the resources and support necessary to increase participation in these programs. Employees may be hesitant to participate in FWAs if they do not feel supported within the organization.

Although FWAs are attractive to many workers, the availability of those arrangements has not kept up with the demand. In part, barriers still exist that can thwart the implementation of FWAs in organizations. Logistical limitations may exist for some organizations as technological capabilities are not always available to implement FWAs. One of the major barriers to FWAs is related to support throughout the organization. Although organizations may develop formal policies recognizing the need for FWAs, a

lack of support to promote those efforts can undermine the very existence of the program (Kirby & Krone, 2002).

Organizations face the challenge of operating efficiently while investing needed resources into work-family benefit programs to alleviate WFC. However, Grover and Crooker (1995) noted that work-family benefits are of no value if there is no organizational or supervisor support for those policies. Many employees do not participate in work-family programs because they do not receive supervisor support to do so (Shellenbarger, 1992). Formal work-family policies may not be enough; social support may provide the resources needed to alleviate WFC (Premeaux et al., 2007). Such support can originate from different sources within the organization (Kossek, Pichler, Bodner, & Hammer, 2011).

An organization may formally support FWAs even while management is opposed to those efforts (Powell & Mainiero, 1999). Conversely, managers may support FWAs while the organization may not support the use of the program. In addition, coworkers may create resistance to peers who choose to participate in FWAs. A lack of employee participation in work-family programs such as FWAs should be of concern to researchers and practitioners. Distinct measures of support in the organization should be examined to identify potential opportunities for improvement in the adoption of these programs (Allen, 2001). The relationships between FWAs and other organizational factors are important to consider as companies seek ways to attract and retain a quality workforce.

High turnover rates can impact performance of the firm (Glebbeek & Bax, 2004). For most organizations, turnover impacts the bottom line (Flint, Haley, & McNally, 2013). Although there are no profit and loss statements that capture the cost of turnover,

costs are buried in areas such as recruitment, selection, training, implicit knowledge, and service (Holtom, Mitchell, Lee, & Eberly, 2008). Although the financial implications related to turnover are difficult to quantify, these costs can be significant to firms.

Researchers have found that FWAs are negatively related to turnover intentions (Allen, 2001; McNall, Masuda, & Nicklin, 2010).

The United States federal government has emerged as a leading organization among industries for implementation on a large scale (Mastracci, 2013). However, the broad expansion of FWAs has encountered challenges among U.S. federal civilian employees. According to the 2015 Federal Employee Viewpoint Survey (FEVS) issued by the U.S. Office of Personnel Management (U.S. OPM), nearly 20% of employees who did not telework indicated that they did not receive the approval to do so (U.S. OPM, 2016). The results from the FEVS included management resistance as one of the main challenges remaining to ensure continued success of the program. A study of this specific population is relevant to this research phenomenon to identify barriers and shortcomings in the current literature. Furthermore, the large amount of data available from federal employees provides opportunities for conclusions to be generalized to broader populations or industries.

This study is relevant as ongoing technological advancements have made the phenomenon of FWAs especially salient to HRD researchers. New workplace contexts and changing work environments necessitate further exploration of FWAs and the extent to which these programs may achieve desired outcomes. The proposed study will also be relevant to work-family research as changing dynamics continue to take place in

organizations on an increasing scale. These areas are of specific concern to HRD practitioners as they can directly impact organizational performance and financial results.

### **Statement of the Problem**

Existing research on work-life balance has mainly focused on predictors and consequences of WFC (Abendroth & den Dulk, 2011). Prior theory and research have devoted little attention to the context in which family-supportive supervision support is provided (Greenhaus, Ziegert, & Allen, 2012). Despite the growing importance of understanding workplace social support linkages to WFC, researchers have yet to clarify whether supervisor or organizational support is most strongly related to WFC (Kossek, Pichler, Bodner, & Hammer, 2011).

Multiple studies alluding to the role of support in work-life balance research have been conducted (e.g., Carlson & Perrewe, 1999; Cegarra-Leiva, Sanchez-Vidal, & Cegarra-Navarro, 2012; Roxburgh, 1999; Van Daalen, Willemsen, & Sanders, 2006; Warren & Johnson, 1995). However, researchers have generally focused on one aspect of support at a time (Abendroth & den Dulk, 2011). Although support at work has received significant research attention, various sources of support have rarely been examined simultaneously in studies (Ng & Sorensen, 2008). These shortcomings in the literature necessitate a more comprehensive approach to evaluating support at multiple levels.

Allen (2001) suggested that because employees may perceive their supervisor to be supportive while their organization is not, or vice versa, organizational and supervisor support should be disentangled from each other in future research. Furthermore,

organizational support perceptions should be viewed in a separate context from managerial support as suggested by Martin and MacDonnell (2012). Middle management and HRD practitioners may not be given the authority or resources to make decisions around implementation of FWAs without the support of the organization.

Although previous research has considered organizational, supervisor, and coworker support related to WFC (e.g., Michel, Kotrba, Mitchelson, Clark, & Baltes, 2011), few studies on support and work-life balance exists that consider resources at different levels in a single design (Abendroth & den Dulk, 2011). Poelmans and Beham (2008) noted a lack of research examining employee responses to managerial work-life allowance decisions and how relationships with co-workers and supervisors are affected by these decisions. As a result, multiple levels of support related to FWAs including coworker support and impact on turnover intention at the organization have not been explored in the current literature.

Separate support variables of organizational, coworker, and supervisor support were included in a study related to work-family benefits, including employees' use of FWAs (Dikkers et al., 2007). The purpose of their study was to introduce an instrument to measure components of hindrance and supportive culture within the organization and related work-home interaction. However, the researchers did not consider the impact of these support measures on organizational outcomes (Dikkers et al., 2007). Although previous scholars examined spousal support, work-based sources of support have traditionally been examined in an organizational or supervisor context (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005). Eby et al. (2005) suggested that future research should be conducted to examine support from multiple levels of analysis. O'Driscoll,

Brough, and Kalliath (2004) called for researchers to examine supervisor and coworker support simultaneously.

Researchers largely focused on gender-related questions around work-family research in recognition of the social and demographic changes occurring in the modern workplace. Scholars have called for the incorporation of life stages and family situations related to employees' work decisions (Allen & Finkelstein, 2014; Greenhaus & Powell, 2012). This study addressed several gaps in the literature and examined constructs that have been identified as important to work-family research.

### **Purpose of the Study**

The purpose of this study was to examine the influences of organizational support, supervisor support, and coworker support on the relationship between FWAs and turnover intentions in the organization for civilian federal employees.

### **Theoretical Underpinnings of the Study**

Five theories underpinned this study: role strain (Goode, 1960), role accumulation (Sieber, 1974), social exchange (Blau, 1964), conservation of resources (Hobfoll, 1989), and border theory (Clark, 2000). Role strain theory was introduced by Goode (1960, p.485) to describe when an individual faces a conflicting array of role obligations and has "difficulty in meeting given role demands." Goode (1960) asserted that the sources of role strain included role demands of individuals a) being required at particular times and places, b) taking part in different role relationships, and c) requiring several activities or responses. Kelly and Voydanoff (1985) found that role strain may be reduced or prevented with the use of resources that allow individuals to cope with the demands

associated with performing multiple roles, and it is more prevalent among employed parents as they can perform multiple roles (e.g., worker, parent, or spouse).

According to Sieber (1974), role accumulation refers to the additive or beneficial effects achieved from participation in multiple roles. Marks (1977) observed that sociologists generally adopted a "scarcity" approach to human energy and urged an "expansion" approach that provides an energy-creation theory of multiple roles. WFC has been largely dominated in the literature by views from a conflict perspective, a scarcity hypothesis view that assumes a fixed amount of time and human energy that creates stress between roles (Greenhaus & Powell, 2006). The conflict perspective discusses how the work and family domains should be kept separate, rather than how the domains interact and depend on one another (Munn, 2013). Researchers have called for a more balanced approach, recognizing the need for a positive approach between the work and family roles (Barnett, 1998; Barnett & Baruch, 1985; Frone, 2003; Parasuraman & Greenhaus, 2002). Greenhaus and Powell (2006) provided a formal definition of workfamily enrichment (WFE) as "the extent to which experiences in one role improve the quality of life in the other role" (p. 72). The implementation of work-family programs can provide role enrichment opportunities to employees.

Social exchange theory (SET) refers to a reciprocal exchange between parties and was defined by Blau (1964) as "actions that are contingent on rewarding reactions from others and that cease when these expected reactions are not forthcoming" (p. 6).

Exchange has been defined as "voluntary transactions involving the transfer of resources between two or more actors for mutual benefit" (Cook, 1977, p. 64). By helping others, obligations are incurred and repayment reinforces a mutually positive exchange of

benefits (Eisenberger, Cotterell, & Marvel, 1987; Eisenberger, Fasolo, & Davis-LaMastro, 1990). In SET, parties abide by certain rules of exchange existing in relationships that "evolve over time into trusting, loyal, and mutual commitments" (Cropanzano & Mitchell, 2005, p. 875).

Conservation of resources (COR) theory was introduced by (Hobfoll, 1989) and posited that "people strive to retain, protect, and build resources and that what is threatening to them is the potential or actual loss of these valued resources" (p. 516) Hobfoll (2002) defined resources to include "entities that either are centrally valued in their own right (e.g., self-esteem, close attachments, health, and inner peace) or act as a means to obtain centrally valued ends (e.g., money, social support, and credit)" (p. 307). Social support can be perceived to be a resource used by the individual to protect their existing resources and to obtain new ones (Kalliath, Kalliath, & Chan, 2015).

Grandey and Cropanzano (1999) suggested that work-family research be guided by COR theory as it encompasses multiple stress theories for both intra- and inter-role stress. COR theory has become one of most commonly cited theories in organizational behavior literature over the past 25 years (Halbesleben, Neveu, Paustian-Underdahl, & Westman, 2014). Work-family research has commonly referred to COR theory as the underpinning for studies (e.g., Allen, 2001; Brough et al., 2014; Matthews & Toumbeva, 2015; Odle-Dusseau, Britt, & Greene-Shortridge, 2012).

Border theory was introduced by Clark (2000) to argue that the connection between the work and family domains is human, not emotional. Therefore, people who make daily transitions between the two domains are referred to as border crossers.

Karassvidou and Glaveli (2015) observed that "when border crossers identify personally

with a domain, they are committed to it and desire to shape it in a way that allows them to contribute and excel, which leads to their higher motivation to manage borders and domains" (p. 86). Individuals create and maintain boundaries to simplify and arrange their environment (Ashforth, Kreiner, & Fugate, 2000). Border theory has opened up opportunities for rich analysis, including interesting questions regarding traditional or contemporary applications of changing work designs (Guest, 2002).

### **Research Hypotheses**

Six hypotheses were tested in this study:

H<sub>1</sub>: Organizational support of FWAs is directly and positively related to supervisor support.

H<sub>2</sub>: Organizational support of FWAs is directly and positively related to coworker support.

H<sub>3</sub>: Supervisor support is directly and positively related to coworker support.

H4: Supervisor support is directly and negatively related to turnover intention.

H<sub>5</sub>: Coworker support is directly and negatively related to turnover intention.

H6: Organizational support is directly and negatively related to turnover intention.

### Research Model

The research model tested in this study is shown in Figure 1.

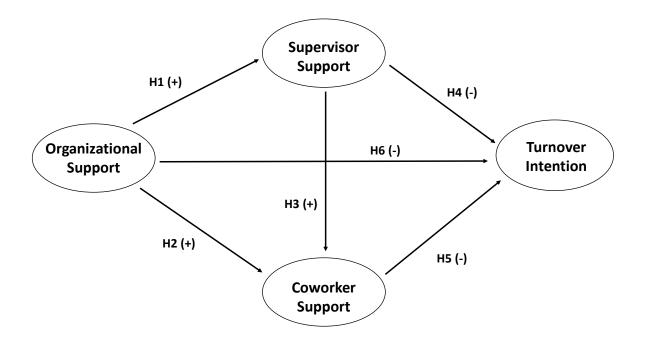


Figure 1. Research Model

### Overview of the Design of the Study

A cross-sectional, quantitative research design was utilized to conduct the study. The quantitative approach is appropriate as theoretical work precedes the data collection, along with the testing of existing constructs and measurements (Bryman & Bell, 2011). In addition, the data collected through the quantitative approach is depicted as "robust and unambiguous, owing to the precision offered by measurement" (Bryman & Bell, 2011, p. 412). Previously operationalized measurement scales were utilized, thereby increasing the reliability of the study. The cross-sectional design is used to collect quantitative data at a single point in time in connection with two or more variables that are examined to detect patterns of association (Bryman & Bell, 2011). In this study, hypotheses and relationships between variables were tested. Therefore, a cross-sectional

approach was appropriate to determine initial relationships between proposed constructs. Future studies should include longitudinal or other research designs.

### **Significance of the Study**

This study has implications for HRD research, theory, and practice in the following four ways: (a) by examining multiple support levels (e.g., organizational, supervisor, and coworker) in the same study and their individual impact on turnover intention; (b) by considering relationships between theoretical model variables in the context of FWAs; (c) by examining perceived usability of FWAs in addition to participation in FWAs; and, (d) by evaluating control variables identified as potentially significant to organizational outcomes in the context of FWAs. The relationship between FWAs, distinct support variables, and turnover intention are relevant to the field of HRD as organizations consider adoption of work-family benefit programs to improve organizational outcomes.

This study identified pathways for work-family researchers as future studies are designed to better address gaps identified in the research. Related to theory, this study provides a model framework to test existing theories and expand on relationships between constructs of particular relevance for researchers. The results are important for HRD researchers to consider and further examine the effects of work-family programs within the organization and how those programs may influence employee behaviors.

Practitioners continually try and identify ways to more effectively implement programs within organizations to achieve better employee outcomes. This study considered practical implications that can be incorporated into strategic planning related

to HRD initiatives. Specifically, this study considered the extent to which various support levels within the organization may be important for participation in FWAs. Implications of the study are important to provide guidance for practitioners as they develop work-family programs and increase support in areas needed for successful implementation. Turnover intention is also an area of concern for HRD practitioners as employee turnover can have a significant impact on organizational performance.

### **Assumptions**

The first assumption in this study was that survey respondents would answer freely and truthfully. Respondents were assured of the confidentiality of the information they provided in the survey. The second assumption was that the sample population would provide diverse representation across departments and agencies within the federal organizational structure.

### **Definition of Terms**

Border Theory – Theory which argues that "the primary connection between work and family systems is not emotional, but human. People are border-crossers who make daily transitions between two worlds – the world of work and the world of the family" (Clark, 2000, p. 748).

Conservation of Resources Theory – Conservation of resources theory states that "people strive to retain, protect, and build resources and that what is threatening to them is the potential or actual loss of these valued resources" (Hobfoll, 2002, p. 307).

Family-Supportive Organization Perceptions – "The global perceptions that employees

- form regarding the extent the organization is family-supportive" (Allen, 2001, p. 416).
- Flexible Work Arrangements "Employer provided benefits that permit employees some level of control over when and where they work outside of the standard workday" (Lambert, Marler, & Gueutal, 2008, p. 107).
- Organizational Culture "A pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (Schein, 2004, p. 17).
- Perceived Organizational Support The degree to which "employees develop global beliefs concerning the extent to which the organization values their contributions and cares about their well-being." (Eisenberger, Huntington, Hutchison, & Sowa, 1986, p. 501).
- Role Accumulation The additive or beneficial effects achieved from participation in multiple roles (Sieber, 1974).
- Role Strain Description of when an individual faces a conflicting array of role obligations and has "difficulty in meeting given role demands" (Goode, 1960, p.485).
- Social Exchange Theory "Actions that are contingent on rewarding reactions from others and that cease when these expected reactions are not forthcoming." (Blau, 1964, p. 6).
- Social Support "An exchange of resources between at least two individuals perceived

- by the provider or the recipient to be intended to enhance the well-being of the recipient' (Shumaker & Brownell, 1984, p. 13).
- Telecommuting "... an alternative work arrangement in which employees perform tasks elsewhere that are normally done in a primary or central workplace, for at least some portion of their work schedule, using electronic media to interact with others inside and outside the organization" (Gajendran & Harrison, 2007, p. 1525).
- Work-Family Conflict "A form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect" (Greenhaus & Beutell, 1985, p. 77)
- *Work-Family Enrichment* "The extent to which experiences in one role improve the quality of life in the other role" (Greenhaus & Powell, 2006, p. 72).

### **Summary of the Chapter and Organization of the Dissertation**

Chapter 1 presented the background to the problem, statement of the problem, and purpose of the study. The theoretical underpinnings of the study were considered along with the underlying research hypotheses and research model. An overview of the design of the study and its significance to HRD research and practice was provided. The chapter concluded with definitions of important terms referred to in the study and assumptions associated with the study. Chapter 2 presented a review of the literature domains relevant to this study, including work design, work domains, flexible work arrangements, and organizational culture. Specific levels (organizational, supervisor, coworker) of support were considered and turnover intention was examined.

Chapter 3 included the research hypotheses and research model that were tested in this study. The design of the study and the instruments used were included. The population and sample were discussed, along with the administration of the online survey. An examination of the instruments used to measure organizational support, supervisor support, coworker support, and turnover intention were included, and the data collection procedures and data analysis employed were presented. Finally, limitations were discussed. Chapter 4 contained the results of the data screening process, along with assumptions testing. Reliability and validity, common method variance, and construct validity were tested. The chapter included the results of the data analysis. Measurement and structural models were examined and hypothesis testing were discussed. Chapter 5 provided a summary of the study along with implications for research and practice. The chapter concluded with limitations of the study.

### **Chapter 2: Literature Review**

### Introduction

This chapter includes a review of relevant literature related to the areas of work design, work domains, flexible work arrangements (FWAs), and support. Literature addressing the related constructs of organizational support, supervisor support, coworker support, and turnover intention were also examined to provide context for this study.

The literature review is organized into five broad sections. The first section explores the history and evolution of work design. Second, work domains are discussed. Third, FWAs are described and examined. Fourth, support at a general level is considered along with the specific areas of organizational culture, organizational support, supervisor support, and coworker support. Fifth, turnover intention is discussed. Finally, civilian federal employees are examined in the context of the current study. The chapter concludes with a section containing the chapter summary.

To conduct this literature review, the resources of The University of Texas at Tyler Robert R. Muntz Library were utilized. The following databases were searched: Business Source Complete, Academic Source Complete, Psych Info, Science Direct, and ProQuest. Specific keywords and search phrases were used in various combinations and/or spelling forms including the following: flexible work arrangements, telework, telecommuting, turnover, turnover intention, work intention, intent to stay, intent to leave, work-family conflict, support, social support, organizational support, supervisor support, coworker support, colleague support, and work design. Google Scholar was also utilized as a complementary search tool for access to a broader body of articles relevant

to the study. Although primary sources consisted of peer-review articles, books and relevant practitioner sources were also utilized. In addition, citations within articles and other seminal literature were examined to identify pathways for research pertinent to this study.

### **Work Design**

A global shift from manufacturing to service and knowledge economies has dramatically impacted work design in organizations (Grant & Parker, 2009).

Technological advancements in recent years have significantly changed how workplace activities are conducted and have provided opportunities for organizations to be more flexible in work design for their employees. Modern approaches to work design can be traced back to origins that emerged in the United Kingdom at the time of the Industrial Revolution (Parker, Wall, & Cordery, 2001). Smith (1776) advocated for the division of labor, a method of breaking down complex tasks into sub-tasks to achieve increased productivity among workers.

Taylor (1911) introduced the theory of scientific management, an approach to engineer workflows for improved economic efficiency. The crucial component of these work methods was that of job simplification to increase production and maximize efficiency. Sweeping changes took effect in the Industrial period and researchers identified unfortunate consequences of simple, nonchallenging jobs that led to negative outcomes such as increased absenteeism and turnover, high employee dissatisfaction, and substantial difficulties managing employees (Hackman & Lawler, 1971). Given that some scholars challenged these assertions (Kilbridge, 1961; MacKinney, Wernimont, &

Galitz, 1962), subsequent researchers explored job motivation approaches to work design (Hackman & Oldham, 1975).

Hackman and Oldham (1975) introduced the job characteristics model to address job characteristics and individual responses to work. The researchers suggested that five motivating job characteristics would contribute to meaningful worker outcomes: skill variety (i.e., the degree to which different activities involve the use of different skills and talents), task identity (i.e., the degree to which the job requires completion of a job beginning to end with a visible outcome), task significance (i.e., the degree to which the job has substantial impact on the lives of other people), autonomy (i.e., the degree to which the job provides freedom to determine procedures used), and feedback (i.e., the degree to which carrying out work activities results in obtaining information about performance).

The definition of work design describes "how jobs, tasks, and roles are structured, enacted, and modified, as well as the impact of these structures, enactments, and modifications on individual, group, and organizational outcomes" (Grant & Parker, 2009, p. 319). Cummings and Worley (2015) examined three approaches to work design: engineering (i.e., efficiency and simplification, resulting in traditional work designs); motivational (i.e., enriching the work experience); and sociotechnical systems (i.e., optimizes the social and technical aspects of work design). The most investigated work design in the literature is motivational, an approach that asserts jobs will be enriched if high levels of motivating characteristics are present (Morgeson & Humphrey, 2006).

It is incumbent on leaders to create a work environment that elicits employee motivation (Gilley, Gilley, & McMillan, 2009). Motivating employees has been shown

to be highly significant in impacting employee growth and development (Gilley, Gilley, Jackson, & Lawrence, 2015). The wide adoption of the motivational approach significantly influenced work design research over the last several decades (Kanfer, 1992). However, researchers observed that the success of job motivation approaches has resulted in focused research attention on a limited set of motivational work features (e.g., skill variety and autonomy) and that the importance of social environment and work context have been neglected (Humphrey, Nahrgang, & Morgeson, 2007).

### **Work Domains**

Workers in the United States now work more hours in comparison to other wealthy countries (Hamermesh & Stancanelli, 2015). In its annual report measuring the number of hours worked per employee, the Organisation for Economic Co-operation and Development (OECD) ranked the United States highest among the G7 countries (United States, Canada, France, Germany, Italy, Japan, and the United Kingdom) for hours worked (OECD, 2015). Technological and global changes have taken a toll on both the American worker and the workplace (Perlow & Kelly, 2014).

Pleck (1977) posited that the boundaries between the work and family domains are asymmetrically permeable as each domain can interfere with the other in an unequal manner. Subsequently, demands from one domain can exert pressure on the other, requiring that priority be given to the domain in which the individual places the most value. Workplace resources can contribute to the flexibility of the domain boundaries and impact both the work and family domains (Ferguson, Carlson, & Kacmar, 2014). Clark (2000) described border crossers as individuals who make daily transitions between

the work and family domains, altering these domains and borders to fit their needs.

Within the work and family domains, boundaries tend to be drawn around roles and increase the difficulty of crossing from one domain to the other (Ashforth et al., 2000).

As the overlap between domains becomes more intertwined, conflict may arise.

**Work-family conflict.** Work-family conflict (WFC) was first defined as "a form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect" (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964, p. 19). That is, "participation in the work (family) role is made more difficult by virtue of participation in the family (work) role" (Greenhaus & Beutell, 1985, p. 77). The overlap between these competing priorities in the work and family domains has also been referred to as work-life conflict (Carlson et al., 2000), work-home interference (Geurts, Kompier, Roxburgh, & Houtman, 2003), or work-family interference (Hughes & Parkes, 2007). WFC consists of two distinct, yet related concepts—family interference with work and work interference with family (Byron, 2005). The relationship between work and family domains is shown to be bi-directional (Greenhaus & Beutell, 1985). Interdependence between these roles can result in role strain of two types—overload and interference (Voydanoff & Kelly, 1984). Geurts et al. (2005) observed that "managing multiple roles (e.g., of employee, spouse, and parent) is problematic as they draw on the same scarce resources" (p. 319).

Potential negative outcomes resulting from WFC include decreased productivity, increased absenteeism, and turnover (Glass & Estes, 1997). In a meta-analysis of WFC literature, Allen, Herst, Bruck, and Sutton (2000) found significant relationships between WFC and stress-related outcomes including job dissatisfaction, depression, and job

burnout. "Stressors are environmental situation or events potentially capable of producing the state of stress, strains are the symptoms or indices of stress, and outcomes refer to consequences of strain that have implications for the work and nonwork domains" (Greenhaus & Parasuraman, 1987, p. 38). As a source of stress, WFC can influence other undesirable outcomes such as increased health risk (Fein & Skinner, 2015), depression (Frone, Russell, & Cooper, 1992), low well-being (Greenhaus & Parasuraman, 1987), diminished life satisfaction (Kossek & Ozeki, 1998; Near, Rice, & Hunt, 1978), job tension (Kelly & Voydanoff, 1985), and negative physical consequences (Pleck, Staines, & Lang, 1980).

Demographic considerations may influence the relationships between WFC and organizational outcomes. The gender composition of the current workforce has changed dramatically during the last several decades. In 1970, women's representation in the labor force was 38.0% and increased to 47.2% by 2010 (U.S. Census Bureau, 2012). Results have been mixed whether men and women report different levels of WFC (Eby et al., 2005). Pleck (1977) contended that gender differences can affect the direction of the work-family conflict and demands from the family domain are more likely to intrude into the work role for women. Grzywacz and Marks (2000) found that several work and family factors influence spillover differently for women. However, they did not find consistent gender interaction effects as posited by Pleck (1977).

Some researchers found that women reported higher levels of WFC than men (e.g., Behson, 2002; Gutek, Searle, & Klepa, 1991), while others found no gender difference (e.g., Duxbury & Higgins, 1991; Eagle, Icenogle, Maes, & Miles, 1998). A longitudinal study in a large U.S. corporation also resulted in no statistically significant

gender differences (Moen, Fan, & Kelly, 2013). Research on the gender division of labor in the last decade revealed that workloads of mothers and fathers had become more equal overall, while remaining gender specialized, with men doing more in the marketplace and women doing more in the home (Bianchi & Milkie, 2010). Inconsistent literature findings have necessitated the need for additional research to further understand the influence of gender on the work-family interface (Powell & Greenhaus, 2010).

Across various life cycles, women are more likely than men to schedule time around family demands (Craig & Sawrikar, 2009) or use work-family programs (Kim & Mullins, 2016). In a study of attorneys, Wallace and Young (2008) found that family-friendly benefits were more attractive to women than to men. Tamres, Janicki, & Helgeson (2002) found that women use different coping strategies when dealing with stressors. Other researchers found that women tend to have a greater sense of guilt related to the interference between work and family roles (Glavin, Schieman, & Reid, 2011; Simon, 1995). King (2008) suggested that gender is a strong predictor related to advancement as superiors underestimate the work involvement and flexibility of working mothers. Leber Herr and Wolfram (2012) discovered that women who worked in flexible jobs before having children were more likely to remain working after motherhood.

In addition to the increasing number of women in the workforce, the number of dual-earners who reside in the same household has also increased (Kinnunen et al., 2004). As the number of dual-income families and women joining the workforce increases, both men and women face challenges in balancing work and family life (Karkoulian, Srour, & Sinan, 2016). Households that include both parents working now makes up more than half of married couples with children (BLS, 2012). In a study of dual-earner households,

employees whose partner participated in FWAs worked less hours and experienced less WFC (Schooreel & Verbruggen, 2016). WFC can increase when children or other family responsibilities are involved in a dual-career household (Elloy & Smith, 2003). Scholars found the number of children at home increases the amount of WFC (Hammer et al., 1997; Premeaux et al., 2007) and lowers family satisfaction (Beutell & Wittig-Berman, 1999). Consequently, these changing family dynamics are an important consideration when developing work-family policies in the organization.

Craig and Sawrikar (2009) found that when children are older, balancing work and family is easier and somewhat more gender equitable. Because women are likely to have greater caregiving responsibilities, working in a family-supportive organization may reduce WFC or increase WFE in women more so than in men (Wayne, Casper, Matthews, & Allen, 2013). Jennings, Sinclair, and Mohr (2016) suggested that future research further examine the effects of children and various outcomes of work-life balance. Age, tenure, and gender are regarded as theoretically important antecedents of stressor-performance relationships (Bowers, Weaver, & Morgan, 1996; Shirom, Gilboa, Fried, & Cooper, 2008). Allen and Finkelstein (2014) suggested that future research should include life stages when examining the availability of schedule flexibility in the organization.

Work-family enrichment. Although much of the work-family literature has approached the relationship between domains from a conflict perspective, it does not mean that these domains cannot be mutually supportive (Greenhaus & Beutell, 1985). In the conflict perspective, a scarcity hypothesis view assumes a fixed amount of time and human energy that creates stress between roles (Greenhaus & Powell, 2006). Marks

(1977) observed that sociologists generally adopted this "scarcity" approach to human energy and urged an "expansion" approach in order to provide an energy-creation theory of multiple roles.

Sieber (1974) introduced the theory of role accumulation, referring to the additive or beneficial effects achieved from participation in multiple work and family roles.

Marks (1977) also called for a more comprehensive theory that explains both the scarcity and the abundance phenomenology of energy, rather than focusing on a "spending" or "drain" theory. Researchers have called for a balanced perspective, recognizing the need for a positive approach between work and family roles (Barnett, 1998; Frone, 2003; Parasuraman & Greenhaus, 2002). Building on the earlier work of Sieber (1974) and Marks (1977), Greenhaus and Powell (2006) introduced the theoretical framework of work-family enrichment (WFE) and defined it as "the extent to which experiences in one role improve the quality of life in the other role" (p. 72).

Work-family balance has been described as "a perceptual phenomenon characterized by a sense of having achieved a satisfactory resolution of the multiple demands of work and family domains" (Higgins, Duxbury, & Johnson, 2000, p. 19).

Clark (2000) defined balance as "satisfaction and good functioning at work and at home, with a minimum of role conflict" (p. 751). Furthermore, role balance has been defined as "the tendency to become fully engaged in the performance of every role in one's total role system, to approach every typical role and role partner with an attitude of attentiveness and care. Put differently, it is the practice of that evenhanded alertness known sometimes as mindfulness" (Marks & MacDermid, 1996, p. 421).

Odle-Dusseau et al., (2012) explained that according to COR theory, resources are expected to aid in stress reduction and positively impact employees. Loher, Noe, Moeller, & Fitzgerald, (1985) found that the more enriched a job is, the more likely that job satisfaction will be experienced by the employee. In WFE, the aspects of the work or family role "provide resources that facilitate the performance of the other role" (Voydanoff, 2002, p. 149). The mechanisms that enable the work and family roles to benefit one another have been used to describe WFE (Hanson, Hammer, & Colton, 2006). WFE has been used along with other related, yet distinct constructs that include enhancement (Sieber, 1974), positive spillover (Crouter, 1984) and facilitation (Wayne, Grzywacz, Carlson, & Kacmar, 2007). While "enhancement focuses on benefits gained by individuals and the possibility that these benefits may have salient effects on activities across life domains, enrichment focuses on enhanced role performance in one domain as a function of resources gained from another" (Carlson, Kacmar, Wayne, & Grzywacz, 2006, p. 133).

Positive spillover (Crouter, 1984) refers to work and family experiences on each other in ways that make the two domains similar (Edwards & Rothbard, 2000). For example, the "resources an employee gains in his or her work role (e.g., time management skills, flexibility) may directly improve his or her parenting role.

Alternatively, participation in the family role may produce positive affect (e.g., enthusiasm, alertness, high energy), which in turn benefits the employee when arriving to work" (Nicklin & McNall, 2013, p. 68). Thompson and Prottas (2006) found that supervisor and coworker support were related to positive spillover, providing support for the potential beneficial effects of participation in multiple roles (Barnett & Hyde, 2001).

Sok, Blomme, and Tromp (2014) found that FWAs made positive spillover easier for employees in a supportive culture. Nicklin and McNall (2013) suggested that perceptions of WFE be captured from more than one source of support in future research.

Facilitation between the work and family domains takes place to the extent that an individual engages in one social system that contributes to growth in another social system (Grzywacz, Carlson, Kacmar, & Wayne, 2007). Greenhaus, Collins, and Shaw (2003) found that individuals who spent more time on family than work experienced a higher quality of life than those who spent more time on work than family. Wayne, Randel, and Stevens (2006) suggested that experiencing WFE in the workplace promotes greater commitment and retention. A study of human service workers revealed that WFE demonstrated large, negative relationships with turnover intention (McNall, Scott, & Nicklin, 2015).

A shift in the work-family literature has occurred, moving away from a focus on conflict to the positive synergies that can be achieved between work and family (Wayne et al., 2007). More social interaction and social support may be available to those who participate in multiple roles (O'Driscoll, 1996). To better support balance between roles, some employers offer work-family policies such as flexible work hours, family leave programs, caregiving, and onsite childcare (Adams & Jex, 1999; Beauregard & Henry, 2009; Ryan & Kossek, 2008). FWAs and care-related arrangements emerge as the main categories of the various work-family benefit programs adopted by organizations. (Dikkers et al., 2007).

### Flexible Work Arrangements

Telecommuting research spans across multiple research disciplines with overlapping terms (e.g., telework, flexible work, virtual work, and remote work), often embodying different conceptualizations of alternative working arrangements (Allen, Golden, & Shockley, 2015). Gajendran and Harrison (2007) defined telecommuting as "... an alternative work arrangement in which employees perform tasks elsewhere

that are normally done in a primary or central workplace, for at least some portion of their work schedule, using electronic media to interact with others inside and outside the organization" (p. 1525).

Gray, Hodson, and Gordon (1993, p. 11) defined telework as "a flexible way of working which covers a wide range of work activities, all of which entail working remotely from an employer, or from a traditional place of work, for a significant proportion of work time." FWAs differ from standard employment in that they do not require that work be done on a fixed schedule or at the employer's place of business (Weeden, 2005).

Flextime has been broadly defined as "the ability to schedule flexible starting and quitting times, sometimes with a core-hours requirement" (Eaton, 2003, p. 146). FWAs have been defined as "employer provided benefits that permit employees some level of control over when and where they work outside of the standard workday" (Lambert, Marler, & Gueutal, 2008, p. 107). Key elements across the various definitions of FWAs in the literature include multiple variations of flexible work schedules and location of the employee.

Examples of FWAs include: compressed schedule (e.g., employee works agreed hours over fewer work days), flex time (e.g., employee works required set of core hours

and has flexibility in choosing how and when they work those hours), time in lieu (e.g., employee may take time off to compensate for extra hours worked), telecommuting (e.g., employee works outside of physical office location with the use of technology), and part-time (e.g., employee works less than eight hours per day) (U.S. Department of Commerce, 2017). Telework and telecommuting are types of FWAs and are used interchangeably as an accepted practice (Martin & MacDonnell, 2012). In this study, teleworking was considered as the primary method of FWAs rather than work arrangements that include reduced hours or other alternative work schedules.

Although workplace flexibility is widely used in both academic and applied literature, it is often poorly understood and ambiguously defined (Hill et al., 2008). Workplace flexibility "recognizes the relationship between employees' work life and their life outside of work" (Jacob, Bond, & Galinsky, 2008, p. 142). Workplace flexibility has been defined as "the ability of workers to make choices influencing when, where, and for how long they engage in work-related tasks" (Hill et al., 2008, p. 152). Flexibility includes where employees work, the number of hours worked, and when employees work (Grawitch & Barber, 2010). Hill et al. (2008) posited that workplace flexibility is conceptualized two ways—through the organizational and worker perspectives. In these constructs, the organizational perspective emphasizes flexibility with a secondary regard for the workers and the worker perspective emphasizes individual agency within the organizational culture. This study focused on flexibility from the worker perspective.

Estimates of the number of individuals working in FWAs vary widely based on the type of data that is being collected. According to Global Workplace Analytics

(2016), there were 3.7 million U.S. telecommuters in 2014 who worked from home at least half the time. For industries with high skilled workers, flexibility is likely to be utilized to attract and retain high value employees (Sweet, Pitt-Catsouphes, Besen, & Golden, 2014). In 2016, approximately 22% of those employed reported doing some or all of their work from home (U.S. BLS, 2016). In the United States civilian federal workforce, approximately 2.2 million workers are employed by the government (U.S. OPM, 2016). Of these employees, approximately 44% are eligible to telework (U.S. OPM, 2016).

Past studies on FWAs and work-family balance share two conflicting views: One view is that FWAs enable workers to better balance family needs and the alternative is that work strain results from an inability to cope with needs in the work and family domains (Maruyama, Hopkinson, & James, 2009). Maruyama et al. (2009) found that teleworkers' time flexibility lubricated the interactions between the work and family domains, promoting increased work-family balance. In a global study of workers in 75 countries, Hill, Erickson, Holmes, and Ferris (2010) found evidence that the implementation of workplace flexibility may create an environment in which employees are able to work longer hours before WFC becomes problematic.

FWAs have also been found to increase the level of work intensification (Kelliher & Anderson, 2010). These views are consistent with the theories of role strain and role accumulation. Demands placed on employees which cause difficulty in meeting increasing number of work obligations are related to role strain (Goode, 1960). Job strain has been associated with higher WFC in previous research (Samad, Reaburn, & Di Milia, 2014). The number of hours worked is one of the most frequently examined demands

that organizations place on workers (McNamara, Pitt-Catsouphes, Matz-Costa, Brown, & Valcour, 2013).

Although FWAs are often intended as a way to increase work-life balance, some scholars expressed concern that working from home may negatively impact WFC by increasing the permeability of the work and family domains (Ashforth et al., 2000; Hartig, Kylin, & Johansson, 2007; Kossek, Lautsch, & Eaton, 2006; Standen, Daniels, & Lamond, 1999). Telework can also be a source of work-life imbalance (Morganson, Major, Oborn, Verive, & Heelan, 2010). Other scholars disagreed with these assertions and posited that FWAs keep the blurring between roles to a minimum, ease transitioning between roles, and grant the employee some control over temporal boundaries (Rau & Hyland, 2002). In a study of Swedish governmental employees, Hartig et al. (2007) found that although teleworkers demonstrated a considerable amount of overlap between work and non-work life, the results did not differ significantly from non-teleworkers.

Flexible work schedules are used by employers more than other traditional programs (Allen, 2001; Friedman, 1990). Several factors can influence employer motivation for offering FWAs to employees. For many organizations, FWAs are viewed as a cost savings measure as related office space, utilities, and other resources are no longer needed (Golden, 2009). FWAs are offered by organizations to provide ways for employees to balance priorities including work and family life (Blair-Loy & Wharton, 2004; Brough et al., 2005; Meyer, Mukerjee, & Sestero, 2001). Organizations also offer FWAs so that employees will have more control over work boundaries (Thompson, Payne, & Taylor, 2015).

Work-family initiatives such as FWAs have connotations to support equal employment opportunity, and to help employers adapt to civil rights legislation and discrimination legislation (Kossek, Lewis, & Hammer, 2010). From a WFE perspective, FWAs have been reported as playing a stronger role for women than men in regards to the work-family interface (Carlson, Grzywacz, & Kacmar, 2010). Conversely, Thompson et al. (2015) found no significant differences between men and women in relation to the level of attraction to organizations that offer FWAs. The implementation of FWAs is also used as a strategy to mitigate gender gaps in employment, and to help women to combine work and family responsibilities (Lyness, Gornick, Stone, & Grotto, 2012). Furthermore, organizations that seek to create a more inclusive workplace may view these efforts as more attractive to employees (Avery & McKay, 2006; Ryan & Kossek, 2008).

Business press has devoted significant attention to work-family policies, creating a cultural expectation that "progressive" employers offer these types of policies as a way to be included on working mother or best employer lists (Kossek, Baltes, & Matthews, 2011). Formal flexibility policy use has been defined as "pertaining to an individual formally obtaining permission to use an available written telecommuting policy and the human resource department identifies the individual as a known policy user" (Kossek et al., 2006, p. 349).

Organizations that initiate a well-planned and well-supported telecommuting program can anticipate favorable responses from respondents (Reinsch, 1997). However, scholars have noted that many earlier studies in telework were of an atheoretical nature, resulting in an ambiguous pattern of effects and mixed results (Bailey & Kurland, 2002;

Gajendran & Harrison, 2007; McCloskey & Igbaria, 1998). Although the availability of work-family benefits such as FWAs may exist in the organization, many employees are not taking advantage of those policies (den Dulk & de Ruijter, 2008; Thompson, Beauvais, & Lyness, 1999).

Bal and De Lange (2015) found that employees' awareness of the availability of FWAs was a stronger predictor of outcomes than the use of FWAs. Sweet et al. (2014) observed that a growing body of studies "reveal an important distinction between 'availability' (meaning that the option is ostensibly open for use) versus 'accessibility' and 'perceived usability' (meaning that there are not other impediments that might discourage actual use)" (p. 117). The construct of perceived usability is an important distinction when considering the availability of flexible work polices (Hayman, 2009). Flexibility availability has been defined as "the extent to which employees feel free to use such policies, whether formal or informal" (Eaton, 2003, p. 147). Researchers have called for future studies to examine the availability of FWAs in addition to the actual frequency of use (Masuda et al., 2011).

Inconsistent findings in the literature related to work-family policies may be attributed to studies considering employee's perceptions of policy availability, policy use, and examination of both (Butts, Casper, & Yang, 2013). Shockley and Allen (2007) suggested that individuals with high family responsibilities have more to gain from FWAs. In addition, gender stereotypes and societal perceptions of traditional roles can result in higher demands from the home domain for women in FWAs than those experienced by men (Radcliffe & Cassell, 2015). Vandello, Hettinger, Bosson, and Siddiqi (2013) found that men suffer greater negative gender perceptions by being

perceived as less masculine when they seek to participate in FWAs. In a meta-analysis of 46 telecommuting studies, Gajendran and Harrison (2007) found low magnitudes and high variabilities of connections, highlighting the need for larger sample sizes and integration of theory into future studies regarding FWAs. In practice, although FWAs may be available, sometimes an underlying message to employees is that they should not use them or that there are limits in place (Kossek et al., 2006). In the workplace, various forms of FWAs are generally individually negotiated between employees and their supervisors (Kelly & Kalev, 2006; Sweet et al., 2014).

Glass and Estes (1997) suggested that future empirical research include a more adequate conceptualization of the types of family responsive policies available and the intensity of employer commitment to these policies. In addition, Grawitch and Barber (2010) called for future research to explain why employees choose to use, or not use, work-family benefits offered by the organization. Few studies have examined the frequency of employees' telecommuting practices, allowing for inappropriate conclusions to be reached (Allen et al., 2015). Despite the practitioner and scholarly attention given to FWAs, few empirical studies examine its relationship with WFC (Allen, Johnson, Kiburz, & Shockley, 2013). The existing research on FWAs provides limited understanding regarding the mechanisms through which FWAs may influence employees' attitudes and behaviors (Rofcanin, Las Heras, & Bakker, 2016).

# Support

**Organizational culture.** Prior research has found that adoption of FWAs is highly dependent on the culture of an organization (Starrels, 1992; Timms et al., 2015).

Organizational culture has been defined as a "system of informal rules that spells out how people are to behave most of the time" (Deal & Kennedy, 1982, p. 15). Schein (2004) also defined organizational culture as "a pattern of shared basic assumptions learned by a group as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (p. 17).

Thompson et al. (1999) described work-family culture as "the shared assumptions, beliefs, and values regarding the extent to which an organization supports and values the integration of employees' work and family lives" (p. 394). Scott (2005) asserted that organizational culture consists of two types: observable and core.

Observable culture includes what can be seen or heard when one walks on company premises and core culture consists of values or beliefs that influence behavior. A person's values are a manifestation of the cultural norms and these values can influence the value placed on resources (Morelli & Cunningham, 2012). Organizational culture is formed as a result of underlying assumptions that influence behavior and visible artifacts (Schein, 1983). It is possible for macrocultures to emerge in the organization and reflect the beliefs shared among upper management (Abrahamson & Fombrun, 1994). The attributes of subcultures can affect other areas of the organization in positive or negative ways.

Work-family culture has been classified into three areas: organizational time demands, career consequences, and managerial support (Thompson et al., 1999). Dikkers et al. (2007) expanded these components by conceptualizing work-family culture as having five dimensions: (a) organizational support, (b) supervisor support, (c) coworker

support, (d) career consequences, and (e) organizational time demands. Workplace culture that is supportive is critical to employees' use of work-family benefits (J. Smith & Gardner, 2007). Work-family culture has been shown to be positively associated with satisfaction and work-family balance (McNamara et al., 2013). Biggs, Brough, and Barbour (2014) noted that it is plausible for work culture support to influence the attitudes and behaviors of employees, thereby shaping the nature of supervision and interactions throughout the organization.

Work-family culture can be described as a supportive or a hindrance culture (Dikkers, Geurts, Dulk, Peper, & Kompier, 2004). Supportive culture refers to employees' perceptions of organizational, management, and coworker responsiveness to issues related to work-family balance. A hindrance culture reflects employees' perceptions of career consequences and organizational demands (Dikkers et al., 2004). The decision of an organization to offer work-life policies to employees does not ensure actual usage of those policies (Poelmans & Beham, 2008). The enactment of work-family programs without a broader concern for employee well-being will likely fail to generate positive effects for employees or the organization (Behson, 2005; Galinsky & Stein, 1990; Lobel & Kossek, 1996). This study examined the supportive components of work-family culture (i.e., organizational, supervisor, and coworker).

Organizational culture is a significant determinant whether organizations will adopt FWAs; furthermore, organizational culture can advance or thwart the effectiveness of work-family programs (Starrels, 1992). Organizational policies and culture have been identified as potential barriers to a family-supportive environment (Lauzun, Morganson, Major, & Green, 2010). Although an organization may formally implement work-family

programs, employees may be deterred from utilizing those programs if the culture does not support them. Effective family-supportive policies should be complemented by the organization's informal processes (Behson, 2005).

Family-supportive work environments consist of two major elements: family-supportive policies and family-supportive supervisors (Thomas & Ganster, 1995). Both elements are needed to provide employees with the opportunities and support necessary to participate in these programs. Organizations with environments that allow employees to have greater autonomy encourage management to be supportive of work-family concerns, and refrain from penalizing employees who devote attention to family needs will benefit from increased employees satisfaction and reduced turnover intentions (Behson, 2005). Work-family benefits are of no value if there is no organizational or supervisor support for those policies (Grover & Crooker, 1995).

Organizational support. Perceived organizational support (POS) is described as the degree to which "employees develop global beliefs concerning the extent to which the organization values their contributions and cares about their well-being" (Eisenberger et al., 1986, p. 501). Family-supportive organization perceptions (FSOP) refer to "the global perceptions that employees form regarding the extent the organization is family-supportive" (Allen, 2001, p. 416). The construct of FSOP was developed as a subset of POS (Thompson, White, Kopelman, & Prottas, 2004). FSOP have been shown to influence family-supportive supervisor perceptions (FSSP) (Mills, Matthews, Henning, & Woo, 2014). Cook (2009) found that FSOPs served as a partial mediator between the availability of work-family policies and turnover intention.

Easing WFC from an organizational perspective can be done through formal or informal means (Somech & Drach-Zahavy, 2012). Formal programs include policies, benefits, and services such as: child-care assistance, job-sharing, flextime, and parental leave (Veiga, Baldridge, & Eddleston, 2004). Informal means represent the values and unspoken norms in the organization (Lobel & Kossek, 1996). Informal support inside the organization explains, in part, the gap between the availability of work-family benefits and its use (De Sivatte & Guadamillas, 2013). Both formal and informal methods can convey to employees the level of support that the organization is willing to provide.

Organizations can improve the quality of life for employees both in the work and family domains by adopting supportive policies (Selvarajan, Cloninger, & Singh, 2013). Global perceptions of family-supportive organizations have been shown to benefit employees' physical and mental health (Jennings et al., 2016). Employees may not consider participation in FWAs if informal attributes in the organization do not support their use (Kirby & Krone, 2002). In a study of managerial and professional employees, Blair-Loy and Wharton (2004) found that employees who were constrained from using FWAs were less committed to the organization than those with no need or interest in those policies. Some of these flexibility programs "appear to be merely 'shelf paper,' offered for public relations reaons but accompanied with the tacit message that workers use workplace flexibility at their peril" (Williams, Blair-Loy, & Berdahl, 2013, p. 210).

Allen (2001) posited that organization-based perceptions are unique from the perceptions that employees form regarding the level of family-supportiveness received from their supervisor. Without endorsement at the organizational level, there is little likelihood that FWAs will receive serious attention or that managers will feel any

incentive to support them (Rodgers, 1992). Cook (2009) found that the availability of work-family policies is significantly related to organizational and supervisor support perceptions. Dick (2011) argued that "the organization environment that supervisors/managers experience is very likely to have a strong influence on the way they manage by constraining their managerial behavior to fit with the norms and practices of the organization" (p. 561).

In a meta-analysis of telework research, Martin and MacDonnell (2012) found that some researchers lumped managerial and employee perspectives together, prohibiting a clear view of the organizational perspective. The decision to adopt FWAs is driven by organizational outcomes and ultimately lies at the top of the firm (Martin & MacDonnell, 2012). In a study considering organizational commitment, Dick (2011) found that employee perceptions of organization support strongly influenced perceptions of supervisor support. This finding is consistent with Shanock and Eisenberger's (2006) results that POS had a significant positive relationship with perceived supervisor support (PSS).

Based on social exchange theory (SET) and reciprocity, POS creates an obligation among employees to reciprocate with behaviors that are beneficial to the organization (Caesens, Stinglhamber, & Ohana, 2016). Through POS, individuals' attitudes are transformed by the level of support perceived, thereby impacting the organization (Ollier-Malaterre, 2010). Eberly, Holley, Johnson, and Mitchell (2011) posited that employees derive significant meaning from frequent interactions with other individuals (e.g., supervisors and coworkers). Conversely, POS may take longer to develop as employees'

access to the organization may occur through their immediate supervisor (Campbell, Perry, Maertz, Allen, & Griffeth, 2013).

Kottke and Sharafinski (1988) found that employees differentiate support from the organization and support from their immediate supervisor. The distinction between family-supportive supervisors and perceived organizational support has been conceptually and empirically supported (Matthews, Mills, Trout, & English, 2014). Informal workplace social support and relational support together form the construct of cultural work-life support (Kossek et al., 2010). In this view, cultural support operates at two interactive levels: the work group level, where support is received from managers or co-workers; and the organizational level where cultural values and norms are generated (Kossek et al., 2010).

Although researchers suggested that various support sources should be disentangled (e.g., Rhoades & Eisenberger, 2002; Stinglhamber & Vandenberghe, 2003), most organizational support researchers limit their studies to organizational support as a general construct (Simosi, 2012). Furthermore, empirical studies examining the link between the "organizational environment supportive of employees' work-life balance and their use of work-family policies" (Kim & Mullins, 2016, p. 82) are scarce. Leschyshyn and Minnotte (2014) suggested that future research should pay closer attention to various forms of support related to the enhancement of employee outcomes.

**Social support.** The social component of the workplace is an important consideration for employees. The social context of work can play a role in formulating employees' experiences and behaviors (Grant & Parker, 2009). Cobb (1976) defined social support as the individual's belief that he or she is either "cared for or loved,

esteemed or valued, and belongs to a network of communication and mutual obligation" (p. 300). Shumaker and Brownell (1984) defined social support as "an exchange of resources between at least two individuals perceived by the provider or the recipient to be intended to enhance the well-being of the recipient" (p. 13).

Schneider (1987) asserted that "the attributes of people, not the nature of the external environment, or organizational technology, or organizational structure, are the fundamental determinants of organizational behavior" (p. 437). Social support has long been identified in research on stress as an important resource to help reduce the effects of stressors (Anderson, Coffey, & Byerly, 2002). Baker, Israel, and Schurman (1996) found that supervisor and coworker support may decrease an employee's negative job feelings. Management support and caring coworkers have been identified among characteristics that affect employee retention (George, 2015).

As teleworkers are removed from the central office location, the amount of face-to-face interaction with coworkers and supervisors is limited (Morganson et al., 2010). Working in a separate location from coworkers may cause feelings of isolation due to lower amounts of interaction between workers (Anderson, Kaplan, & Vega, 2015). To fulfill the human need to belong, workers "need to perceive that there is an interpersonal bond or relationship marked by stability, affective concern, and continuation into the forseeable future" (Baumeister & Leary, 1995, p. 500). Telecommuting can enhance the social environment at work in some circumstances (Gajendran, Harrison, & Delaney-Klinger, 2015). Organizational support has been found to positively enhance both supervisor and coworker support (Yoon & Thye, 2000). In addition, institutional

pressures from the organization are likely to affect the attitudes of managers, including both formal and informal teleworking policies (Peters & Heusinkveld, 2010).

Social support has been shown to significantly contribute to overall job satisfaction of employees (Ducharme & Martin, 2000). However, Lim and Teo (2000) found that supervisor and coworker support were not significantly related to teleworking decisions. Professional isolation has been demonstrated to be predictive of workplace frustration (Lewandowski, 2003). Relatively little research exists related to how employees discover the level of support available to them (Halbesleben & Wheeler, 2015). In a study of 230 work groups, the results suggested that individuals who received low levels of social support from their work group experienced high levels of WFC, regardless of the work group's level of WFC (Bhave, Kramer, & Glomb, 2010).

Social support can be perceived to be a resource, consistent with COR theory (Kalliath et al., 2015). A criticism of COR theory is that the definition of resources are generally vague (Gorgievski, Halbesleben, & Bakker, 2011). Halbesleben (2006) noted that social support may come from different sources (e.g., coworker, supervisor, family, and friends). Workplace social support has been described as emanating from the organization, supervisors, and coworkers (Kossek et al., 2011). Employees who receive support from both coworkers and supervisors experience less WFC (Kim, 2001). Relationships with supervisors and coworkers are impacted by the extent (i.e., intensity) to which employees telecommute (Golden, 2006). O'Driscoll et al. (2004) suggested that future research should examine supervisor and coworker support simultaneously.

With COR theory as an underpinning for social support, Goh, Ilies, and Wilson (2015) found that the daily relationship between workload and WFC was weaker for

employees with higher supervisor support than those with low support. However, Samad et al. (2014) found that a weak relationship existed between social support and reduced WFC. Previous research has generally focused on one aspect of support (Abendroth & den Dulk, 2011). Various sources of support have rarely been examined simultaneously (Ng & Sorensen, 2008). Kossek et al. (2011) posited that the source of support is critical and future researchers should take care in construct definition related to workplace social support.

Studies conducted to examine the level of social support received by employees have yielded mixed results when considering gender. Geller and Hobfoll (1994) found that although women did not benefit from social support received from their supervisor and coworkers, men did benefit from these levels of social support. However, other scholars found that although women received more social support from their coworkers than men (Fusilier, Ganster, & Mayes, 1986; Van Daalen, Sanders, & Willemsen, 2005), women also received more support from their supervisors than men (Fusilier et al., 1986). Despite a number of studies showing gender differences related to the relevance of social support, social support has been demonstrated to be effective in reducing WFC (Adams, King, & King, 1996; Behson, 2005; Carlson & Perrewe, 1999; Thomas & Ganster, 1995; Warren & Johnson, 1995).

Supervisor support. Thomas and Ganster (1995) defined the supportive supervisor as "one who empathizes with the employee's desire to seek balance between work and family responsibilities" (p. 7). When considering support as a resource, supervisor support is expected to be more consistent as it manifests itself in ways such as career development, listening to concerns, and answering questions, as well as other

employee considerations (Ng & Sorensen, 2008). Supervisors are advocates on behalf of the organization (Matthews & Toumbeva, 2015). Informal supervisor support may be more important to employee well-being than the provision for formal workplace policies (Hammer, Kossek, Yragui, Bodner, & Hanson, 2009). Supervisor support has been associated with positive job outcomes including high satisfaction and low distress when considered alongside flexible job schedules (Shinn, Wong, & Simko, 1989).

Perceived supervisor support (PSS) and work-family benefits are complementary to each other (Breaugh & Frye, 2008). Support from supervisors and upper management is needed in conjunction with policies around FWAs (Raabe & Gessner, 1988). When supervisors are supportive, the use of work-family programs increases (Kim & Mullins, 2016; Sweet, Pitt-Catsouphes, & James, 2016). Supportive supervisors encourage their employees to participate in work-family policies (Poelmans & Beham, 2008). In a study of supervisors in a large government agency, supervisor awareness of work-family programs was found to influence the frequency of employee referrals made to the programs (Casper, Fox, Sitzmann, & Landy, 2004).

Employees may not take advantage of flexible work policies if they feel that doing so will jeopardize job security, work assignments, or promotional possibilities (Glass & Estes, 1997). Many employees refrain from participating in work-life programs because of a lack of managerial support (Shellenbarger, 1992). In a qualitative study conducted by McDonald, Bradley, and Brown (2008), interviewees reported low levels of management support for FWAs and widely believed that management did not trust their employees to work off-site. Galea, Houkes, and De Rijk (2014) suggested that managerial style and support seem to be closely related to the utilization of FWAs. Koch

and Binnewies (2015) found that supervisors who provided support and segmented the home and work domains were perceived as strong work-life-friendly role models.

Powell and Mainiero (1999) discovered that many managers tend to focus on what will be in their own short-term best interest. In addition, they found that managers appeared to be influenced by the potential for work disruption when reviewing subordinates' requests for FWAs. Wells-Lepley, Thelen, & Swanberg's (2015) results indicated that challenges preventing use of FWAs included: structural (i.e., hours of operation, job schedule, and nature of the work); personnel concerns (i.e., treating employees equally and potential worker resentment); and administrative problems supervising staff. Similarly, managers who are inconsistent when approving subordinates' requests for FWAs may create resentment among employees who perceive unequal treatment (Powell & Mainiero, 1999). Conversely, family-supportive supervisor behaviors create perceptions of high work-family enrichment (Odle-Dusseau et al., 2012).

Role enrichment is important in employees' perceptions of support. Supervisors determine the amount of autonomy and feedback that employees experience, making jobs difficult to enrich if managerial methods are not supportive (Cummings & Worley, 2015). Golden, Barnes-Farrell, and Mascharka (2009) found that supervisors place more emphasis on information gathered from direct observations of employees than information acquired virtually. Epstein, Marler, and Taber (2015) found no evidence for a significant relationship between supervisor gender and the level of family-supportive behavior exhibited by the supervisor. However, Peters and Heusinkveld (2010) found that supervisors with higher education levels held more positive attitudes regarding the

social results of telework. These results were consistent with DiMaggio and Powell's (1983) hypothesis that organizations employing higher numbers of individuals with formal education will increase normative pressures, thereby influencing behaviors in the organization (Peters & Heusinkveld, 2010).

When there is a perceived lack of supervisor support for FWAs, employees who participate in FWAs may experience disparities in rewards when compared to their peers whose productive output is more visible to management (Glass & Fujimoto, 1995; Perlow, 1995). Positive effects on job satisfaction and health outcomes have been demonstrated when managers are supportive of work-family programs (Thomas & Ganster, 1995). Implementation and adoption of FWAs require support from managers in multiple levels of the organization. Organizations should make lower level managers aware of the benefits of FWAs and provide incentives to offer these programs rather than simply announcing that FWAs are available (Powell & Mainiero, 1999). Hammer, Kossek, Anger, Bodner, and Zimmerman (2011) found that supervisors are of central importance to the work-family interface.

Immediate supervisors can reduce the extent to which the work role of employees interferes with the family role (Lapierre & Allen, 2006). Emotional support is one facet of support and "involves actions that convey caring and empathetic understanding" (Rooney & Gottlieb, 2007, p. 187). Supervisors who manage employees participating in FWAs should define jobs and provide feedback for all workers consistently, rather than attempting to manage telecommuter employees in a more detailed manner (Lautsch & Kossek, 2011). Hammer et al. (2011) noted that more research is needed to examine how

employee perceptions of family-specific supervisor support link to human resource change initiatives.

Coworker support. Although much of the WFC research has focused on negative experiences at work, opportunities for enrichment can occur. In one study, job satisfaction and coworker support were shown to be closely related (O'Driscoll et al., 2004). For working couples, positive feelings of energy and enthusiasm expressed by an employee were shown to influence the other partner (Bakker, Demerouti, & Schaufeli, 2005; Wayne et al., 2013; Schooreel & Verbruggen, 2016). Similar to families, coworker relationships can influence how well employees function (Love & Forret, 2008). Although there is not a consensus in the literature regarding the definition of coworker support, Leavy (1983) provided a related description of social support as "the availability of helping relationships and the quality of those relationships" (p. 5).

Individuals often find sources of identity, meaning, and support in the workplace as it is where they spend most of their time (Burroughs & Eby, 1998). Individuals' immediate work groups shape their perceptions and behaviors in the context of WFC (Bhave et al., 2010). As organizational structures become flatter and team-based work increases, workers engage in more frequent lateral interactions (Chiaburu & Harrison, 2008). However, teleworkers may have struggles formulating work relationships and social identity (Tietze & Musson, 2010). In a study of high-intensity teleworkers, findings highlighted the importance of maintaining friendships between teleworkers and coworkers whose contact methods may be different than peers in traditional work arrangements (Fay & Kline, 2011).

Coworker support may influence the integration of the work and family domains, although some previous studies have combined coworker support together with another construct (Thompson & Prottas, 2006). Berman, West, and Richter (2002) found that managers generally have a positive orientation towards workplace friendship. One study of full-time workers found that coworkers are more important than managers related to WFC, contradicting other studies which found that organizational climate primarily depends on supportive managers (Selvarajan, Singh, & Cloninger, 2016).

Strong friendship ties among employees lead to reciprocity and social exchange, as posed by SET (Bowler & Brass, 2006). Bakker and Xanthopoulou (2009) found that resources can cross over when frequent engagement occurs between coworkers, with a resulting indirect effect on performance. Without social relationships in the workplace, employees are likely to perceive low social support in the organization (Lam & Lau, 2012). In a large study of over 69,000 employees, Basford and Offermann (2012) found that coworker support had a significant positive impact on employees' intent to stay at the organization. In addition, the researchers found that coworker support was significant for employees in both higher and lower level positions, indicating that the importance of coworker support was relevant throughout the entire organization.

Employees who telework can miss out on informal learning and interpersonal networking, both of which can provide learning opportunities and potential career advancement (Cooper & Kurland, 2002). In a study of high-intensity teleworkers, Belle, Burley, and Long (2015) identified the importance for these workers to experience organizational identification, a sense of being included, and communal qualities achieved through empathy and care for each other. Collins, Hislop, and Cartwright (2016) found

that permanent teleworkers developed a strong level of social disconnect with officebased staff, largely due to the lack of regular interaction with coworkers.

Employees who take advantage of FWAs and visibly demonstrate a concern for family or personal life may experience career consequences or negative judgments from others pertaining to a perceived lack of organizational commitment (Allen & Russell, 1999; Finkel, Olswang, & She, 1994). Minimal research has been conducted to examine the specific impact that coworkers have in providing resources to their peers in order to meet the demands of a complex work environment (Halbesleben & Wheeler, 2015; Love & Forret, 2008). De Sivatte and Guadamillas (2013) found a strong positive association between employees' perception of coworkers' use of FWAs and utilization. Conversely, results of a study of two separate organizations demonstrated that employees who perceived their coworkers as supportive of FWAs were not more likely to use FWAs (Lambert et al., 2008).

Telecommuting reduces organizational presence and visibility, thereby posing a threat to organization-related identities (Thatcher & Zhu, 2006). Value placed on the amount of time spent at work can be interpreted by employees to mean that more time put in at work demonstrates increased organizational commitment, also referred to as "chronic presenteeism" (Sheridan, 2004, p. 207). Employees who do not give the maximum amount of time can be less valued than peers who put in more hours (Lewis, 1997). McDonald et al. (2008) asserted that absences in both traditional and flexible work settings attract substantial career penalties. Female teleworkers with dependent children reported higher likelihoods of reduced work visibility and career development (Maruyama & Tietze, 2012). Although FWAs can be offered in the organization, these

policies can be "subverted by uncooperative supervisors or larger corporate cultures that still value long hours and continuous availability from workers" (Glass & Finley, 2002, p. 333). Therefore, inconsistencies can arise when organizations advocate for flexible work policies while simultaneously devaluing employees who use them (Putnam, Myers, & Gailliard, 2014).

When viewed through the lens of SET, coworkers interact as exchange partners and the quality of the relationship underlies a coworker's influence (Chen, Takeuchi, & Shum, 2013). Explicit statements by coworkers that a job does not allow for the balance of work and family needs, forcing individuals to reject or factor into their own evaluations provides an example of this influence (Bhave et al., 2010). Leonardi, Treem, and Jackson (2010) conducted a qualitative study of teleworkers. Employees working away from the main office experienced disconnection in a communicative sense and were not as connected with office happenings as they once were (Leonardi et al., 2010). However, participants in FWAs may not be isolated as is often assumed because the ease of technological communication can provide high connectivity (Fonner & Roloff, 2012). Fonner and Roloff (2012) found that teleworkers' sense of connection did not appear to be hindered by limited face-to-face communication.

In a study of 638 workers at a financial consultancy firm, Dikkers et al. (2004) found that employees who participated in FWAs were perceived as having less organizational commitment and also experienced negative career consequences.

Consequently, organizations with a long-hours culture create unaccommodating attitudes that are likely to discourage employees from making use of the work-life programs available to them (Beauregard & Henry, 2009). McDonald, Guthrie, Bradley, and

Shakespeare-Finch (2005) found that women who worked part-time or in FWAs perceived that opportunities for advancement were more limited, with the assumption that more time in the workplace demonstrated increased commitment. These types of attitudes can become prevalent among workers and result in negative outlooks among peers for those who participate in FWAs.

#### **Turnover Intention**

Retaining professional talent is important to organizations "as it eliminates the recruiting, selection, and on-boarding costs of their replacement, maintains continuity in their areas of expertise, and supports a culture in which merit can be rewarded" (Tymon, Stumpf, & Smith, 2011, p. 293). Researchers found that FWAs are negatively related to turnover intentions (Allen, 2001; Batt & Valcour, 2003; Grover & Crooker, 1995; Kossek et al., 2006; McNall et al., 2010; Roehling, Roehling, & Moen, 2001). The retention of telecommuters is a challenge faced by managers (Overbey, 2013). Supervisor support is negatively related to employee turnover (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002). Conversely, Teoh, Coyne, Devonish, Leather, and Zarola (2016) found that supportive management behaviors did not result in reduced turnover intention. When considering SET, employees should be more likely to reciprocate towards the organization and have lower turnover intention when they perceive support from their supervisor (Dysvik & Kuvaas, 2013).

When job satisfaction is high, individuals are more likely to stay in their current positions (Wright & Bonett, 2007). Holtom and Inderrieden (2006) suggested that flexible work policies can be important to embedding employees in organizations.

Employees who experience extensive WFC may quit their job in order to reduce conflict, and this action may be seen as a coping reaction. Golden, Veiga, and Dino (2008) found that professionally isolated teleworkers expressed the lowest turnover intention. In a study of dual-earner couples with access to flexible scheduling, Batt and Valcour (2003) found that turnover intention was significantly lower for men than women. The researchers also revealed that although women's turnover intention was significantly influenced by having a supportive supervisor, men's turnover intention was not. Felps et al. (2009) observed that the bulk of research on turnover has focused on individual attitudes as a sole precursor to leaving, rather than also considering other social influences such as coworker support.

Cheung and Wu (2013) studied older workers and found that workers had a higher intent to stay when the organization was perceived as supportive. A study of hospital employees demonstrated that individuals who shared a high-quality relationship with their supervisor were more likely to stay at the organization (Ballinger, Lehman, & Schoorman, 2010). As workers age and remain in the labor force, work intensification demands can be mitigated by offering more flexibility in the workplace (Perera, Sardeshmukh, & Kulik, 2015). However, other research has yielded conflicting results.

In a study conducted by Haar (2004), employees who perceived support from the employer for family-friendly programs were no less likely to consider leaving the organization than for employees who perceived unsupportive behaviors. Hill, Matthews, and Walsh (2016) found that family-supportive supervision had a significant negative direct effect on turnover intention although family-supportive organization perceptions was unrelated to turnover intention. Supervisor support was more important than

coworker support related to turnover intention in federal employees (Pitts, Marvel, & Fernandez, 2011).

Coworker satisfaction was found to be a predictor of employee turnover in a meta-analysis of antecedents of turnover intentions (Griffeth, Hom, & Gaertner, 2000). Thompson and Prottas (2006) examined a large, national, representative sample of employed adults and found that coworker support had a favorable relationship with turnover intention. Conversely, a study of health care workers found that coworker support did not predict turnover (Mossholder, Settoon, & Henagan, 2005). Frone, Yardley, and Markel (1997) found a negative relationship between coworker support and work distress. Holtom and Harman (2009) noted that little work exists on how social relationships affect turnover and that coworker relationships should be explored further in future research. Furthermore, scholars suggested that future research should pay greater attention to relational variables and social exchange relationships to manage turnover (Mossholder et al., 2005; Regts & Molleman, 2013).

Workers are attracted to employers that offer flexibility and work-life balance policies (Carless & Wintle, 2007; Casper & Buffardi, 2004; Honeycutt & Rosen, 1997). High turnover rates can impact the performance of the firm (Glebbeek & Bax, 2004). For most organizations, turnover impacts the bottom line (Flint et al., 2013). Turnover costs are evidenced in areas such as recruitment, selection, training, implicit knowledge, and service (Holtom, Mitchell, Lee, & Eberly, 2008). However, Rau and Hyland (2002) found that job attractiveness for FWAs is dependent on the level of the job seeker's interrole conflict.

One study conducted in a large technology company revealed that FWAs ranked 12th out of 16 factors used to decide to join a company (Rodgers, 1992). Notably, this same study showed that FWAs ranked fourth when consideration was made to leave the company, demonstrating how important flexible policies are in retaining high-performing employees (Rodgers, 1992). Chiaburu and Harrison (2008) revealed a negative relationship between coworker support and intention to quit in a meta-analysis of coworker support studies. These conflicting results in the literature necessitate future research to examine turnover intention and coworker support.

In a meta-analysis of telecommuting studies, Gajendran and Harrison (2007) found small favorable impacts of FWAs on individual outcomes including increased job satisfaction and lower turnover intent. In an experimental design study, Dalton and Mesch (1990) found that FWAs in the workplace resulted in a significant reduction in absenteeism. Conversely, their study did not demonstrate a link between FWAs and employee turnover (Dalton & Mesch, 1990). Additional studies are needed to examine turnover intention related to FWAs. Future research is also needed to examine discrepant findings related to work-family benefits and how the adoption of these programs is potentially affected by different types of support in the organization. Studies have yielded mixed results on the impact of FWAs for job attractiveness to employees or turnover intention.

Casper and Buffardi (2004) conducted a study that examined the impact of work-family policies on worker intent to pursue employment and the impact of work-family policies on recruitment. Their hypotheses examined whether work schedule flexibility would be positively related to job pursuit intentions and if the potential effects would be

mediated by anticipated organizational support. Limitations in their study were noted and included the observation that other potential complex variables not included in the study could impact applicants' work choices. In addition, Casper and Buffardi (2004) noted that a low response rate in the study should guide future research and expand results to achieve generalizability to a broader population. Given that the social environment influences individuals' attitudes and behaviors (Salancik & Pfeffer, 1978), organizational behavior outcomes such as turnover intention should be examined based on the social context of the individuals being studied. Few studies on turnover intention of public employees have considered both organizational and individual factors related to social support or job motivation (Kim, 2015).

## **Civilian Federal Employees**

During times of economic slowdown, public sector organizations face significant personnel challenges as government revenues decline. Public organizations often respond by targeting human resource costs, and subsequently struggle to address potential productivity declines or staffing shortages (Wadsworth & Facer, 2016). In a competitive job market, creative strategies are needed for government organizations to be the employer of choice beyond workers' motivation for public service (Vandenabeele, 2008). In the last 25 years, public organizations have offered non-traditional benefits (e.g., child care and employee assistance programs) and alternative work arrangements (e.g., flextime, compressed workweek, and telecommuting) to employees (Wadsworth & Facer, 2016). The motivational factors underlying the adoption of these types of work-family programs have been identified as varying from utilitarian (e.g., turnover reduction) to

altruistic (e.g., quality of life and gender equity) (Roberts, Gianakis, McCue, & Wang, 2004). Family-friendly fringe benefit packages are being offered by more public agencies in response to turnover concerns and changing dynamics in the workforce (Mulvaney, 2014).

The United States federal government has adopted telework programs and strives to be a model employer by providing resources and benefits to allow workers to balance time demands (Mastracci, 2013). The view that telework is a cost-efficient alternative to traditional work arrangements has resulted in adoption of FWAs by government agencies (Anderson et al., 2015). Federal and state governments have committed to expand FWAs through legislation (e.g., Telework Enhancement Act of 2010), establishing policies and guidelines authorizing employees to telework. The U.S. Office of Personnel Management issues an annual report to Congress known as the Status of Telework in the Federal Government. In the 2016 report, 44% of federal employees were eligible to telework (U.S. OPM, 2016, p. 12). Telework participation was shown to have steadily increased from 39% to 46% of eligible employees (U.S. OPM, 2016).

Among federal workers, a lack of supervisor support has prevented some employees from participating in FWAs. In the 2016 Federal Employee Viewpoint Survey (FEVS), nearly 20% of employees who did not telework indicated that they did not receive managerial approval to do so (U.S. OPM, 2016). These results are similar to a study conducted by WorldatWork (2015), which found that 21% of managers do not offer informal flexibility programs at their discretion. Although the FEVS demonstrated considerable progress of telework efforts among federal agencies, the results included

management resistance as one of the main remaining challenges to adopting FWAs (U.S. OPM, 2016).

Although many federal agencies have adopted telework programs, some employees may not be able to participate due to internal conflict or lack of resources (Bae & Kim, 2016). In a study of public employees participating in FWAs, no significant difference between genders related to work-family balance was found (Wadsworth & Facer, 2016). However, Bae and Kim (2016) found that female employees have the lowest level of job satisfaction when telework is formally available and they are unable to participate in the program. Wadsworth and Owens (2007) reported that both supervisor and coworker support were significantly and positively related to work enhancement of family for public employees. In a study of public sector agencies, Troup and Rose (2012) found that workers who used formal or informal telework arrangements had significantly higher job satisfaction than those who did not telework. Although most federal agencies have been described as taking action at the leadership level to promote telework, barriers to adoption of FWAs remain.

#### **Summary of the Chapter**

Chapter 2 provided a review of previous literature regarding the constructs of FWAs, organizational support, supervisor support, coworker support, and turnover intention. Work design and WFC were considered for additional background.

Shortcomings in the literature related to a lack of separate support measures and the need for additional testing of related constructs were addressed in this study.

### **Chapter 3: Design and Methodology**

### Introduction

This study was a cross-sectional quantitative investigation that utilized an online survey design. This chapter presents the methodology utilized in the development of the study and includes the following: the purpose of the study, research hypotheses, research model, design of the study, population, and sample. In addition, an overview of the instrumentation, survey design, data collection procedures, and data analysis is provided. The limitations of the study are also included.

# **Purpose of the Study**

The purpose of this study was to examine the influences of organizational support, supervisor support, and coworker support on the relationship between FWAs and turnover intention in the organization for civilian federal employees.

### **Research Hypotheses**

Six hypotheses were tested in this study, in an effort to respond to calls in the literature for research to disentangle and distinguish various sources of support that may exist (e.g., Abendroth & den Dulk, 2011; Allen, 2001; Ng & Sorensen, 2008; Rhoades & Eisenberger, 2002; Stinglhamber & Vandenberghe, 2003). Multiple support levels were considered in this study, including organizational support, supervisor support, and coworker support. Little extant literature exists regarding the level of support available to employees (Halbesleben & Wheeler, 2015). In a study that considered formal and informal support measures, Thompson and Prottas (2006) noted that future research should incorporate additional variables that may affect relationships not tested in their

study. The research hypotheses proposed in this study included testing of relationships between expanded support variables of organizational support, supervisor support, and coworker support in relation to turnover intention.

Despite the availability of work-family benefits such as FWAs, many employees do not utilize policies designed to reduce WFC (den Dulk & de Ruijter, 2008; Thompson et al., 1999). Research continues in an effort to identify the potential barriers that may contribute to this phenomenon. Given that organizational change is more effective when the organization leverages both structural and cultural support, the research related to these supports is not well integrated (Kossek et al., 2010). Without organizational support for work-family policies, there is little likelihood that managers within an organization will feel the need to support such guidelines (Rodgers, 1992). Employee perceptions of organizational support have been shown to strongly influence perceptions of supervisor support (Dick, 2011).

Shanock and Eisenberger (2006) reported that POS had a significant positive relationship with PSS. Mills et al. (2014) found that organizational support perceptions influenced supervisor support perceptions. Youn and Thye (2000) also found that organizational support positively enhanced supervisor support. As asserted by Dick (2011), the organization is likely to strongly influence on the way supervisors manage their employees. Although the importance of support in the organization for work-family programs has been identified (Poelmans & Beham, 2008; Raabe & Gessner, 1988; Selvarajan et al., 2013), the extent of the relationship between organizational and supervisor support is much less investigated and in need of further clarification. To test

previous findings in the context of FWAs, the following hypothesis was proposed to consider influence between organizational support and supervisor support:

**H1:** Organizational support of FWAs is directly and positively related to supervisor support.

Although Mills et al. (2014) found that organizational support perceptions influenced supervisor support perceptions, they called for examination of other potential foci in future studies. Beauregard and Henry (2009) demonstrated that organizations with a long-hours culture create unaccommodating attitudes, which are likely to discourage employees from making use of work-life programs. In a study of police, Biggs et al. (2014) found that work culture support predicted both supervisor and coworker support. As organizational culture may be predictive of organizational support, the following hypothesis was proposed to consider influence between organizational support and coworker support:

**H2:** Organizational support of FWAs is directly and positively related to coworker support.

Given the impact immediate supervisors can have on employees related to FWAs (Lapierre & Allen, 2006; Lautsch & Kossek, 2011), further empirical testing is needed to measure the influence immediate supervisors may have on coworker support. Previous findings that managers have a positive orientation toward workplace friendships (Berman et al., 2002) were further explored in this study with the inclusion of FWAs. Hancock and Page (2013) found both support from supervisors and coworkers to be important related to WFC. Selvarajan et al. (2016) proposed that resources do not act in isolation and that future research should examine co-worker support in conjunction with

supervisor support and other contextual variables. Therefore, the following hypothesis was proposed to consider influence between supervisor support and coworker support:

**H3:** Supervisor support is directly and positively related to coworker support.

Breaugh and Frye (2008) asserted that family-friendly benefits and supervisor support are complementary to each other. Many employees refrain from participating in work-life programs such as FWAs because of a lack of managerial support (Shellenbarger, 1992). Rhoades and Eisenberger (2002) posited that the antecedents and consequences of perceived organizational support are important as related to employee outcomes. However, Allen (2001) suggested that availability of FWAs alone had minimal effect on job attitudes and experiences. Eisenberger et al. (2002) found that supervisor support is negatively related to employee turnover. A high-quality relationship between supervisors and employees was cited as motivation for employees to stay at the organization (Ballinger et al., 2010). However, Teoh et al. (2016) found that supportive management behaviors did not reduce turnover intention.

Timms et al. (2015) found that use of FWAs had a minimal direct relationship with turnover intentions. Conversely, Grover and Crooker (1995) found that work-life policies predicted turnover intention. Their conclusions noted that work-life policies have no value if managerial or organizational support does not accompany those benefits. Supervisor support has been identified as a characteristic that affects employee retention (George, 2015). When considering federal employees, Pitts et al. (2011) suggested that supervisor support is more important than coworker support related to turnover intention As Hammer et al. (2011) noted, more research is needed to examine how employee perceptions of family-specific supervisor support link to organizational change initiatives.

Given these prior conclusions, the relationship between supervisor support and turnover intention was tested in the context of FWAs. Therefore, the following hypothesis was proposed to consider influence between supervisor support and turnover intention:

**H4:** Supervisor support is directly and negatively related to turnover intention.

Frone et al. (1997) found a negative relationship between coworker support and work distress. Coworker support has been identified as a characteristic that affects employee retention (George, 2015). Thompson and Prottas (2006) found that coworker support had a favorable relationship with turnover intention. In addition, Chiaburu and Harrison (2008) found that there was a negative relationship between coworker support and intention to quit. Conversely, Mossholder et al. (2005) found that coworker support did not predict turnover. However, coworker support is often considered separately in research and not simultaneously with other distinct support levels.

Coworker support has been posited as less important than supervisor support related to turnover intention (Pitts et al., 2011). Scholars have noted that research on turnover has largely focused on individual attitudes rather than other social influences such as coworkers (Felps et al., 2009). Few studies of public employees have considered both organizational and individual factors related to social support when considering turnover intention (Kim, 2015). Given the limited research that exists on the relationship between social relationships and turnover intention (Felps et al., 2009), the following hypothesis was proposed to consider influence between coworker support and turnover intention.

**H5:** Coworker support is directly and negatively related to turnover intention.

Allen et al. (2013) suggested that organizational support practices may be more beneficial than FWAs in reducing WFC. This study addressed the need for more examination of organizational support on turnover intention in the context of FWAs. Employees should reciprocate more towards the organization and have lower turnover intention when they perceive they are receiving support from their supervisor (Dysvik & Kuvaas, 2013). Golden et al. (2008) found that isolated teleworkers expressed lower turnover intention than traditional workers. Allen (2001) suggested a negative relationship existed between FWAs and turnover intention when considering intervening variables such as family-supportive organizational perceptions.

Previous studies have found that FWAs are negatively related to turnover intentions (Allen, 2001; McNall et al., 2010). However, Haar (2004) found that organizational support was not a significant determinant when employees considered whether to leave the organization. In addition, Hill et al. (2016) found that family-supportive organization perceptions was unrelated to turnover intention. As a result, the the following hypothesis was proposed to consider influence between organizational support and turnover intention:

**H6:** Organizational support is directly and negatively related to turnover intention.

#### Research Model

The research model was built on Hobfoll's (2001) framework of conservation of resources (COR) theory (Figure 2). As resource gain can generate new resources and influence employee performance, COR theory can be used as a lens to better understand

relationships between WFC and turnover intentions (Nohe & Sonntag, 2014). Support can enhance the interaction between work-family domains; therefore, the research model incorporated three sources of support (organizational support, supervisor support, and coworker support) as suggested by Kossek et al. (2011). Prior studies have reported that PSS will lead to POS (Hutchison, 1997; Rhoades, Eisenberger, & Armeli, 2001). However, Yoon and Thye (2000) proposed a model with opposite directionality, suggesting that POS leads to PSS. The results of their study indicated that POS enhanced both supervisor support and coworker support (Yoon & Thye, 2000). The research model for this study further tested Yoon and Thye's (2000) model by applying the POS to PSS directionality in the context of FWAs.

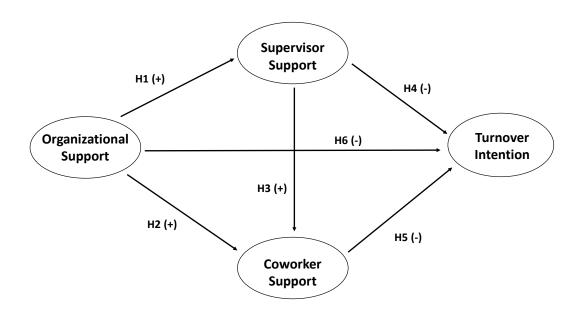


Figure 2. Research Model

Shanock and Eisenberger (2006) proposed a model that examined the relationships between perceived organizational support (POS), perceived supervisor support (PSS), and organizational outcomes. The results of their study found that POS

had a significant positive relationship with PSS. In this study, the research model also considered the influence of coworker support. Casper and Buffardi (2004) proposed a model that considered the relationship between work schedule flexibility and job pursuit intentions, mediated by anticipated organizational support. The results from their study suggested that the effects of schedule flexibility on job pursuit intentions are fully mediated by anticipated organizational support. To expand on the Casper and Buffardi (2004) model, social support levels (i.e., supervisor support and coworker support) were added.

### **Design of the Study**

A cross-sectional online survey, quantitative research design was utilized to conduct the study. The quantitative approach is appropriate as theoretical work precedes the data collection, along with the testing of existing constructs and measurements (Bryman & Bell, 2011). In addition, the data collected through the quantitative approach is depicted as "robust and unambiguous, owing to the precision offered by measurement" (Bryman & Bell, 2011, p. 412). Previously operationalized measurement scales were utilized, which increased the reliability of the study. Researchers have proposed the use of the measurement model of structural equation modeling (SEM) to examine the latent nature of a construct, negating the need to re-validate existing measurement scales (Borsboom, 2006; Clark, 2006; Sijtsma, 2006). The cross-sectional design was used to collect quantitative data at a single point in time in connection with two or more variables and examined to detect patterns of association (Bryman & Bell, 2011). In this study, hypotheses and relationships between variables were tested. Therefore, a cross-sectional

approach was considered appropriate to determine initial relationships between proposed constructs. If these relationships are established, future research should include longitudinal or other research designs.

## **Survey Testing**

Before the main survey was conducted, an online test survey was created that contained the study's target instruments and demographic variables. The intent of this survey was to conduct pre-testing of the survey layout and gather feedback from respondents. In addition, various email subject lines were tested to determine which would be the most meaningful in generating interest to complete the survey (Appendix M). Information gap theory suggests that a gap in knowledge elicits a curiosity in the individual to seek out additional information (Loewenstein, 1994). The email subject line is the first visible element of an email and can have the potential to lure or repel the target respondent, potentially affecting reaction decisions (Sappleton & Lourenco, 2016).

The test survey was emailed to 60 master's and doctoral graduate students from a public, 4-year university in Texas. Of the 60 surveys distributed, a total of 55 surveys were completed. Forty-eight percent of the respondents selected "Will you help out a Ph.D. student?" as their first choice of email subject lines. Four respondents indicated that the life stages listed in the survey did not apply to them and that definitions should be expanded to include additional age groups and number of children in the home. Four respondents indicated that they felt the instructional manipulation checks (IMC) included in the survey were helpful to ensure that the respondent was paying attention to the questions in the survey. Based on the highest preference of survey respondents, the

subject selected for implementation in the main study was "Will you help out a PhD student by Completing Survey?" In addition, life stage demographic categories were adjusted to reflect information not captured in previous studies.

# **Population**

The study context included representation from the approximately 2.2 million civilian employees who work for the United States government (U.S. OPM, 2016). The U.S. OPM (2016) has deemed nearly half of these employees eligible to telework. This population was selected due to the wide prevalence of FWAs mandated through the Telework Enhancement Act of 2010. The population included a broad group of individuals with demographic diversity from multiple agencies in the federal government. As federal agencies offer more access to FWAs and promote its use to their employees, the implications of these efforts may be important to HRD researchers. The results gathered from this population can potentially provide insight to other industries and demographics in future studies.

# Sample

A convenience sampling method was used due to the nature of accessibility of the data in question (Bryman & Bell, 2011). The sample was gathered from multiple federal governmental departments and agencies that included the following: Bureau of Reclamation, Bureau of Safety and Environmental Enforcement, Census Bureau, Department of Education, Food and Nutrition Service, Department of Agriculture, Bureau of Land Management, Bureau of Ocean Energy Management, Fish and Wildlife Service, U.S. Forest Service, Department of Transportation, Environmental Protection

Agency, International Trade Administration, National Institute of Standards and Technology, Patent and Trademark Office, and National Park Service. Email addresses for civilian federal employees were obtained through Freedom of Information requests and publicly accessible contact lists.

It was expected that the sample would be representative of the broader population of the federal civilian workforce and that gathered data could be generalized to this industry. The minimum required sample size for studies has been widely cited at ten subjects per item (Nunnally, 1978). Bentler and Chou (1987) suggested that the ratio of sample size to number of free parameters should range from 5:1 under normal circumstances to 10:1 for arbitrary distributions. Models with fewer indicators generally require a larger sample relative to models with more indicators (Wolf, Harrington, Clark, & Miller, 2013). When using SEM, a median sample size found in studies is 200; however, it has also been noted that more than 200 may be required for complex models or non-normal distributions (Kline, 2016). In the case of this study, a larger sample size was targeted to increase the rigor of the study with 51 items in the online survey. Following the 10:1 ratio suggested by Bentler and Chou (1987), a minimum of 510 responses were sought to complete this study with a target number of 1,020 responses.

#### Instrumentation

The research model (Figure 2) was tested by utilizing previously operationalized measurement scales. The measurement for FWAs consisted of questions adapted from the U.S. Federal Employee Viewpoint Survey (2016) to determine the extent to which respondents have access to FWAs or participate in these programs. Organizational

support, coworker support, and supervisor support consisted of subscales adapted from Survey of Perceived Organizational Support developed by Eisenberger et al. (1986). Turnover intention consisted of a measure developed by Kelloway, Gottlieb, and Barham (1999). Copies of the complete measures are included in Appendices A – C. In addition, complete measures included in the survey and not considered in this study are included in Appendix D and E.

Flexible work arrangements. To measure perceived usability and availability of FWAs, an existing survey was referenced related to telework. Two questions were utilized from the U.S. Federal Employee Viewpoint Survey (2016) as shown in Appendix A. An example item is: 'Have you been notified whether or not you are eligible to telework?'

# Support.

Eisenberger et al. (1986) developed the Survey of Perceived Organizational Support (SPOS) instrument to measure perceived organizational support (See Appendix B). The SPOS has been widely utilized by researchers and adapted in various short form versions (e.g., Cheung & Wu, 2013; Eisenberger, Cummings, Armeli, & Lynch, 1997; Eisenberger et al., 1990; Eisenberger et al., 2002; Halbesleben & Wheeler, 2015; Hayton, Carnabuci, & Eisenberger, 2012; Ladd & Henry, 2000; Liu, Lee, Hui, Kwan, & Wu, 2013; Matthews, Mills, Trout, & English, 2014; Shore & Wayne, 1993; McNall, Masuda, Shanock, & Nicklin, 2011; Mossholder et al., 2005; Rhoades et al., 2001; Settoon & Mossholder, 2002; Selvarajan et al., 2016; Shanock & Eisenberger, 2006; Shantz, Alfes, & Latham, 2016; Stinglhamber & Vandenberghe, 2004; Wu, Hu, & Jiang, 2012). Prior studies provided evidence regarding the reliability and validity of the SPOS scale

(Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001; Eisenberger et al., 1990; Shore & Wayne, 1993).

For practical reasons, the majority of studies on POS have used a shorter version of the instrument that consisted of the 17 highest loading items (Rhoades & Eisenberger, 2002). Rhoades and Eisenberger (2002) suggested that future researchers use prudence to include both facets of employees' contribution and employees' well-being when developing short forms of the instrument. "Because the original scale is unidimensional and has high internal reliability, the use of shorter versions does not appear problematic" (Rhoades & Eisenberger, 2002, p. 699).

Prior uses of the SPOS were reviewed and findings demonstrated that instrument items were reduced to three (M. Edwards & Peccei, 2010; Eisenberger et al., 2002; Halbesleben & Wheeler, 2015; Matthews et al., 2014), four (Shantz, Alfes, & Latham, 2016; Wright, Mohr, Sinclair, & Yang, 2015;), six (Eisenberger et al., 2001; Hayton, Carnabuci, & Eisenberger, 2012; Mossholder et al., 2005; Settoon & Mossholder, 2002; Shanock & Eisenberger, 2006; Wu, Hu, & Jiang, 2012), eight (Eisenberger et al., 1997; Liu et al., 2013; Rhoades et al., 2001; Selvarajan et al., 2016; Stinglhamber & Vandenberghe, 2004), nine (Ladd & Henry, 2000), and ten (Armstrong-Stassen & Ursel, 2009; Cheung & Wu, 2013). In this study, the a priori decision was made to select seven high-loading items from the SPOS similar to methods used in previous studies. Based on the SPOS scale reduction and validity testing in previous studies, the researcher was confident that the empirical results of these measures were sufficient to proceed with the study.

Organizational support. Organizational support was a seven item short form measure (Table 1) adapted from Eisenberger et al. (1986). This seven item short version was anchored on a 7-point Likert scale ranging from 1 indicating strongly disagree to 7 indicating strongly agree. As suggested by Rhoades and Eisenberger (2002), items measured employees' perception that the organization values their contribution and wellbeing. Reverse-coded items were not selected as negatively-worded items may generate artifactual response factors and may be a source of common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

Table 1.

SPOS revised wording for Organizational Support

Original Wording (Eisenberger et al., 1986, p. 502)	Revised Wording		
"The organization values my contribution to its well-being."	"By offering FWAs, my organization values my contribution to its well-being." (OS1)		
"The organization strongly considers my goals and values."	"By offering FWAs, my organization strongly considers my goals and values." (OS2)		
"The organization really cares about my well-being."	"By offering FWAs, my organization really cares about my well-being." (OS3)		
"The organization is willing to extend itself in order to help me perform my job to the best of my ability."	"By offering FWAs, my organization is willing to extend itself in order to help me perform my job to the best of my ability." (OS4)		
"The organization is willing to help me when I need a special favor."	"By offering FWAs, my organization is willing to help me when I need a special favor." (OS5)		
"The organization cares about my general satisfaction at work."	"By offering FWAs, my organization cares about my general satisfaction at work." (OS6)		
"The organization cares about my opinions."	"By offering FWAs, my organization cares about my opinions." (OS7)		

Seven high-loading items were selected from the original SPOS scale (Items 1, 4, 9, 10, 20, 21, and 25; factor loadings of .710, .740, .830, .800, .720, .820, and .820 respectively). An example item is: 'By offering FWAs, my organization strongly

considers my goals and values.' Items asked respondents the extent to which they feel support from their organization through the availability of FWAs. Eisenberger et al. (1986) reported Cronbach's alpha ( $\alpha$ ) of .930 for the original SPOS scale. Liu et al. (2013) reported Cronbach's alpha ( $\alpha$ ) of .890 for a reduced eight item version measuring POS and Shantz et al. (2016) reported Cronbach's alpha ( $\alpha$ ) of .890 for a reduced four item version.

Supervisor support. Supervisor support was a seven item short form measure (Table 2) adapted from Eisenberger et al. (1986). This seven item short version was anchored on a 7-point Likert scale ranging from 1 indicating strongly disagree to 7 indicating strongly agree. As suggested by Rhoades and Eisenberger (2002), items measured employees' perception that their supervisor values their contribution and wellbeing. Reverse-coded items were not selected as negatively-worded items may generate artifactual response factors and may be a source of common method bias (Podsakoff et al., 2003).

Seven high-loading items were selected from the original SPOS scale (Items 4, 8, 9, 18, 20, 21, and 25; factor loadings of .740, .740, .830, .670, .720, .820, and .820 respectively). An example item is: 'My supervisor really cares about my well-being.' Items asked respondents the extent to which they feel support from their supervisor. Eisenberger et al. (1986) reported Cronbach's alpha ( $\alpha$ ) of .930 for the original SPOS scale. Selvarajan et al. (2016) used an eight item version of the SPOS scale and replaced the word 'organization' with 'supervisor,' with Cronbach's alpha ( $\alpha$ ) reported as .930. Shanock & Eisenberger (2006) used a six item version of supervisor support and reported Cronbach's alpha ( $\alpha$ ) of .870.

Table 2.

SPOS Revised Wording for Supervisor Support

Original Wording (Eisenberger et al., 1986, p. 502)	Revised Wording		
"The organization strongly considers my goals and values."	"My supervisor strongly considers my goals and values." (SS1)		
"Help is available from the organization when I have a problem."	"Help is available from my supervisor when I have a problem." (SS2)		
"The organization really cares about my well-being."	"My supervisor really cares about my well-being." (SS3)		
"The organization would grant a reasonable request for a change in my working conditions."	"My supervisor would grant a reasonable request for a change in my working conditions." (SS4)		
"The organization is willing to help me when I need a special favor."	"My supervisor is willing to help me when I need a special favor." (SS5)		
"The organization cares about my general satisfaction at work."	"My supervisor cares about my general satisfaction at work." (SS6)		
"The organization cares about my opinions."	"My supervisor cares about my opinions." (SS7)		

Coworker support. Coworker support was a seven item short form measure (Table 3) adapted from Eisenberger et al. (1986). This seven item short version was anchored on a 7-point Likert scale ranging from 1 indicating strongly disagree to 7 indicating strongly agree. As suggested by Rhoades and Eisenberger (2002), items measured employees' perceptions that their coworkers value their contribution and wellbeing. Reverse-coded items were not selected as negatively-worded items may generate artifactual response factors and may be a source of common method bias (Podsakoff et al., 2003). Similar to Neves (2014), items were chosen on whether those actions adequately represented the relationship between coworkers. Seven high-loading items were selected from the original SPOS scale (Items 4, 8, 9, 13, 20, 21, and 25; factor loadings of .740, .740, .830, .660, .720, .820, and .820 respectively). An example item is: 'My coworkers are willing to help me when I need a special favor.' Items asked respondents the extent to which they feel support from their coworkers. Eisenberger et

al. (1986) reported Cronbach's alpha ( $\alpha$ ) of .930 for the original SPOS scale. Similarly, Mossholder et al. (2005) reported Cronbach's alpha ( $\alpha$ ) of .740 for similar adapted short version of this scale measuring coworker support.

Table 3.

SPOS Revised Wording for Coworker Support

Original Wording (Eisenberger et al., 1986, p. 502)	Revised Wording		
"The organization strongly considers my goals and values."	"My coworkers strongly consider my goals and values." (CS1)		
"Help is available from the organization when I have a problem."	"Help is available from my coworkers when I have a problem." (CS2)		
"The organization really cares about my well-being."	"My coworkers really care about my well-being." (CS3)		
"The organization would forgive an honest mistake on my part."	"My coworkers would forgive an honest mistake on my part." (CS4)		
"The organization is willing to help me when I need a special favor."	"My coworkers are willing to help me when I need a special favor." (CS5)		
"The organization cares about my general satisfaction at work."	"My coworkers care about my general satisfaction at work." (CS6)		
"The organization cares about my opinions."	"My coworkers care about my opinions." (CS7)		

Turnover intention. As shown in Appendix C, turnover intention was a four item measure developed by Kelloway et al. (1999). The original measurement utilized a 5-point Likert scale ranging from 1 indicating *strongly disagree* to 5 indicating *strongly agree*. Based on recommendations from Podsakoff et al. (2003), a 7-point Likert scale was utilized to increase variance among the scale responses. The measure was anchored on a 7-point Likert scale ranging from 1 indicating *strongly disagree* to 7 indicating *strongly agree*. An example item is: 'I am thinking about leaving this organization.' Kelloway et al. (1999) reported Cronbach's alpha ( $\alpha$ ) of .920 for the original Turnover Intention scale. This measure has been widely used in studies and Cronbach's alphas ( $\alpha$ ) have been reported ranging from .880 to .960 (e.g., Chen, 2005; Chen, Ployhart, Thomas,

Anderson, & Bliese, 2011; Dane & Brummel, 2013; Harris, Li, & Kirkman, 2014; Hausknecht, Sturman, & Roberson, 2011; Haynie, Harris, & Flynn, 2016; Nohe & Sonntag, 2014).

Control variables. Control variables were included in the study as they may rule out alternative explanations for the research findings (Schmitt & Klimoski, 1991).

Previous research and theoretical underpinnings were examined to identify potentially relevant control variables and justification was provided for their inclusion as suggested by Becker (2005). Becker (2005) argued that control variables are as important as independent and dependent variables. In this study, the control variables of telework eligibility, telework participation, gender, life stage, generational cohort, organizational tenure, teleworking tenure, job role, marital status, income type, and education level were included based on selection criteria as recommended by Carlson and Wu (2012).

Demographic information of respondents was gathered through a series of questions pertaining to work status and individual characteristics. Race was listed to include the following options: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, Two or More Races (Not Hispanic or Latino), or White (U.S. FEVS, 2015).

Previous researchers determined that gender, age, and tenure function as antecedents in stressor relationships (Bowers et al., 1996; Shirom et al., 2008). Given that prior work-family studies have indicated the importance of gender in work-family research (e.g., Behson, 2002; Bianchi & Milkie, 2010; Gutek, Searle, & Klepa, 1991; Pleck, 1977), gender was included as a control variable and options were male or female

(U.S. FEVS, 2016). As asserted by Craig and Sawrikar (2009), women are more likely to engage in different scheduling practices than men.

In a large study of employees considering workplace flexibility, those over the age of 45 were found to be more engaged than counterparts younger than the age of 45 (Pitt-Catsouphes & Matz-Costa, 2008). The newest generation entering the workforce is substantively different from previous generational cohorts, and one of the most important emerging issues in HRD research is how to assist organizations in dealing with shifting demographics (Eversole, Venneberg, & Crowder, 2012). This finding was further tested in the current study with a support context applied specifically to the availability of FWAs in the organization. Bal and De Lange (2015) found that younger workers may be affected in their work motivation, while older workers may be more affected in their work behavior.

Life stage included eight family categories similar to operationalization in previous studies (Allen & Finkelstein, 2014; Baltes & Young, 2007; Erickson, Martinengo, & Hill, 2010) including the following: establishment (respondents under the age of 35 with no children in the home); mid-stage (respondents age 36-53 with no children in the home); formation (respondents over age 54 with no children in the home); very young children (respondents whose youngest child is under the age of three); preschool children (respondents whose youngest child is 3-5 years of age); elementary schoolchildren (respondents whose youngest child is 6-12 years of age); teenage children (respondents whose youngest child is 13-18 years of age); grown children (respondents whose youngest child is 19+ years of age); and empty nest (respondents over the age of 54 with no children in the home).

The phenomenon of shifting demographics in the workplace has created a need for more research related to generational difference of workers (Eversole et al., 2012). Generational cohort was classified into the following categories: Baby Boomers; Generation X; and Millennials. Baby Boomers were defined as individuals who were born from 1945 to 1964, Generation X as 1965 to 1980, and Millennials as 1981+ (Debevec, Schewe, Madden, & Diamond, 2013). Rather than accept assumptions that older workers are "dead wood" in organizations, Pitt-Catsouphes and Matz-Costa (2008) asserted that contemporary career theories should examine ways that work environments engage workers at younger, mid-life, and older stages. Given this consideration and a response to the call from Allen and Finkelstein (2014) for further research of the relationship between flexibility in the workplace and life stages, this demographic component was included in the current study. As a result, the control variables of life stage and generational cohort were incorporated into the study.

Organizational tenure was used as a control variable as it has been found to have a negative relation to turnover (Cotton & Tuttle, 1986; G. Lewis, 1991; Pitts et al., 2011). Similar to Golden and Veiga (2005), telecommuting tenure was included as a control variable to preclude any honeymoon effects (i.e., the possibility of unintended effects). Organizational tenure and telecommuting tenure were classified into the following ranges: Less than one year; 1 to 3 years; 4 to 5 years; 6 to 10 years; 11 to 20 years; and 20 years and greater (Caillier, 2012).

The important role of supervisor support in the organization has been demonstrated in the literature and necessitates the identification of job role in this study.

Job role selections were employee, middle management, and top management (Ollier-

Malaterre, 2010). Marital status was indicated as married or not married (Masuda et al., 2011). Given the rise of dual income earners, respondents were asked if their household had a single or dual income (Mulvaney, 2014). As noted by Peters and Heusinkveld (2010), education level was included to measure employees' perceptions of telework in the organization. The highest level of education achieved included high school, associate degree, bachelor's degree, master's degree, doctoral degree, and other.

## **Survey Design**

The survey was organized into six blocks. Block 1 included informed consent, Block 2 included five questions regarding telework, Block 3 included seven items measuring organizational support of FWAs and one instructional manipulation check (IMC). Block 4 included 14 items measuring supervisor and coworker support. Block 5 included 17 items for variables not examined in the current study, one IMC, and four items measuring turnover intention. Block 6 contained the ten demographic items. Babbie (2008) asserted that interview surveys should include demographic questions at the beginning and self-administered surveys should include them at the end.

A description of the study, confidentiality information, and purpose of the research were included in Block 1. Respondents were provided the opportunity to select Agree or Disagree before they proceeded to the rest of the survey. If the Disagree option was selected, the respondent was automatically redirected to the end of the survey and was not allowed to continue. For web researchers, respondent privacy and anonymity is a concern and reluctance to engage will increase if there is a perception that the security of the individual is compromised (Rogelberg, Spitzmuller, Little, & Reeve, 2006).

In online surveys, many respondents wonder if their answers will be treated confidentially (Evans & Mathur, 2005). To control for common method variance, respondents were informed during the consent section that confidentiality would be protected as no identifying information was collected. In addition, respondents were reminded that their participation was completely voluntary and they would be able to exit the survey at any time. If not verified, respondents were screened and automatically redirected to the end of the survey. Respondents were assured that there were no right or wrong answers to reduce evaluation apprehension (Henchy & Glass, 1968). Three instructional manipulation checks (IMC) were included throughout the survey questions to ensure that respondents were reading instructions appropriately as suggested by Oppenheimer, Meyvis, and Davidenko (2009).

To avoid bias or influence of the respondents, the purpose of the survey was described in general terms as examining workplace dynamics and to understand worker perceptions. Prior research indicates respondents are more likely to complete surveys if the studies have a high topic interest (Groves, Presser, & Dipko, 2004; Zillmann, Schmitz, Skopek, & Blossfeld, 2014). The subject of this research demonstrated topic salience as questions were engaging to employees, practical for HRD practitioners, and relevant to HRD research. The dependent variable was listed after independent variables to address common method bias (Podsakoff et al., 2003). To further address common method bias, impulsive responses to questions were mitigated by stressing the importance of answering accurately and carefully reading each statement or question (MacKenzie & Podsakoff, 2012).

Survey questions required a response before the respondent was able to proceed to the next page of the survey to control for missing data. To increase likelihood of completion, the survey was designed to be completed in less than ten minutes. Thirteen minutes or less has been suggested to be the optimal amount of time for a survey to be completed (Asiu, Antons, & Fultz, 1998). The Next button was included at the bottom of each survey page and respondents were able to observe completion status in the progress bar as the Percent Complete status was automatically updated throughout the survey.

#### **Data Collection Procedures**

To collect the data, Freedom of Information Act (FOIA) requests were submitted to various governmental agencies and departments requesting email addresses of federal employees. In addition, email addresses were gathered from publicly accessible federal agencies staff directories. The link to an online survey built in Qualtrics was distributed to the email addresses collected through the FOIA requests. Approval was received from the University of Texas at Tyler's Institutional Review Board (IRB) to collect data for the study (Appendix J). Contact information for the University of Texas at Tyler Institutional Review Board was also provided. A recruitment email was sent to the targeted individuals (Appendix L). Based on results of the test survey, the subject line used for the recruitment email was "Will You Help Out a Ph.D. Student by Completing a Survey?"

Although online surveys are desirable to distribute to a large population, potential weaknesses can occur. Blanket emailing often resembles spam when sent to large numbers of potential respondents (Evans & Mathur, 2005). In addition, response rates

can be very low when organizational policy generally prohibits respondents from participating in online surveys (Baruch & Holtom, 2008). Cybersecurity breaches throughout federal agencies have contributed to a heightened sensitivity to spam and phishing activities. The servers at the Federal Aviation Administration (FAA) were breached by hackers in 2009 and the personal information of 45,000 current and former FAA employees was compromised (Bain & Mosquero, 2009). In 2014, two breaches of the United States Office of Personnel Management resulted in the sensitive information of 22.1 million people being compromised (Nakashima, 2015).

In both mail and online surveys, incentives are used to increase respondent response rates (Fan & Yan, 2010). To encourage increased participation, seven \$20 Amazon gift cards were given to randomly drawn respondents who fully completed the surveys. This amount was offered to comply with the Standards of Ethical Conduct for Employees of the Executive Branch (1992) concerning gifts from outside sources. After the data collection period ended, the winners were contacted via the email address they provided and were sent the electronic gift card.

Respondents were informed of the voluntary nature of the survey, confidentiality, potential risks, and that they could exit the survey at any time. Survey responses were kept confidential and were reviewed only by the researcher and by members of the dissertation committee. No identifying information (e.g., name, address, or IP addresses) was collected from respondents. Respondents who wished to be included in the drawing for the Amazon gift cards were given the opportunity to provide their email address in a separate Qualtrics survey link. In this way, respondents' email addresses were not tied to any individual survey responses.

### **Data Analysis Procedures**

### **Data Screening.**

To analyze the data, IBM® SPSS® Statistics 24 and IBM® SPSS® Amos 24 statistical software programs were used. Once the data was collected from the completed surveys, the data was analyzed to determine which, if any, responses should be eliminated. Respondents who refused to agree to the informed consent section were eliminated along with those who exited from the survey with partial completion.

Respondents who failed the last IMC were removed from the results. The length of time to complete the surveys and straight lining of the answers were also examined.

Respondents who took less than four minutes to complete the survey were eliminated from the data results. Descriptive statistics including means, standard deviations, and construct correlations were included.

## **Assumptions Testing.**

Assumptions testing was performed by first examining the normality of the data distribution. Histograms and Q-Q plots were produced to visually examine normality and test for skewness ( $|\gamma_1|$ ) and kurtosis ( $|\gamma_2|$ ). Kline (2016) recommended that data are considered to be normal if  $|\gamma_1| < 3$  and  $|\gamma_2| < 10$ . The homoscedasticity of the data was examined by using the Leven's test (Levene, 1960) to determine the level of statistical significance between variances. It should be noted that statistically significant results can result from large sample sizes and should be interpreted accordingly (Field, 2013). To determine potential statistically significant differences between groups in the sample, analysis of the control variables was conducted.

Next, reliabilities of the measurement scales were examined. The reliability of the data was examined by testing internal consistency (Thompson, 1994). The reliability of scores is important to understand observed relationships between variables (Henson, 2001). Validity is used to determine "whether or not an indicator (or set of indicators) that is devised to gauge a concept really measures that concept" (Bryman & Bell, 2011, p. 159). To determine convergent validity, the implied correlations, average variance extracted (AVE), and composite reliability (CR) were calculated (cf. Kline, 2016). All four measures were allowed to correlate and a preliminary examination of common method variance was conducted. The means for each indicator were converted into scale scores for each measurement scale in subsequent data analysis.

## Measurement and Structural Model Analysis.

Structural equation modeling (SEM) was utilized as it is a method used to depict "relations among observed and latent variables in various types of theoretical models, which provide a quantitative test of a hypothesis by the researcher" (Schumacker & Lomax, 2016, p. 1). As outlined by Byrne (2010), the general SEM model was decomposed into a measurement model and then the structural model. The measurement model was applied to the data before theoretical testing was completed (cf. Schumacker & Lomax, 2016). To conduct a preliminary examination of common method variance, all four measures were allowed to correlate and a Harman's single-factor test was performed (cf. Podsakoff et al., 2003) and common latent factor test.

Factor analysis was conducted by examining factor loadings and Barlett's test of sphericity. In addition, the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) (Kaiser, 1970) was used. Hutcheson and Sofroniou (1999) recommended accepting

values greater than 0.5 as minimum acceptable with values up to 0.9 being excellent. Factor analysis is used both to test measurement integrity and to guide further theory refinement (Henson & Roberts, 2006).

An initial exploratory factor analysis (EFA) was performed to "identify the factor structure or model for a set of variables" (Bandalos, 1996, p. 389). The primary goal of EFA is to explore the number of factors that exist among a set of variables and the extent to which the variables are related to the factors (Kahn, 2006). Confirmatory factor analysis (CFA) tests "whether a set of indicators shares enough common variance to be considered measures of a single factor" (Bagozzi & Yi, 2012, p. 14). Subsequently, CFA was conducted to examine the goodness of fit of the data for the measurement model. Commonly used fit indices (cf. Schumacker & Lomax, 2016) were utilized to determine whether the single measure model fit the data better than the full measure correlated model.

Fit indices were utilized including chi-square ( $\chi^2$ ) with degrees of freedom (df) and p value, normed chi-square (Wheaton, Muthen, Alwin, & Summers, 1977), root mean square error of approximation (RMSEA), standardized root mean square residual (SRMR), comparative fit index (CFI), and Tucker-Lewis Index (TLI; Tucker & Lewis, 1973) (cf. Kline, 2016; Schumacker & Lomax, 2016). Wheaton et al. (1977) recommended that normed chi-square value be less than 5. MacCallum, Browne, and Sugawara (1996) suggested that .01, .05, and .08 be used as cutoff values for RMSEA to indicate excellent, good, and mediocre fit respectively. Browne and Cudeck (1993) suggested that RMSEA values between .05 and .08 indicate fair fit. Hu and Bentler (1998) suggested that a SRMR value of less than .08 can be considered a generally good

fit although Steiger (2007) suggested an upper limit of .07. Schumacker and Lomax (2016) recommended that CFI or TLI values greater than .95 are considered acceptable. In addition to the theoretical model, an alternative model was tested and added a direct path from supervisor support to organizational support.

#### Limitations

In this study, several limitations are acknowledged. One limitation of this study is the cross-sectional design. This method assumes that model parameters are constant over time and across firms (Bowen & Wiersema, 1999). Cross-sectional research design likely produces biased results (Nimon & Astakhova, 2015). However, organizations can experience changes in leadership and culture over time. Longitudinal designs would be beneficial in future studies to assess relationships between variables over time. Another limitation is that other variables may exist that were not included in the research model. Cross-sectional research designs consider association between stated variables rather than findings from which causal inferences can be unambiguously made (Bryman & Bell, 2011). Other potential relationships may exist that were not explored within the context of the current study.

An additional limitation is that some of the support questions in the revised SPOS measurement scales have similar wording. As a result, respondents may have encountered confusion if they did not carefully read the questions and answer appropriately. The fourth limitation is that self-reporting source of the data may be a source of common method bias as the predictor and criterion variables are obtained from

the same rater (Podsakoff et al., 2003). These limitations are not found to diminish the findings; however, they may limit generalizability.

# **Summary of the Chapter**

This chapter provided an overview of the methods and designs to be employed for this study. The purpose of the study was presented and proposed hypotheses were discussed. A description of the population and sample was included, along with instrumentation used for the study. Survey design and content were presented in this chapter. Data collection results and analysis procedures were examined. Finally, limitations were presented and addressed.

## **Chapter 4: Results**

#### Introduction

This chapter presents the data collected and analyzed for this study. The chapter outlines the results of the data collection and hypothesis testing. The chapter includes data screening, demographics, assumptions testing, reliability analysis, control variables analysis, common method variance, construct validity, and hypothesis testing.

## **Data Screening**

The survey was distributed to civilian federal employees through the use of Qualtrics and the researcher's personal student email account. Data were collected via a convenience sample from an online survey. Surveys were distributed over the course of five weeks and sent out in waves due to weekly limitations placed on the number of emails able to be sent out via Qualtrics. The number of email invitations sent through Qualtrics was 150,671 while 29,833 were sent out from the student email account. The total number of email invitations was 180,504.

The increasing prevalence of unsolicited emails has caused organizations to use more robust and aggressive spam-blocking tools (Fan & Yan, 2010). Significant email distributions through Qualtrics were not received by some recipients due to evident network firewall restrictions. Of the 180,504 total emails sent, it was estimated that at least 25,000 were initially blocked as there were no completed responses to these batches of emails. In addition, large blocs of emails were identified as junk or spam emails by agency system filters based on emails sent to the researcher by respondents.

A number of respondents contacted the researcher directly to advise that employees in certain areas were only able to see the survey after viewing their email junk folder (Appendix N). Therefore, various email filtering methods deployed by federal agencies resulted in the inability to determine the true number of surveys successfully delivered to email inboxes of respondents. As a result, it was difficult for the researcher to determine the total number of surveys that could have passed through correctly to the potential respondents. In the abundance of caution, the researcher estimated that more than 100,000 additional emails intended for delivery were never actually received. Based on evidence previously stated, it can be estimated that 55,000 (30%) of the emails that were distributed actually reached the intended federal employees. The resulting survey response rate for the surveys is estimated at 3.4%.

A total of 1,561 responses were collected through the Qualtrics delivery method and 301 via personal email, totaling 1,862 responses. Of these responses, 50 individuals did not agree to the Informed Consent section of the survey and were removed from the sample. To account for missing data, 179 were removed who did not complete the survey. Respondents who took less than four minutes to complete the survey were identified and resulted in 19 removals (cf. Vannette & Krosnick, 2014). Respondents who straight-lined all of their answers to the three support scales were eliminated and resulted in 72 removals (cf. Weijters, Schillewaert, & Geuens, 2008). Finally, respondents who passed the first two IMC questions were retained and those who failed the third IMC were removed, resulting in 370 additional removals. The total number of responses removed as a result of these screening measures was 690. The final number of

usable responses equaled 1,172. Of the 1,172 responses, 988 were collected using Qualtrics and 184 through the use of the researcher's personal email distribution.

An independent sample t-test was conducted to determine whether any statistically significant different turnover intention resulted between the two groups (i.e., Qualtrics and researcher's personal email). Turnover intention results for Qualtrics respondents (M = 3.435, SD = 1.907, n = 988) versus email respondents (M = 3.182, SD = 1.891, n = 184) were not statistically significant (p > .05). Subsequently, the data was combined into a single set (n = 1,172).

# **Demographics**

Demographics were analyzed to determine whether any of the individual items had a significant impact on individuals' responses to survey results. Full demographic data is shown in Table 4. Although the study was not modeled after the FEVS, demographic results were compared to those from previous FEVS to determine whether results were similar based on the same population being utilized. Although race demographics were collected in the study, the results were not considered in data analysis. The researcher received anecdotal inquiries from survey respondents who indicated concerns that the survey requested race data and that results would be filled out incorrectly (Appendix O). The demographic data indicated that 79.3% of respondents were Native Hawaiian or Other Pacific Islander. This result was not consistent with the 2015 FEVS (U.S. OPM, 2016) as this group represented less than 1% of respondents. Based on these concerns and the lack of inclusion in previous research, this demographic was not further considered in the current study.

Table 4.

Frequencies of Demographic Variables

Demographics	n	%
Department		
Dept. of Education	22	1.9%
Dept. of Agriculture	70	6.0%
Dept. of Interior	292	24.9%
Dept. of Transportation	422	36.0%
Environmental Protection Agency	181	15.4%
International Trade Administration	15	1.3%
National Institute of Standards and Technology	63	5.4%
National Park Service	10	0.9%
Patent and Trademark Office	40	3.4%
Census Bureau	57	4.9%
Gender		
Male	678	57.8%
Female	494	42.2%
Generational Cohort		
Baby Boomers (1945-1964)	512	43.7%
Generation X (1965-1980)	415	35.4%
Milennials (1981+)	245	20.9%
Race		
White	58	4.9%
Asian	43	3.7%
Black or African American	97	8.3%
Hispanic/Latino	4	0.3%
American Indian or Alaskan Native	9	0.8%
Native Hawaiian or other Pacific Islander	929	79.3%
Two or More Races	32	2.7%
Latino		
Yes	79	6.7%
No	1,093	93.3%
Education		
High School	76	6.5%
Associates	66	5.6%
Bachelors	381	32.5%
Masters	441	37.6%
Doctorate	177	15.1%
Other	31	2.6%
Job Tenure		
Less than 1 year	97	8.3%
1-3 years	202	17.2%
4 – 5 years	75	6.4%
6 – 10 years	214	18.3%
11-20 years	224	19.1%
> 20 years	360	30.7%

Table 4. Continued

Telework Tenure		
Less than 1 year	117	10.0%
1-3 years	265	22.6%
4-5 years	157	13.4%
6 – 10 years	137	11.7%
11 – 20 years	51	4.4%
> 20 years	7	0.6%
Job Role		
Employee	832	71.0%
Middle Management	301	25.7%
Top Management	39	3.3%
Marital Status		
Married	789	67.3%
Not Married	383	32.7%
Life Stage		
Under age 35 with no children in the home	171	14.6%
Age 36-53 with no children in the home	84	7.2%
Over age 54 with no children in the home	56	4.8%
Youngest child is under the age of 3	118	10.1%
Youngest child is 3-5 years of age	130	11.1%
Youngest child is 6-12 years of age	328	28.0%
Youngest child is 13-18 years of age	87	7.4%
Youngest child is 19+ years of age	198	16.9%
Household Income		
Single Income	532	45.4%
Dual Income	640	54.6%
Telework Eligibility		
Notified	984	16.0%
Not notified	188	84.0%
Telework Situation		
Do telework	734	62.6%
Do not telework	438	37.4%

The number of respondents with a master's or doctoral degree formed the majority of the sample (52.7%), similar to the results of the FEVS in which 54.2% of federal employees had a post-bachelor's degree. Respondents with children at home under the age of 18 was 56.6%; 67.3% indicated that they were married, and 54.6% The number of respondents with a master's or doctoral degree formed the majority of the sample (52.7%), similar to the results of the FEVS in which 54.2% of federal employees had a post-bachelor's degree. Respondents with children at home under the age of 18

was 56.6%; 67.3% indicated that they were married, and 54.6% responded that they were part of a dual income household. Of the total respondents, 734 indicated that they teleworked to some extent.

## **Assumptions Testing**

Before testing the data, normality was visually examined by using Q-Q plots for the variables considered in this study. No substantial deviations from normality were observed and the resulting plots were deemed sufficiently normal. Normality was demonstrated with skewness ( $|\gamma_1|$ ) and kurtosis ( $|\gamma_2|$ ) of the collected data (cf. Kline, 2016). Resulting ranges skewness ( $|\gamma_1| = -1.554$  to .260) and kurtosis ( $|\gamma_2| = -1.124$  to 2.111) were all within guidelines suggested by Kline (2016) that data are considered to be normal if  $|\gamma_1| < 3$  and  $|\gamma_2| < 10$ . It should be noted that significance tests for normality can have limited usefulness for large samples (Field, 2013; Kline, 2016).

The homoscedasticity of the data was examined by using the Levene's test (Levene, 1960). The results of this test should indicate that variances should not be statistically significant (p > .05) in different groups (Field, 2013). Although multiple variables failed this test, statistically significant results can result from large sample sizes and should be interpreted accordingly (Field, 2013). As a result, data were considered normal to proceed with data analysis.

## Reliability and Validity

Reliability of the measurement scales was tested by using Cronbach's alpha ( $\alpha$ ). As suggested by Bryman and Bell (2011), values of  $\alpha$  >.8 are typically employed as a rule of thumb for acceptable internal reliability, though many researchers accept slightly

lower figures. Table 5 lists the Cronbach's alpha values for each of the study's constructs.

Table 5.

Cronbach's Alpha Values for Measurement Scales

Construct	Standardized $\alpha$	# of items
Organizational Support	.926	7
Supervisor Support	.947	7
Coworker Support	.946	7
Turnover Intention	.889	4

*Note.*  $\alpha$  = Cronbach's alpha

The organizational support construct was represented by seven items (i.e., OS1-OS7), supervisor support was represented by seven items (i.e., SS1-SS7), coworker support was represented by seven items (i.e., CS1-CS7), and turnover intention was represented by four items (i.e., TI1-TI4). The Cronbach's alpha for organizational support ( $\alpha$  = .926), supervisor support ( $\alpha$  = .947), and coworker support ( $\alpha$  = .946) indicated excellent reliability. The Cronbach's alpha for turnover intention ( $\alpha$  = .889) indicated a good reliability. As shown in Table 6, the means, standard deviations, and correlation coefficients were included. All correlation coefficients were shown to be statistically significant (p<.001).

Table 6.

Descriptive Statistics and Construct Correlations

Construct	M	SD	1	2	3	4
1. Organizational Support	5.308	1.290				
2. Supervisor Support	5.719	1.369	.499**			
3. Coworker Support	5.542	1.220	.405**	.428**		
4. Turnover Intention	3.395	1.906	287**	417**	328**	

*Note.* M = Means; SD = Standard Deviation \*\*p < .001

### **Control Variables Analysis**

The independent sample *t*-test and one-way analysis of variance (ANOVA) methods were used to examine the control variables. Independent sample *t* tests compare "the mean of a variable in one group with the mean of the same variable in another group" (Graham, 2008, p. 493). As noted previously, an independent sample *t*-test was conducted to test differences between groups of respondents recruited through Qualtrics and also the researcher's personal email. In addition, *t*-tests were conducted to determine if there were significant differences in the means of telework notification eligibility, teleworking situation, gender, marital status, and household income type. Of these control variables examined, only marital status was found to have statistically significant results between groups for turnover intention.

Turnover intention results for respondents who were notified of being eligible for telework (M = 3.428, SD = 1.909, n = 984) versus those who were not notified (M = 3.222, SD = 1.887, n = 188) were not statistically significant between the two groups (p=.175). Turnover intention results for respondents who participated in some form of telework (M = 3.421, SD = 1.951, n = 438) versus those who did not participate (M = 3.380, SD = 1.881, n = 734) were not statistically significant between the two groups (p=.723). Turnover intention results for males (M = 3.429, SD = 1.889, n = 678) versus females (M = 3.348, SD = 1.931, n = 494) were not statistically significant between the two groups (p=.473). Turnover intention results for married respondents (M = 3.288, SD = 1.874, n = 789) versus respondents who were not married (M = 3.616, SD = 1.955, n = 383) were statistically significant between the two groups (p=.006). Turnover intention results for single income (M = 3.438, SD = 1.974, n = 532) versus dual income (M = 3.438, SD = 1.974, n = 532) versus dual income (M = 3.438, SD = 1.974, n = 532) versus dual income (M = 3.438, SD = 1.974, n = 532) versus dual income (M = 3.438).

3.359, SD = 1.849, n = 640) were not statistically different between the two groups (p=.478).

One-way ANOVA tests were also conducted to examine if there were significant differences in the means of department, generational cohort, organizational tenure, teleworking tenure, job role, life stage, and educational level. Of these control variables, none were found to have statistically significant different results for turnover intention between groups. Levene's test for homogeneity of variance was conducted in each case and Scheffe method was used in post-hoc analysis as group size comparisons were unequal. Department (i.e., DE, DOA, DOI, DOT, EPA, ITA, NIST, NPS, PTO, and Census) was measured to determine the impact, if any, on turnover intention. Levene's test for homogeneity of variance was greater than .050 (p=.094), indicating that the homogeneity of variance assumption was not violated. No statistically significant difference in turnover intention for the various departments was found (p=.132). Generational cohort (i.e., Baby Boomers, Generation X, and Milennials) was measured to determine the impact on turnover intention. Levene's test for homogeneity of variance was greater than .050 (p=.577), indicating that the homogeneity of variance assumption was not violated. For generational cohort, there was no statistically significant difference in turnover intention for the three generational cohort groups (p=.092).

Organizational tenure (i.e., 1-3 years, 4-5 years, 6-10 years, 11-20 years, and 20+ years) was measured to examine the impact on turnover intention. Levene's test for homogeneity of variance was greater than .050 (p=.877), indicating that the homogeneity of variance assumption was not violated. No statistically significant difference in turnover intention between organizational tenure groups was found (p=.752).

Teleworking tenure (i.e., 1-3 years, 4-5 years, 6-10 years, 11-20 years, and 20+ years) was measured to examine impact on turnover intention. Levene's test for homogeneity of variance was greater than .050 (p=.780), indicating that the homogeneity of variance assumption was not violated. For teleworking tenure, there was no statistically significant difference in turnover intention between teleworking tenure groups (p=.568). Job role (i.e., employee, middle management, and top management) was measured to examine the impact on turnover intention. Levene's test for homogeneity of variance was greater than .050 (p=.877), indicating that the homogeneity of variance assumption was not violated. No statistically significant difference in turnover intention between job role groups was found (p=.752).

Life stage (i.e., establishment, mid-stage, formation, very young children, preschool children, elementary schoolchildren, teenage children, grown children, and empty nest) was measured to examine the impact on turnover intention. Levene's test for homogeneity of variance was greater than .050 (p=.276), indicating that the homogeneity of variance assumption was not violated. No statistically significant difference in turnover intention between life stage groups was found (p=.690). Education level was measured to examine the impact on turnover intention. Levene's test for homogeneity of variance was greater than .050 (p=.157), indicating that the homogeneity of variance assumption was not violated. No statistically significant difference in turnover intention between education level groups was found (p=.498).

#### **Common Method Variance**

Common method variance can occur when systematic variance is introduced into the measure, causing "observed relationships to differ from the true relationships among constructs" (Doty & Glick, 1998, p. 374). To test for common method bias, two methods were utilized to increase the rigor of the analysis. First, the Harman's single-factor test was performed as it is one of the most widely used techniques used by researchers (Podsakoff et al., 2003). Using IBM® SPSS® Statistics 24, all factors were restrained to one and analyzed without rotation. Four factors above the eigenvalue of one explained 75% of the variance. The sum of the squared loadings for the single factor was 43%, below the threshold of 50% (cf. Podsakoff et al., 2003). Although this test is simple and widely used by many researchers, concerns have been raised about its insufficient sensitivity to common method bias (Malhotra, Kim, & Patil, 2006; Podsakoff et al., 2003).

The second method used to examine common method variance was the common latent factor (CLF) approach (cf. MacKenzie & Podsakoff, 2012). Using IBM® SPSS® AMOS 24, a common latent factor was added and connected to all of the indicators in the proposed model. In addition, the CLF was removed and analyzed to determine if any large differences were present between the two analyses. The standardized regression weights of the CLF were subtracted from the standardized regression weights without the CLF. The results revealed that none of the values were greater than .200, confirming that common method bias was not a concern in the data (cf. Beutell, Schneer, & Alstete, 2014).

# **Construct Validity**

### **Exploratory Factor Analysis.**

An initial exploratory factor analysis (EFA) was conducted using the software program IBM® SPSS® Statistics 24. This procedure was used to determine how, and to what extent, the variables are linked to their underlying factors (Byrne, 2010). An oblique rotation method was used (i.e., promax) as it was expected that the factors would be correlated (Costello & Osborne, 2005; Kahn, 2006; Osborne, 2015; Kline, 2016). The determinant of the matrix was greater than zero, indicating that the correlation matrix was not singular. The Kaiser-Meyer-Olkin (KMO) measure verified the sampling adequacy for the analysis (i.e., .928), at the excellent range as outlined by Hutcheson and Sofroniou (1999). In EFA, the suggested sample size number of cases has ranged from 300 as good (Comrey & Lee, 1992; Tabachnick & Fidell, 1996) to 1,000 being excellent (Comrey & Lee, 1992). The Bartlett test of sphericity yielded a p-value less than .001, demonstrating that the inter-item correlation matrix was statistically significantly different than an identity matrix.

The first four factors identified all yielded an eigenvalue greater than 1 (i.e., 10.568, 3.216, 2.797, 2.086) and explained 75% of the variance (cf. Kaiser, 1960; Stevens, 1996). The fifth factor not retained had an eigenvalue of .984. With the exception of OS5, all of the factors explained more than 50% of each item's variance as suggested by Costello and Osborne (2005). As shown in Table 7, an analysis of the pattern and structure coefficients demonstrated that each manifest variable correlated most highly with its respective factor (cf. Graham, Guthrie, & Thompson, 2003; Henson

& Roberts, 2006). All factor loadings were above the minimum threshold of .5. As a result, all items were retained and considered sufficient to proceed.

Table 7.

Pattern (P) and Structure (S) Coefficients of EFA

Construct Variable	Organiza Supp		Supervisor Support		Coworker Support		Turnover Intention	
	P	S	P	S	P	S	P	S
Org. Support								
OS1	.856	.843	001	.394	.005	.328	.050	195
OS2	.912	.891	.007	.417	030	.320	.046	207
OS3	.930	.917	010	.432	022	.344	003	257
OS4	.877	.870	029	.408	016	.335	047	280
OS5	.601	.620	.059	.337	004	.251	.026	168
OS6	.854	.889	.032	.469	.030	.391	026	293
OS7	.809	.836	005	.423	.044	.377	044	286
Sup. Support								
SS1	.089	.502	.856	.898	010	.389	007	385
SS2	060	.383	.889	.878	.007	.370	035	389
SS3	002	.442	.942	.929	030	.367	001	381
SS4	.063	.414	.751	.770	041	.305	014	330
SS5	006	.366	.768	.759	.042	.344	.058	273
SS6	013	.449	.926	.935	.029	.417	007	397
SS7	006	.444	.919	.921	.016	.400	.004	381
Cowork. Support								
CS1	.136	.431	028	.362	.803	.834	.036	254
CS2	044	.320	.041	.391	.829	.846	053	328
CS3	006	.367	.022	.406	.902	.914	014	317
CS4	066	.282	.023	.346	.864	.840	.024	250
CS5	049	.298	.016	.350	.878	.855	.030	250
CS6	.043	.385	037	.369	.888	.898	025	313
CS7	.010	.354	026	.358	.902	.894	.003	284
Turnover Intent								
TI1	039	281	.010	369	.004	293	.873	.878
TI2	.029	230	004	365	.002	285	.908	.900
TI3	.041	197	.007	327	.019	247	.872	.852
TI4	029	278	016	377	026	309	.809	.833
Eigenvalues		2.80		3.22		10.57		2.09
% of variance		11.19		12.86		42.28		8.34

# **Confirmatory Factor Analysis.**

A confirmatory factor analysis (CFA) was conducted to evaluate hypothesized relationships between variables and to determine overall model fit (Byrne, 2010). First,

factor loadings were checked to determine reliability. As shown in Table 8, the standardized regression weights generally demonstrated satisfactory loadings of each indicator to the measurement construct. All factor loadings were above the suggested minimum threshold of 0.5. The majority of factor loadings were above 0.7, and all were less than .95 (cf. Bagozzi & Yi, 1988).

Table 8.

Factor Loadings of Measurement Model (CFA)

Construct	Item	<b>Factor Loading</b>
Organizational Support	OS1	.819
	OS2	.875
	OS3	.915
	OS4	.845
	OS5	.548
	OS6	.878
	OS7	.790
Supervisor Support	SS1	.894
	SS2	.856
	SS3	.924
	SS4	.709
	SS5	.688
	SS6	.932
	SS7	.923
Coworker Support	CS1	.813
	CS2	.813
	CS3	.909
	CS4	.796
	CS5	.814
	CS6	.892
	CS7	.877
Turnover Intention	TI1	.728
	TI2	.945
	TI3	.877
	TI4	.660

To examine model fit, a measurement model was first applied to the data before further theoretical testing (Schumacker & Lomax, 2016). Analysis of the measurement model was performed by using the software program IBM® SPSS® AMOS 24. Initially, all indicators were allowed to correlate on a single factor model (See Figure 3).

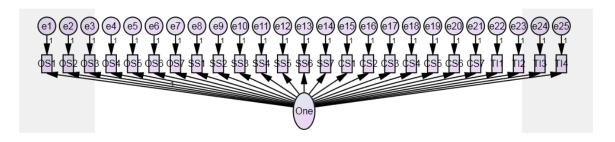


Figure 3. Single Factor Measurement Model

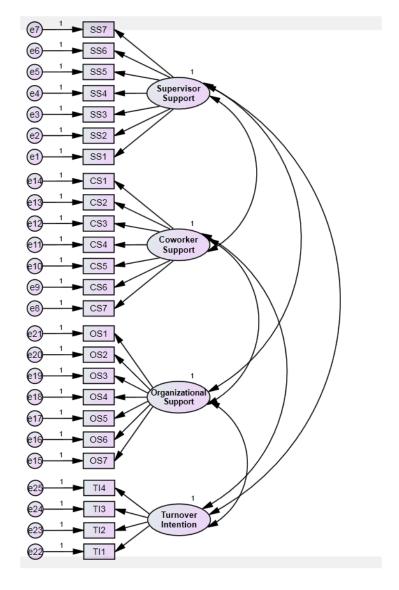


Figure 4. 4-Factor Measurement Model

The single factor model demonstrated very poor model fit (RMSEA = .218, SRMR = .175, CFI = .447, TLI = .396). The next step included examination of the four-factor correlated model (See Figure 4). The results of the CFA for the four factor measurement model did not demonstrate good model fit (RMSEA = .090, SRMR = .052, CFI = .907, TLI = .896).

To improve model fit, the researcher examined modification indices to determine which parameter constraints were limiting the model fit of the covariances. Further analysis demonstrated that error terms for the same factors could be allowed to correlate to improve model fit. Error correlations were included as a means to test hypotheses regarding shared sources of variation between measures (cf. Kline, 2016). Consistent with recommendations provided by Kline (2016), eight sets of errors were correlated (See Table 9).

Table 9.

Nonstandard Confirmatory Factor Analysis Models with Correlated Errors\*

#### Identification Rule(s)

For each factor, at least one of the following must hold:

- 1. There are at least three indicators whose errors are uncorrelated with each other.
- There are at least two indicators whose errors are uncorrelated and either
  - a. The errors of both indicators are not correlated with the error term of a third indicator for a different factor, or
  - b. An equality constraint is imposed on the loadings of the two indicators.

For every pair of factors, there are at least two indicators, one from each factor, whose error terms are uncorrelated.

For every indicator, there is at least one other indicator (not necessarily of the same factor) with which its error term is not correlated.

(Kline, 2016, p. 203)

<sup>\*</sup>These requirements were originally described as Conditions B-D in Kenny, Kashy, and Bolger (1998, pp. 253-254).

As shown in Figure 5, high error loadings were correlated (i.e., e4<->e6, e7<->e8, e10<->e11, e5<->e10, e5<->e17, e15<->e17, e20<->e21, e22<->e25). This exercise resulted in significantly improved goodness of fit indices and were all within acceptable parameters (RMSEA = .057, SRMR = .049, CFI = .964, TLI = .959) as shown in Table 10. The delta chi-square ( $\Delta\chi^2 = 1593.478$ ) and 8 degrees of freedom change resulted in a statistically significant better fit (p < .001) of the 4-factor model compared to the 4-factor model.

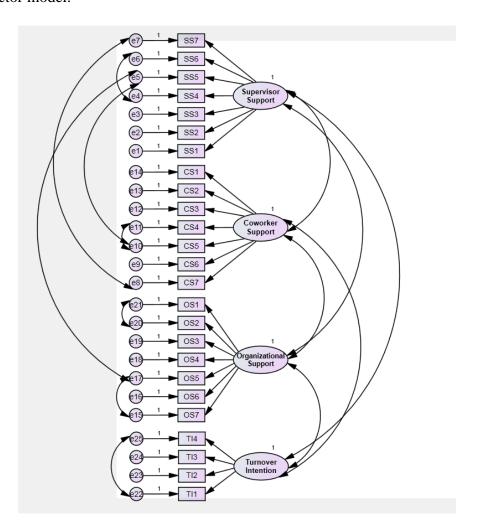


Figure 5. 4-Factor Modified Measurement Model

Table 10.

Fit Indices for Measurement Models

	$\chi^2$	p	df	$\chi^2/df$	RMSEA	SRMR	CFI	TLI
Single Factor	15531.331	< .001	275	56.478	.218	.175	.447	.396
4-Factor	2837.623	< .001	269	10.549	.090	.052	.907	.896
4-Factor Modified	1244.145	< .001	261	4.767	.057	.049	.964	.959

Table 11.

Pattern (P) and Structure (S) Coefficients of Modified Measurement Model

Construct Variable	Organiza Suppo			Supervisor Support		Coworker Support		Turnover Intention	
	P	S	P	S	P	S	P	S	
Org. Support									
OS1	.795	.795		.405		.338		202	
OS2	.857	.857		.437		.364		218	
OS3	.919	.919		.468		.391		234	
OS4	.848	.848		.432		.361		216	
OS5	.536	.536		.273		.228		136	
OS6	.886	.886		.452		.377		225	
OS7	.788	.788		.402		.335		200	
Super. Support									
SS1		.456	.894	.894		.395		342	
SS2		.437	.857	.857		.378		328	
SS3		.472	.926	.926		.409		354	
SS4		.358	.701	.701		.309		268	
SS5		.358	.702	.702		.310		268	
SS6		.474	.929	.929		.410		355	
SS7		.471	.925	.925		.408		354	
Cowork. Support									
CS1		.347		.360	.816	.816		249	
CS2		.345		.358	.812	.812		248	
CS3		.388		.403	.912	.912		279	
CS4		.333		.346	.783	.783		239	
CS5		.341		.354	.802	.802		245	
CS6		.381		.395	.895	.895		273	
CS7		.373		.387	.878	.878		268	
Turnover Intent									
TI1		173		260		208	.680	.680	
TI2		249		375		299	.980	.980	
TI3		221		332		265	.868	.868	
TI4		152		229		183	.599	.599	

The Modified Measurement Model was further analyzed to examine validity. An examination of structure coefficients (cf. Kline, 2016) in Table 11 revealed that each

manifest variable correlated most highly with its respective factor. As shown in Table 12, the range of composite reliability (CR) values (.870 - .983) and average variance extracted (AVE) values (.634 - .728) provided evidence of adequate reliability and convergent validity. All correlations between factors were lower than the square root of the AVE for individual measures. As a result, evidence of discriminant validity was demonstrated.

Table 12.

Implied Correlations, AVE, and CR

Construct	1	2	3	4
1. Organizational Support	.813			
2. Supervisor Support	.510	.853		
3. Coworker Support	.425	.441	.844	
4. Turnover Intention	254	382	305	.796
CR	.930	.983	.945	.870
AVE	.660	.728	.712	.634

*Note.* AVE = Average Variance Extracted; CR = Composite Reliability. Square root of AVE along the diagonal.

Once the goodness of fit was confirmed for the modified measurement model, a structural model was examined to determine the goodness of fit for the theoretical model (See Figure 6). The final modified measurement model, including correlated error terms, was used to create the first theoretical structural model. This theoretical structural model considered the significance of each relationship among the constructs. Although a hypothesized model may fit the data well, equivalent alternative models may exist that also help to interpret the data being analyzed (Raykov & Marcoulides, 2001). Therefore, two alternative models were tested in addition to the theoretical structural model. Alternative Model 1 (See Figure 7) tested a direct relationship from organizational support to supervisor support to turnover intention.

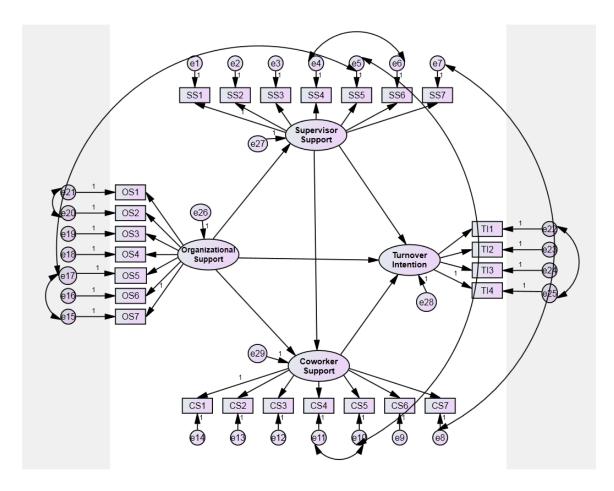


Figure 6. Theoretical Structural Model

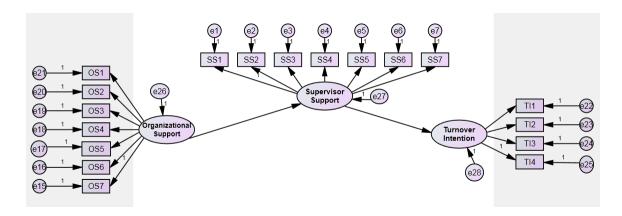


Figure 7. Alternative Model 1

Table 23.

Fit Indices for Structural Models

	$\chi^2$	p	df	$\chi^2/df$	RMSEA	SRMR	CFI	TLI
Theoretical Model	1244.145	< .001	261	4.767	.057	.049	.964	.959
Alternative Model 1	1940.542	< .001	133	14.591	.108	.064	.907	.893
Alternative Model 2	1758.732	< .001	133	13.224	.102	.071	.910	.897

As shown in Table 13, model fit results of Alternative Model 1 did not result in a good fitting model (*RMSEA* = .108, *SRMR* = .064, *CFI* = .907, *TLI* = .893). Alternative Model 2 (Figure 8) tested a direct relationship from organizational support to coworker support to turnover intention. Results also did not indicate a good fitting model in comparison to the theoretical structural model (*RMSEA* = .102, *SRMR* = .071, *CFI* = .910, *TLI* = .897). All indices for the theoretical structural model indicated good model fit, although the alternative models did not result in better model fit (See Table 13). Once the structural model analysis was completed, hypothesis testing was performed with the theoretical structural model.

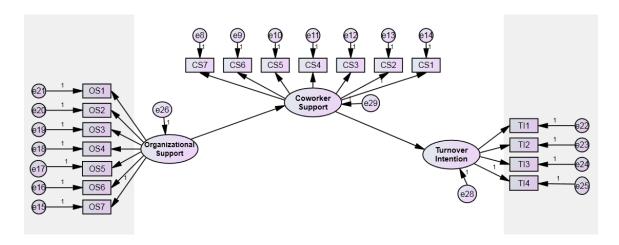


Figure 8. Alternative Model 2

### **Hypothesis Testing**

Six hypotheses were tested among the four constructs (i.e., organizational support, supervisor support, coworker support, and turnover intention). H<sub>1</sub> predicted that organizational support of FWAs would be directly and positively related to supervisor support. Organizational support had a significant and positive impact on supervisor support ( $\beta$  = .510, p = < .001, supporting H<sub>1</sub>. H<sub>2</sub> predicted that organizational support of FWAs would be directly and positively related to coworker support. Organizational support of FWAs had a significant and positive impact on coworker support ( $\beta$  = .271, p = < .001, supporting H<sub>2</sub>.

H<sub>3</sub> predicted that supervisor support would be directly and positively related to coworker support. Supervisor support had a significant and positive impact on coworker support ( $\beta = .303$ , p = < .001, supporting H<sub>3</sub>. H<sub>4</sub> predicted that supervisor support would be directly and negatively related to turnover intention. Supervisor support had a significant and negative impact on turnover intention ( $\beta = -.293$ , p = < .001, supporting H<sub>4</sub>. H<sub>5</sub> predicted that coworker support would be directly and negatively related to turnover intention. Coworker support had a significant and negative impact on turnover intention ( $\beta = -.161$ , p = < .001, supporting H<sub>5</sub>. H<sub>6</sub> predicted that organizational support would be directly and negatively related to turnover intention. This hypothesis was partially supported. Although organizational support had a negative impact on turnover intention ( $\beta = -.037$ , p = .285), the relationship was not significant. Table 14 contains the summary of the hypothesis testing results.

Table 34.

Summary of Research Hypotheses Results

Hypothesis	<b>Hypothesis Description</b>	Result
1	Organizational support of FWAs is directly and positively related to supervisor support.	Supported
2	Organizational support of FWAs is directly and positively related to coworker support.	Supported
3	Supervisor support is directly and positively related to coworker support.	Supported
4	Supervisor support is directly and negatively related to turnover intention.	Supported
5	Coworker support is directly and negatively related to turnover intention.	Supported
6	Organizational support is directly and negatively related to turnover intention.	Partially Supported

Of the six hypotheses tested, the first five were fully supported. The results suggest that organizational support of FWAs positively influences both supervisor and coworker support. As organizations demonstrate support for FWAs through formal and informal methods, supervisors and coworkers may be more likely to exhibit supportive behaviors. Subsequently, supportive supervisors can influence employees to be more supportive to their coworkers in the workplace. The results of this study also suggest that both supervisor support and coworker support are negatively related to turnover intention. As higher levels of supportive behaviors are demonstrated by supervisors and coworkers, the likelihood of employees leaving the organization decreases. Although organizational support was found to have a negative relationship to turnover intention, the results were not statistically significant for the last hypothesis. As employees often perceive organizational support through their supervisor, this finding suggests that organizational support is a construct of minimal influence when employees consider whether to leave the organization.

# **Summary of the Chapter**

This chapter provided data analysis results including descriptive statistics, assumptions testing, reliability testing, exploratory factor analysis, confirmatory factor analysis, and analysis of the study hypotheses. The results indicated that internal reliability of the measurement scales all exceeded minimum threshold. The modified measurement model demonstrated acceptable fit. Finally, hypothesis testing of the relationships between study constructs was discussed and summarized by examining structural models.

# **Chapter 5: Conclusions and Recommendations**

#### Introduction

This chapter provides discussion of the data analysis results found in Chapter 4.

The discussion of the study's findings is first. Next, the study's implications for research, practice, and organizations are examined. Finally, the limitations of the study are discussed.

# **Discussion of Study Findings**

The purpose of this study was to examine the influences of organizational support, supervisor support, and coworker support on the relationship between FWAs and turnover intention in the organization for civilian federal employees. This study examined multiple levels of support in relation to turnover intention. To examine the proposed theoretical relationships, six hypotheses were tested. The results of this study provide partial or full support for each of the proposed hypotheses. Statistically significant relationships were found between variables in the theoretical model. Table 14 contains the summary of the hypothesis testing results.

The results of this study suggest that organizational support of FWAs positively impacts the levels of supervisor and coworker support within the organization. In addition, results also suggest that supervisor and coworker support are significant influences in reducing turnover intention of employees. One notable finding is that when compared to supervisor and coworker support, organizational support of FWAs was not found to be statistically significant when considering impact to turnover intention. The findings suggest that supervisor and coworker support are areas that researchers and

practitioners should focus on in future studies to determine potential relationships between these constructs and other employee outcomes.

Hypothesis One. Hypothesis one (H<sub>1</sub>) predicted that organizational support of FWAs would be directly and positively related to supervisor support. Organizational support had a significant and positive impact on supervisor support ( $\beta$  = .510, p = < .001). Therefore, H<sub>1</sub> was supported. This finding was similar to previous studies that reported a positive relationship between organizational support and supervisor support (Shanock & Eisenberger, 2006; Mills et al., 2014; Yoon & Thye, 2000). In this study, results suggest that organizational support of FWAs positively impacts the level of supervisor support that employees perceive for these programs. Employees can translate support from the organization through their immediate supervisor.

Organizations that seek to improve the work experience for employees attempt to identify ways to improve work-family enhancement. As stressors arise in the intersection of the work and family domains, employers can provide programs to alleviate conflict between these roles. One method used by employers to alleviate sources of stress is the implementation of FWAs in the workplace. Employees are then able to better balance obligations in their personal and professional lives. Although programs such as FWAs may formally exist in the organization, informal approvals may be just as important.

As organizational directives are often conveyed to employees via front-line supervisors, employees can interpret organizational support through their immediate supervisor. The extent to which organizations formally support work-family programs can impact the level of supervisor support that is experienced by employees.

Organizations that support FWAs are more likely to influence how supportive

supervisors are of these types of programs. If organizations are not supportive of FWAs, supervisors are largely unable to support employees in this manner as they would not have the resources to implement without organizational approval or resources.

Hypothesis Two. Hypothesis two (H<sub>2</sub>) predicted that organizational support of FWAs would be directly and positively related to coworker support. Organizational support of FWAs had a significant and positive impact on coworker support ( $\beta$  = .271, p = < .001). Therefore, H<sub>2</sub> was supported. This finding concurs with previous results that work culture support predicts coworker support (Biggs et al., 2014). Results suggest that organizational support influences how supportive coworkers are within the organization. The organizational culture is formed based on underlying assumptions within the organization that influence behavior (Schein, 1983). A person's values are a manifestation of the cultural norms (Morelli & Cunningham, 2012). As a result, organizational support can impact the level to which coworkers are supportive to their peers.

The organizational culture and support system can be vital to employee behavioral outcomes. These resources are channeled through worker relationships among groups and affect employee outcomes. Coworkers influence their peers, deriving learned practices based on how the organizational culture affects cultural norms and behavioral expectations. Therefore, organizational support can be an important determinant of how coworker support is formed.

**Hypothesis Three.** Hypothesis three (H<sub>3</sub>) predicted that supervisor support would be directly and positively related to coworker support. Supervisor support had a significant and positive impact on coworker support ( $\beta = .303$ , p = < .001). Therefore, H<sub>3</sub>

was supported. This finding validated the suggestion by Berman et al. (2002) that managers have a positive orientation toward workplace friendships and this study further explored coworker support in conjunction with supervisor support as recommended by Selvarajan et al. (2016).

Supervisors serve as advocates on behalf of the organization (Matthews & Toumbeva, 2015). As organizational support can impact supervisor support, the subsequent level of supervisor support in the organization can influence the extent that coworkers support each other. Specifically, as workers decide if they will participate in FWAs, supervisor support for these programs can affect employee perceptions whether they should participate and determine whether coworkers will be supportive. Employees may decline to participate in FWAs if informal attributes in the organization do not support their use (Kirby & Krone, 2002). If supervisors are not willing to accommodate alternative work arrangements or convey attitudes that absence from work translates into less organizational commitment, coworkers are likely to perpetuate these types of attitudes. Consequently, coworkers can promulgate a cultural norm that longer hours of physical presence at work equals a higher level of dedication to the organization.

Organizations with a long-hours culture can create unaccommodating attitudes that are likely to discourage employees from making use of work-family programs that may otherwise be available to them (Beauregard & Henry, 2009). As a result, the organizational culture and norms can become engrained in supervisor attitudes that in turn impact coworker attitudes. Supervisors who are supportive can have a positive impact on coworker support. As a result, supervisors can help to prevent negative culture perceptions such as chronic presenteeism. This view holds that employees who spend

more time at work demonstrate higher levels of organizational commitment. When employees no longer perceive that an increased number of hours being physically present at the workplace results in additional intrinsic or extrinsic rewards, workers will feel less inhibited to participate in work enhancement programs.

Hypothesis Four. Hypothesis four (H4) predicted that supervisor support would be directly and negatively related to turnover intention. Supervisor support had a significant and negative impact on turnover intention ( $\beta$  = -.293, p = < .001). Therefore, H4 was supported. This finding affirms prior research that suggested supervisor support is negatively related to turnover intention (Eisenberger et al., 2002). Based on SET, employees should have lower turnover intention when they perceive support from their supervisor (Dysvik & Kuvaas, 2013). The current study suggests that supervisor support will be directly related to employee decisions on whether to leave the organization.

Employees often communicate directly with their supervisor and can interact with them on a daily basis. Given the general consensus in previous studies that supervisor support is important to employee outcomes, turnover intention decisions may be influenced based on the quality of relationships between supervisors and employees. Furthermore, supervisors who engage in poor managerial practices may be a primary reason that employees choose to leave organizations. Due to the nature of unique sources of support being present in the organization, it is possible for employees to perceive the organization as supportive, while viewing their individual supervisor as non-supportive.

**Hypothesis Five.** Hypothesis five (H<sub>5</sub>) predicted that coworker support would be directly and negatively related to turnover intention. Coworker support had a significant and negative impact on turnover intention ( $\beta = -.161$ , p = <.001). Therefore, H<sub>5</sub> was

supported. This finding is similar to studies suggesting that coworker support is a predictor of employee turnover (Griffeth et al., 2000; Thompson & Prottas, 2006). The results of this hypothesis are important to the field of HRD as previous researchers have noted that little work exists that has examined social relationships in relation to employee turnover (Holtom & Harman, 2009; Mossholder et al., 2005; Regts & Molleman, 2013). The results from the current study suggest that coworker support is negatively related to turnover intention, affirming that social support can affect employee behavioral outcomes.

In relation to SET, strong friendship ties among employees lead to reciprocity and social exchange (Bowler & Brass, 2006). Employees may perceive low social support in the organization without social relationships with coworkers (Lam & Lau, 2012). In addition, coworker support can significantly impact employees intent to stay at the organization (Basford & Offermann, 2012). Given the importance of social support experienced by employees in the workplace, meaningful relationships with coworkers are needed to provide employees with a sense of belonging to the organization.

Many employees spend a significant amount of their time during the work week being in the presence of or interacting with coworkers. Social relationships are important sources of support for employees as they navigate between the work and family domains. Supportive coworkers can assist in alleviating stressors that can arise when interactions between employees are negative, which can originate from a hindrance culture.

**Hypothesis Six.** Hypothesis six (H<sub>6</sub>) predicted that organizational support would be directly and negatively related to turnover intention. This hypothesis was partially supported. Although organizational support had a negative impact on turnover intention

 $(\beta = -.037, p = .285)$ . Therefore, the relationship was not significant. Although the result did confirm the proposed hypothesis, this finding concurs with previous studies that did not find organizational support to be a significant determinant related to turnover intention (Haar, 2004; Walsh, 2016).

As the organization can be perceived as a formal entity more than a personal relationship, employees may associate support at a lower level from the organization. Employees' access to perceived organizational support may occur through their immediate supervisor (Campbell et al., 2013). Given that informal organizational policies are often more important than formal ones, employees can derive support from sources of social support within the organization (e.g., supervisor and coworker).

## **Implications of the Study**

Given that this study was conducted with cross-sectional data, inferences to causality are limited. However, the results and findings in this study have multiple implications for the field of HRD in research and practice. Also, implications for organizations were examined. Previous gaps in the literature were examined and hypothesized relationships between variables were tested which had not been previously explored in a single study design.

The key finding in this study is that employees draw from distinct levels of support within the organization and these can influence other sources of support.

Organizations need to recognize the importance that specific sources of support hold in relation to employee outcomes. By focusing efforts to develop and enhance the supportive resources and behaviors that exist within the organization, employees can

draw from these sources and reduce conflict that arises from stress experienced when navigating between work and family domains.

The results from this study also provide several new pathways for researchers and practitioners to consider as they conduct future studies and initiate change within organizations. In addition, various sources of support can impact employee outcomes such as turnover intention. Negative correlations were shown to exist between various support levels and turnover intention.

Implications for Research. The first contribution to HRD research is the use of an empirical study to consider various sources of support in a single study design. The current literature has not adequately addressed multiple levels of support simultaneously when conducting organizational research. This study's theoretical framework included Blau's (1964) SET to refer to the reciprocal exchange between parties. Through helping others, a mutually positive exchange of benefits occurs and reinforces repayment (Eisenberger et al., 1987; Eisenberger et al., 1990). Organizational, supervisor, and coworker support were shown to have significant relationships and highlights the exchange process that occurs between individuals who demonstrate supportive behaviors.

The second implication for research is that disentangling support levels in the organization affirms that each can uniquely influence organizational outcomes. This finding contributes to the field by highlighting the need for future studies to separately examine multiple sources of support that may be available to employees throughout the organization. The results of the theoretical model analysis demonstrate that sources of support for employees can vary and impact turnover intention differently. Therefore, the extent to which each of these sources of support may influence turnover intention will be

important for researchers to consider as studies consider specific types of organizations or industries.

The final implication of this study for research opens up new pathways for researchers to consider as future studies are developed. Constructs tested in previous studies should be examined further in the context of additional sources of support. In addition, employees may derive resources or support from other areas not typically examined in research. In this study, the theoretical framework of COR was considered as people seek to retain and protect resources that are derived from various sources including support (Hobfoll, 1989). Social support has been identified as an important resource to help reduce the effects of stressors (Anderson et al., 2002; Kalliath et al., 2015). Consequently, researchers should examine resources and potential sources of support that may exist both inside and outside of the organization. As the boundaries between work and family domains become increasingly blurred, the resources that employees derive support from should be considered in future studies.

## **Implications for Practice**

The results of this study include several implications for HRD practice. As work design continues to evolve with dramatic technological changes, the role of practitioners will increase in importance. As organizations are faced with competitive pressures in the marketplace, retaining top talent will be a priority and practitioners will be tasked with developing strategies to enhance the work experience. The results of this study provide key insights that can be incorporated into change initiatives.

First, practitioners should consider that employees can derive support from multiple areas when implementing change initiatives in the organization. These sources

of support can originate from the organization, supervisors, coworkers, and other sources not considered in the current study. Each source of support can have distinctive and unique contributions to organizational outcomes and employee behaviors. In addition, support can originate from formal and informal sources. It will be important for practitioners to identify the extent to which each type of source contributes to the organization or industry being considered.

Second, organizational work enhancement initiatives should be formally outlined in order to provide logistical support throughout the organization. Without formal support from the organization and top management, other sources of support may not be manifested to back these efforts. The results of this study suggest that organizational support of FWAs has a significant impact on supervisor support. Therefore, organizational support for work-family initiatives such as FWAs should be formally recognized and outlined, providing the approvals necessary for management to promote their use.

Third, practitioners should work to promote a culture of support that includes a multi-faceted approach within the organization. The results of this study suggest that organizational support positively impacts coworker support, revealing the need for a strong organizational culture to exist. Before implementing change initiatives, practitioners should evaluate whether the culture in the organization is considered a supportive or hindrance one. Identifying core attributes of the organizational culture is imperative as creating support efforts without this step will be futile. Specific negative culture attributes should be identified and addressed accordingly.

Negative perceptions of participation in work-family programs can be manifested in the form of chronic presenteeism (Sheridan, 2004), a view that more presence at work is equivalent to higher levels of dedication. These negative perceptions can create a culture that demands longer hours in order to demonstrate work ethic. Practitioners should communicate that participation in work-family programs are both suggested and encouraged without any negative consequences. Encouraging managers to support their teams while aligning with organizational support initiatives is important.

Fourth, practitioners should focus on enforcing strong social support systems as these can be related to employee outcomes. Within the organization, employees often view the supervisor as the embodiment of the organization. Therefore, the social support received from supervisors directly impacts employee perceptions regarding the level of support they can expect to receive. In this study, supervisor support was found to have a significant positive impact on coworker support. The results suggest that supervisors influence how coworkers support each other within the organization. Coworker perceptions can affect decisions made by employees whether to participate in workfamily programs such as FWAs. Practitioners should communicate the importance of work-family programs and encourage their use. These types of efforts will assist in preventing negative perceptions such as chronic presenteeism, a negative view that inhibits engagement in work-family programs.

Fifth, practitioners should reiterate to supervisors the importance that their role holds in relation to turnover intention of their employees. When turnover rates are high, targeted interventions should take place to assist supervisors in effectively engaging with their employees to reduce turnover. Furthermore, informational sessions should be

conducted to reinforce to managers that their encouragement to participate in workfamily programs is a crucial component to achieve work enhancement.

Finally, practitioners should ensure that efforts take place in the organization to encourage positive relationships among employees. The results of this study suggest that coworker support reduces turnover intention. Related to SET, employees may perceive their organization as more supportive when relationships with their coworkers are meaningful. As stressors rise for workers as they navigate between the work and family domains, support derived from coworkers can be vital as difficult situations are encountered.

### **Implications for Organizations**

This study has several implications for organizations. Employee turnover can be costly to organizations and is manifested in areas such as recruitment, selection, training, and implicit knowledge (Holtom et al., 2008). As a result, it is incumbent upon organizations to make every effort to mitigate turnover. Turnover can also impact the organizational culture as it is more difficult to build trust and support within teams when new employees are constantly being onboarded. Human resource managers are often tasked with functional roles to maintain compliance and make personnel decisions.

These job demands are often carried out by understaffed HR departments and the resources available to increase employee engagement are often minimal. Therefore, it is important that key resources are deployed to ensure that support is available to employees throughout all levels of the organization.

First, supervisors should be provided formal training as part of their managerial preparation to reiterate the importance of creating a supportive culture for their direct

reports. These training programs should include the implementation of work-family benefit programs across departments so that these are applied on a consistent basis and not subject to the sole discretion of individual supervisors. Second, supervisors should take an active role in promoting positive relationships between coworkers and teams. The results of this study suggest that supervisor support has a significant positive impact on coworker support. Supervisors should promote cultural norms that encourage support between employees and positive attitudes towards work-family programs. Supervisors who engage in unsupportive behaviors will likely enforce a hindrance culture that discourages employees to support each other. As lower levels of coworker support can also lead to increased turnover intention, supervisor behaviors can be influential on how coworkers treat each other. Supervisors hold a critical role in perpetuating workplace perceptions that become embedded in the organizational culture. Perceptions that discourage participation in work-family programs or support between coworkers can be changed by supportive supervisor behaviors. These actions can be accomplished by allowing employees to have flexibility to balance roles between the work and family domains. Such supportive behaviors signal to employees that managers care about them and provide resources to alleviate stressors that arise between the work and family roles. As a result, these supportive behaviors will help to promulgate a positive workplace culture.

Finally, supervisor performance reviews should include components of supportive activities that can be measured and tied to compensation. For example, if organizational efforts are being made to increase participation in flexible work arrangements, supervisors should be measured on how many of their direct reports are utilizing the

program. These performance evaluations can then be examined to determine increases in compensation. As a result, supervisors will have accountability to ensure that work-family enhancement initiatives are effectively implemented. Consequently, organizational outcomes such as turnover intention will be directly impacted by the supportive behaviors of supervisors throughout the organization.

#### Limitations

In this study, as is common to all research, limitations are acknowledged. The first limitation of this study is the cross-sectional design. This method assumes that model parameters are constant over time and across firms (Bowen & Wiersema, 1999). The cross-sectional research design is likely to produce biased results (Nimon & Astakhova, 2015). Cross-sectional research designs consider association between stated variables rather than findings from which causal inferences can be unambiguously made (Bryman & Bell, 2011). It would be beneficial for longitudinal designs to be included in future studies to assess relationships between variables over time. Another limitation is that other variables may exist that are not examined in the current study's proposed research model. Other potential relationships may exist that were not considered within the context of the current study.

An additional limitation is that various support questions in the revised SPOS measurement scales have similar wording. It is possible that respondents may have encountered confusion if they did not carefully read the questions and answer appropriately. The fourth limitation is that self-reported data may be a source of common method bias as the predictor and criterion variables are obtained from the same rater

(Podsakoff et al., 2003). Although these are just some of the limitations that are associated with this research, they are not found to diminish the findings. However, they may serve to limit their generalizability. Despite the limitations, this study adds to the literature on support, FWAs, and turnover intention. In addition, implications and future pathways for research and practice were provided.

# **Summary of the Chapter**

This chapter included a summary of the study findings along with related discussion. Hypotheses were discussed in relation to relationships between the variables. Implications for research and practice for the field of HRD were provided. In addition, implications for organizations were discussed. Finally, limitations were addressed.

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## **Appendix A: Federal Employee Viewpoint Survey**

(U.S. FEVS, 2016, p. 42)

- 72. Have you been notified whether or not you are eligible to telework?
  - 1. Yes, I was notified that I was eligible to telework.
  - 2. Yes, I was notified that I was not eligible to telework.
  - 3. No, I was not notified of my telework eligibility.
  - 4. Not sure if I was notified of my telework eligibility.
- 73. Please select the response below that BEST describes your current teleworking situation.
  - 1. I telework 3 or more days per week.
  - 2. I telework 1 or 2 days per week.
  - 3. I telework, but no more than 1 or 2 days per month.
  - 4. I telework very infrequently, on an unscheduled or short-term basis.
  - 5. I do not telework because I have to be physically present on the job.
  - 6. I do not telework because I have technical issues that prevent me from teleworking.
  - 7. I do not telework because I did not receive approval to do so, even though I have the kind of job where I can telework.
  - 8. I do not telework because I choose not to telework.

## **Appendix B: Survey of Perceived Organizational Support (With Factor Loadings)** (Eisenberger et al., 1986, p. 502)

- 1. The organization values my contribution to its well-being. (.71)
- 2. If the organization could hire someone to replace me at a lower salary it would do so. (R) (.69)
- 3. The organization fails to appreciate any extra effort from me. (R) (.72)
- 4. The organization strongly considers my goals and values. (.74)
- 5. The organization would understand a long absence due to my illness. (.60)
- 6. The organization would ignore any complaint from me. (R) (.71)
- 7. The organization disregards my best interests when it makes decisions that affect me. (R) (.73)
- 8. Help is available from the organization when I have a problem. (.74)
- 9. The organization really cares about my well-being. (.83)
- 10. The organization is willing to extend itself in order to help me perform my job to the best of my ability. (.80)
- 11. The organization would fail to understand my absence due to a personal problem. (R) (.62)
- 12. If the organization found a more efficient way to get my job done they would replace me. (R) (.59)
- 13. The organization would forgive an honest mistake on my part. (.66)
- 14. It would take only a small decrease in my performance for the organization to want to replace me. (R) (.64)
- 15. The organization feels there is little to be gained by employing me for the rest of my career. (R) (.64)
- 16. The organization provides me little opportunity to move up the ranks. (R) (.43)
- 17. Even if I did the best job possible, the organization would fail to notice. (R) (.80)
- 18. The organization would grant a reasonable request for a change in my working conditions. (.67)
- 19. If I were laid off, the organization would prefer to hire someone new rather than take me back. (R) (.65)
- 20. The organization is willing to help me when I need a special favor. (.72)
- 21. The organization cares about my general satisfaction at work. (.82)
- 22. If given the opportunity, the organization would take advantage of me. (R) (.73)
- 23. The organization shows very little concern for me. (R) (.84)
- 24. If I decided to quit, the organization would try to persuade me to stay. (.60)
- 25. The organization cares about my opinions. (.82)
- 26. The organization feels that hiring me was a definite mistake. (R) (.60)
- 27. The organization takes pride in my accomplishments at work. (.76)
- 28. The organization cares more about making a profit than about me. (R) (.59)

## **Appendix B: Continued**

- 29. The organization would understand if I were unable to finish a task on time. (.60)
- 30. If the organization earned a greater profit, it would consider increasing my salary. (.65)
- 31. The organization feels that anyone could perform my job as well as I do. (R) (.66)
- 32. The organization is unconcerned about paying me what I deserve. (R) (.50)
- 33. The organization wishes to give me the best possible job for which I am qualified. (.67)
- 34. If my job were eliminated, the organization would prefer to lay me off rather than transfer me to a new job. (R) (.56)
- 35. The organization tries to make my job as interesting as possible. (.72)
- 36. My supervisors are proud that I am a part of this organization. (.65)

*Note.* (R) indicates the item is reverse scored.

## **Appendix C: Turnover Intention Measure**

(Kelloway et al., 1999, p. 340)

- 1. I am thinking about leaving this organization. (TI1)
- 2. I am planning to look for a new job. (TI2)
- 3. I intend to ask people about new job opportunities. (TI3)
- 4. I don't plan to be in this organization much longer. (TI4)

## **Appendix D: Overall Job Satisfaction Measure**

(Cammann et al., 1983, p. 84)

- 1. All in all, I am satisfied with my job. (JS1)
- 2. In general, I don't like my job. (R) (JS2)
- 3. In general, I like working here. (JS3)

Note: This instrument was included in the survey, but not considered in the current study. The data collected may be used in future research.

## Appendix E: Work-Family Conflict and Family-Work Conflict Measure

(Netemeyer et al., 1996, p. 410)

## Work-family conflict items:

- 1. The demands of my work interfere with my home and family life. (WF1)
- 2. The amount of time my job takes up makes it difficult to fulfill family responsibilities. (WF2)
- 3. Things I want to do at home do not get done because of the demands my job puts on me. (WF3)
- 4. My job produces strain that makes it difficult to fulfill family duties. (WF4)
- 5. Due to work-related duties, I have to make changes to my plans for family activities. (WF5)

## Family-work conflict items:

- 1. The demands of my family or spouse/partner interfere with work-related activities. (FW1)
- 2. I have to put off doing things at work because of demands on my time at home. (FW2)
- 3. Things I want to do at work don't get done because of the demands of my family or spouse/partner. (FW3)
- 4. My home life interferes with my responsibilities at work such as getting to work on time, accomplishing daily tasks, and working overtime. (FW4)
- 5. Family-related strain interferes with my ability to perform job-related duties. (FW5)

Note: This instrument was included in the survey, but not considered in the current study. The data collected may be used in future research.

## **Appendix F: Permission to Use Turnover Intention Measure**

Re: Permission to Use Turnover Intention Scale Kevin Kelloway <Kevin.Kelloway@smu.ca> Wed 3/29/2017 5:07 AM To:Marvin Bontrager <mbontrager@patriots.uttyler.edu>;

Yes please feel free to use the scale in your research - best of luck with your project Kevin

Get Outlook for iOS

From: Marvin Bontrager <mbontrager@patriots.uttyler.edu>

Sent: Tuesday, March 28, 2017 11:23:54 PM

To: Kevin Kelloway

**Subject:** Permission to Use Turnover Intention Scale

To: Dr. E. Kevin Kelloway From: Marvin Bontrager

Dr. Kelloway,

My name is Marvin Bontrager and I am a PhD candidate in Human Resource Development at the University of Texas at Tyler College of Business & Technology.

I am preparing my doctoral dissertation proposal tentatively titled, "Examining the Influences of Organizational, Supervisor, and Coworker Support on the Relationship between Flexible Work Arrangements and Turnover Intention of Civilian Federal Employees."

As part of my dissertation study, I am writing to request your permission to use the Turnover Intention scale as outlined in the following article:

Kelloway, E., Gottlieb, B., & Barham, L. (1999). The source, nature, and direction of work and family conflict: A longitudinal investigation. *Journal of Occupational Health Psychology*, 4(4), 337-346. doi: 10.1037/1076-8998.4.4.337

#### Items:

- 1. I am thinking about leaving this organization.
- 2. I am planning to look for a new job.
- 3. I intend to ask people about new job opportunities.
- 4. I don't plan to be in this organization much longer.

I can be reached at mbontrager@patriots.uttyler.edu if there are any questions.

Thank you for your consideration.

Sincerely,

Marvin Bontrager

# Appendix G: Permission to Use Work-Family Conflict and Family-Work Conflict Measure

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## Appendix H: Permission to Use Survey of Perceived Organizational Support

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## Appendix I: Permission to Use the Overall Job Satisfaction Measure

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Mon 4/3, 1:49 PM Marvin Bontrager Inbox Dear Marvin:

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111 River Street Hoboken, NJ 07030-5774 U.S. permissions@wiley.com From: Marvin Bontrager [mailto:mbontrager@patriots.uttyler.edu]

Sent: Thursday, March 23, 2017 11:42 PM

To: Wiley Global Permissions

Subject: NON RIGHTSLINK - Instrument Use Permission Request

To: Wiley Permission Request

My name is Marvin Bontrager and I am a PhD candidate in Human Resource Development at the University of Texas at Tyler College of Business & Technology. I am preparing my doctoral dissertation proposal tentatively titled, "Examining the Influences of Organizational, Supervisor, and Coworker Support on the Relationship between Flexible Work Arrangements and Intent to Stay of Civilian Federal Employees."

I was not able to locate the article/book entry in the permissions request section of your website.

I am writing to request your permission to use the Overall Job Satisfaction Instrument as outlined in the following article/publication:

Cammann, C., Fichman, M., Jenkins, G.D. and Klesh, J.R. (1983), "Assessing the attitudes and perceptions of organizational members", in Seashore, S.E., Lawler, E.E. III, Mirvis, P.H. and Cammann, C. (Eds), Assessing Organizational Change: A Guide to Methods, Measures, and Practices, Wiley, New York, NY, pp. 71-138.

#### **Instrument:**

- 1. All in all, I am satisfied with my job.
- 2. In general, I don't like my job (R)
- 3. In general, I like working here.

The purpose of this request is to use this measurement scale during deployment of a survey to population sample for research purposes.

Thank you for your consideration,

Marvin Bontrager

mbontrager@patriots.uttyler.edu

## Appendix J: UT Tyler Institutional Review Board (IRB) Approval



# THE UNIVERSITY OF TEXAS AT TYLER 3900 University Blvd. • Tyler, TX 75799 • 903.565.5774 • FAX: 903.565.5858

Office of Research and Technology Transfer Institutional Review Board

May 4, 2017

Mr. Bontrager,

Your request to conduct the study: "Examining the Influences of Organizational Supervisor and CoWorker Support on the Relationship Between Flexible Work Arrangements and Turnover Intention of Civilian Federal Employees," IRB #S2017-93 has been approved by The University of Texas at Tyler Institutional Review Board as a study exempt from further IRB review. This approval includes a waiver of signed, written informed consent. In addition, please ensure that any research assistants are knowledgeable about research ethics and confidentiality, and any co-investigators have completed human protection training within the past three years, and have forwarded their certificates to the IRB office (G. Duke).

Please review the UT Tyler IRB Principal Investigator Responsibilities, and acknowledge your understanding of these responsibilities and the following through return of this email to the IRB Chair within one week after receipt of this approval letter:

- · Prompt reporting to the UT Tyler IRB of any proposed changes to this research activity
- Prompt reporting to the UT Tyler IRB and academic department administration will be done of any unanticipated problems involving risks to subjects or others
- Suspension or termination of approval may be done if there is evidence of any serious or continuing noncompliance with Federal Regulations or any aberrations in original proposal.
- Any change in proposal procedures must be promptly reported to the IRB prior to implementing any changes except when necessary to eliminate apparent immediate hazards to the subject.

Best of luck in your research, and do not hesitate to contact me if you need any further assistance.

Sincerely,

Gloria Duke, PhD, RN Chair, UT Tyler IRB

Storia Duke, BAD, RN

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## **Appendix K: Qualtrics Survey**



#### Informed Consent

The purpose of this study is to better understand the perceptions of federal employees related to the workplace, the level of support received from the organization, and to better understand family/workplace conflicts and your job satisfaction. This survey is being conducted by Marvin Bontrager in conjunction with the University of Texas at Tyler. You have been invited to participate in this study. Your participation is completely voluntary. If you begin participation, you may click the EXIT button in the top right-hand corner or by closing your web browser. If you decide not to complete the survey, you are free to withdraw from the survey without any adverse consequences.

Information about the study:

- The principal researcher is a PhD candidate at the University of Texas at Tyler.
- This survey is related to a portion of the researcher's dissertation.
- The study has been approved by the UT Tyler Institutional Review Board.
- Your email address was obtained as part of a Freedom of Information request.
- Only aggregate summary data from this study will be included in published results.
- Names, email addresses, or other personal information will never be published.
- All information provided will remain confidential.
- The survey is expected to require approximately 8 to 9 minutes of your time.
- There are no right or wrong answers.

To protect your confidentiality, your responses will be anonymous. The researcher anticipates no side effects or risks to completing this survey. Potential benefits from this study include helping organizations implement meaningful work-family benefit programs. This research has been reviewed and approved according to The University of Texas at Tyler's Institutional Review Board (IRB) procedures for research involving human subjects.

Participants in the survey who wish to be considered in a random drawing for 7 Amazon \$20 gift cards will be given the opportunity to do so at the end of the survey. Email addresses provided will be in no way associated with survey responses. This incentive falls within gift guidelines for federal employees as outlined in 5 CFR Ch. XVI §2635.204.

Link to this guidance can be found here

If you are willing to proceed, you understand the following:

I know that my responses to the survey questions are anonymous. If I have any questions regarding the study, I can contact the principal researcher, Marvin Bontrager at mbontrager@patriots.uttyler.edu. Or, if I have any questions about my rights as a research participant, I can contact Dr. Gloria Duke, Chair of the UT Tyler Institutional Review Board at gduke@uttyler.edu, (903) 566-7023, or the University's Office of Sponsored Research:

The University of Texas at Tyler c/o Office of Sponsored Research 3900 University Blvd Tyler, TX 75799

I have read and understood what has been explained to me. If I choose to participate in this study, I will click "Yes" in the box below and proceed to the survey. If I choose to not participate, I will click "No" in the box.

For the next two questions, telework is defined as "A flexible way of working which covers a wide range of work activities, all of which entail working remotely from an employer, or from a traditional place of work, for a significant proportion of work time" (Gray, Hodson, & Gordon, 1993, p. 11).

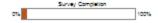
Gray, M., Hodson, N., & Gordon, G. (1993). Teleworking explained. New York: Wiley.

Have you been notified whether or not you are eligible to telework?

- Yes, I was notified that I was eligible to telework.
- Yes, I was notified that I was not eligible to telework.
- No, I was not notified of my telework eligibility.
- Not sure if I was notified of my telework eligibility.

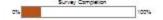
Please select the response below that BEST describes your current teleworking situation.

- I telework 3 or more days per week.
- I telework 1 or 2 days per week.
- I telework, but no more than 1 or 2 days per month.
- I telework very infrequently, on an unscheduled or short-term basis.
- I do not telework because I have to be physically present on the job.
- I do not telework because I have technical issues that prevent me from teleworking.
- I do not telework because I did not receive approval to do so, even though I have the kind of job where I can telework.
- I do not telework because I choose not to telework.



If you telework to any extent, how long have you been doing so?

- Less than 1 year
- 1-3 years
- 4-5 years
- @ 6-10 years
- 11-20 years
- 20+ years



For the next set of questions, Flexible Work Arrangements (FWAs) broadly refer to various forms of telework, telecommuting, alternative work arrangements, and flextime.

#### Definition:

Flexible Work Arrangements (FWAs) - "Employer provided benefits that permit employees some level of control over when and where they work outside of the standard workday" (Lambert, Marler, & Gueutal, 2008, p. 107).

Lambert, A., Marler, J., & Gueutal, H. (2008). Individual differences: Factors affecting employee utilization of flexible work arrangements. Journal of Vocational Behavior, 73(1), 107-117.

Please carefully read each of the statements presented below and the set of response options provided, then check the response option that most accurately reflects your own opinions or beliefs. There are no right or wrong answers.

				Neither agree			
	Strongly Disagree	Moderately Disagree		nor	Slightly Agree	Moderately Agree	Strongly agree
By offering FWAs, my organization values my contribution to its well-being.	0	0	0	0	0	0	0
By offering FWAs, my organization strongly considers my goals and values.	0	0	0	0	0	0	0
Select Strongly Agree for this question.	0	0	0	0	0	0	0
By offering FWAs, my organization really cares about my well- being.	0	0	0	0	0	0	0
By offering FWAs, my organization is willing to extend itself in order to help me perform my job to the best of my ability.	0	0	0	0	0	0	0
By offering FWAs, my organization is willing to help me when I need a special favor.	0	0	0	0	0	0	0
By offering FWAs, my organization cares about my general satisfaction at work.	0	0	0	0	0	0	0
By offering FWAs, my organization cares about my opinions.	0	0	0	0	0	0	0

				Neither agree			
	Strongly Disagree	Moderately Disagree	_	nor	Slightly Agree	Moderately Agree	Strongly agree
My supervisor strongly considers my goals and values.	0	0	0	0	0	0	0
Help is available from my supervisor when I have a problem.	0	0	0	0	0	0	0
My supervisor really cares about my well- being.	0	0	0	0	0	0	0
Select Slightly Agree for this question.	0	0	0	0	0	0	0
My supervisor would grant a reasonable request for a change in my working conditions.	0	0	0	0	0	0	0
My supervisor is willing to help me when I need a special favor.	0	0	0	0	0	0	0
My supervisor cares about my general satisfaction at work.	0	0	0	0	0	0	0
My supervisor cares about my opinions.	0	0	0	0	0	0	0

				Neither agree			
	Strongly Disagree	Moderately Disagree		nor disagree	Slightly Agree	Moderately Agree	Strongly agree
My coworkers strongly consider my goals and values.	0	0	0	0	0	0	0
Help is available from my coworkers when I have a problem.	0	0	0	0	0	0	0
My coworkers really care about my well- being.	0	0	0	0	0	0	0
My coworkers would forgive an honest mistake on my part.	0	0	0	0	0	0	0
My coworkers are willing to help me when I need a special favor.	0	0	0	0	0	0	0
My coworkers care about my general satisfaction at work.	0	0	0	0	0	0	0
My coworkers care about my opinions.	0	0	0	0	0	0	0
		0%	Survey Completion	100%			

		Moderately Disagree		Neither agree nor disagree	Slightly Agree	Moderately Agree	Strongly agree
The demands of my work interfere with my home and family life.	0	0	0	0	0	0	0
The amount of time my job takes up makes it difficult to fulfill family responsibilities.	0	0	٥	0	0	0	0
Things I want to do at home do not get done because of the demands my job puts on me.	0	0	0	0	0	0	0
My job produces strain that makes it difficult to fulfill family duties.	0	0	0	0	٥	0	0
Due to work-related duties, I have to make changes to my plans for family activities.	0	0	0	0	0	0	0
		0%	Survey Completion	100%			

				Neither agree			
		Moderately Disagree		nor	Slightly Agree	Moderately Agree	Strongly agree
The demands of my family or spouse/partner interfere with work-related activities.	٥	٥	٥	0	٥	0	0
I have to put off doing things at work because of demands on my time at home.	0	۰	0	0	0	0	0
Select Strongly Disagree for this question.	0	0	0	0	0	0	0
Things I want to do at work don't get done because of the demands of my family or spouse/partner.	0	0	0	0	0	0	0
My home life interferes with my responsibilities at work such as getting to work on time, accomplishing daily tasks, and working overtime.	٥	0	۰	۰	0	0	0
Family-related strain interferes with my ability to perform job-related duties.	0	0	0	0	0	0	0
			Francisco Francisco				

Survey Completion

	Strongly Disagree	Moderately Disagree		Neither agree nor disagree	Slightly Agree	Moderately Agree	Strongly agree
All in all, I am satisfied with my job.	0	0	0	0	0	0	0
In general, I don't like my job.	0	0	0	0	0	0	0
In general, I like working here.	0	0	0	0	0	0	0

Please carefully read each of the statements presented below and the set of response options provided, then check the response option that most accurately reflects your own opinions or beliefs. There are no right or wrong answers.

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Neither agree nor disagree	Slightly Agree	Moderately Agree	Strongly agree
I am thinking about leaving this organization.	0	0	0	0	0	0	0
I am planning to look for a new job.	0	0	0	0	0	0	0
I intend to ask people about new job opportunities.	0	0	0	0	0	0	0
I don't plan to be in this organization much longer.	0	0	0	0	0	0	0



The University of Texas at Tyler  TYLER  Tyler · Longview · Palestine	
Do you identify as Hispanic or Latino?  Yes  No	
What is your race?  American Indian or Alaska Native  Asian  Black or African American  Hispanic/Latino  Native Hawaiian or Other Pacific Islander  White  Two or More Races	
What is your gender?  Male Female	
What generation are you a member of?  Baby Boomers (1945-1964)  Generation X (1965-1980)  Millenials (1981+)	

Millenials (1981+)

## How long have you been with your current employer?

- Less than 1 year
- 1-3 years
- 4-5 years
- 6-10 years
- 11-20 years
- 20+ years

## Please describe your job role.

- Employee
- Middle Management
- Top Management

## Please indicate your marital status.

- Married
- Not Married

### Please describe your life stage.

- Under age 35 with no children in the home
- Age 36-53 with no children in the home
- Over age 54 with no children in the home
- Youngest child is under the age of 3
- Youngest child is 3-5 years of age
- Youngest child is 6-12 years of age
- Youngest child is 13-18 years of age
- Youngest child is 19+ years of age

## Please indicate if your household has:

- Single Income
- Dual Income

Please indicate your highest level of education achieved.

- Highschool
- Associates Degree
- Bachelor's Degree
- Master's Degree
- Doctoral Degree
- Other



>>



If you would like to be included for consideration in the drawing for the \$20 Amazon Gift cards, please click Yes here.

- O Yes
- ⊜ No



### **Appendix L: Respondent Recruitment Email**

Subject: Will You Help Out PhD Student by Completing Survey?

Hello!

My name is Marvin Bontrager and I am a PhD candidate at the University of Texas at Tyler. I am conducting an online survey regarding the perceptions that federal employees have about their work environment. I am researching this topic as part of my dissertation in partial fulfillment of requirements needed to complete my PhD in Human Resource Development. Your email address was obtained from a FOIA request. This research study has been reviewed and approved according to The University of Texas at Tyler's Institutional Review Board (IRB) procedures for research. Your participation would be greatly appreciated! The survey is estimated to take less than 9 minutes to complete and your response will be completely anonymous. More background information about the survey can be found in the link below. The results of the survey will be reported as aggregate information from a group of all respondents. A random drawing for seven \$20 Amazon gift cards will be conducted among survey participants who wish to be included.

Thank you for your consideration.

Sincerely,
Marvin Bontrager
mbontrager@patriots.uttyler.edu

Follow this link to the Survey:

## Appendix M: Test Survey Email Subject Line Survey Question

If you were to receive this survey with a link via your work email inbox, please rank the following subject lines in order of importance (1-10) regarding which option would be more likely to cause you to complete the survey.

- -Will you help out a PhD student?
- -Complete this survey for a chance to win a \$20 Amazon Gift Card!
- -Complete this survey, help a student earn his PhD!
- -Quick favor?
- -Yes, I am asking you to help me out by completing a survey.
- -Do you like to telework?
- -You have the power to make your voice heard.
- -Do you like working from home?
- -I need your feedback! Help research on the employee experience.
- -I know, I know, another email asking you for a favor....

## **Appendix N: Emails from Respondents Regarding Spam Concerns**

From: <\*\*\*\*@epa.gov>

Sent: Thursday, June 1, 2017 8:51 AM

**To:** Marvin Bontrager

**Subject:** Survey - Federal Employees Perception

Hello Mr. Bontrager,

I received today an email from you regarding your request to complete a survey about the perceptions that federal employees have about their work environment. I would like to help but your email was delivered to my Junk Email folder so I'm just trying to verify its legitimacy. We are constantly reminded not to click on links or attachments from unknown senders. (Here you have something that may be part of the federal employee work environment – the paranoia of clicking on something that would allow unauthorized access to our government Intranet.)

From: <\*\*\*\* @epa.gov>

Sent: Thursday, June 1, 2017 7:01 AM

**To:** Marvin Bontrager **Subject:** PHD Study

Marvin,

Your email comes up as Junk Email wanted to see if you are a real person.

FYI the 20 dollar gift card makes it seem more like Spam.

**Best Regards** 

From: <\*\*\*\*@epa.gov>

Sent: Thursday, June 1, 2017 11:21 AM

**To:** Marvin Bontrager

**Subject:** RE: Will You Help Out PhD Student by Completing Survey?

#### Hi Marvin.

I did your survey, however, FEDERAL employee responses may not be many, due to the email going to my JUNK folder.

I read your intro and decided to DO the survey as I appreciate the need for a PhD candidate to complete the work for a dissertation.

Good luck and I hope many more don't discard your email. Best wishes in your future work!

From: < \*\*\*\* @census.gov>

Date: Tuesday, June 20, 2017 at 3:02 PM

To: Gloria Duke

**Subject:** Suspected Phishing scam

Hello Ms. Duke,

I am a federal employee and I recently received the below message (links removed) to my Census Bureau email address. I believe it is likely a phishing scam email and therefore I reported this to our internal IT Department. However I also wanted to make you aware of the email because it uses your institution to build legitimacy. If you can verify for me that this is a legitimate email I will participate in the survey, however I do not believe that it is.

Thank you for your attention to this matter.

From: <\*\*\*\*@nist.gov>

Sent: Monday, June 19, 2017 5:05 PM

**To:** Marvin Bontrager **Subject:** Survey

Hi Marvin,

To verify that your email regarding a survey of federal employees is not a phishing attempt, please tell me a secure website where I may find a link to your survey. I will not follow the link from your email.

From: <\*\*\*\*\*@census.gov>

Sent: Monday, June 19, 2017 7:59 AM

To: Marvin Bontrager

**Subject:** Re: Will You Help Out PhD Student by Completing a Survey?

Mr. Bontrager:

I help to run the American Housing Survey, and I am very sympathetic to anyone conducting survey research. Unfortunately, I am also very aware of the training that all government employees receive concerning information security. One of the rules is that we do not click on URLs in emails unless we are sure where they came from.

I am 99% sure that you are who you say you are. However, your email could be a masterful example of phishing. Thus, I must reluctantly decline to participate in your survey.

**From:** <\*\*\*\*@nist.gov>

**Sent:** Friday, June 16, 2017 9:14 AM

To: Marvin Bontrager

**Subject:** did you send out a email asking me to complete a survey?

Marvin I received an email stating asking me to participate in a survey. The survey link looks very much like a phishing attack.

Can you confirm that you are conducting a survey and if so provide a url to the survey

**From:** <\*\*\*\*@faa.gov>

Sent: Friday, June 9, 2017 1:56 PM

**To:** Marvin Bontrager **Subject:** Your survey

#### Marvin

I am emailing you to confirm that the email you sent from Qualtrics-Survey is legitimate and not spam. Please confirm.

Thank you

From: <\*\*\*\*@dot.gov>

Sent: Wednesday, May 31, 2017 8:07 AM

To: Marvin Bontrager

Subject: RE: Will You Help Out PhD Student by Completing Survey?

#### Marvin,

While search of your name indicates that you are legit, I think that you will find most govt employees, including myself, wary of opening a link from an unknown person, due to the proliferation of hacking and scam emails sent to govt employees. While certainly more tedious and time consuming, you may want or need to resort to snail mail.

From: <\*\*\*\*\*@fs.fed.us>

Sent: Thursday, May 11, 2017 12:53 PM

**To:** Marvin Bontrager **Subject:** Survey

Dear Mr. Bontrager:

Although I haven't seen a statement of the appropriate agency policy for some years, I think my employer has asked agency employees to ignore solicitations for survey participation if the survey request does not come from the USDA directly. Don't get me wrong, I've participated in several sanctioned surveys this year, but they all have

received the seal of approval for content, intent, and appropriateness to complete on official time.

I'd like to think you know all of the above already, but perhaps not. This might explain a low participation rate, if such occurs. At the very least, I expect to see a USDA reminder about this policy in the very near future.

Good luck in your studies.

**From:** <\*\*\*\*@fs.fed.us>

Sent: Thursday, May 11, 2017 12:47 PM

To: Marvin Bontrager

Subject: Confirming you are researching HRO's in Government

I received an email request from a qemailserver address for a survey. Can you comfirm?

Thank you!

From: <\*\*\*\*@faa.gov>

Sent: Thursday, May 11, 2017 10:19 AM

To: Marvin Bontrager

Subject: Will you help out a PhD student - verification

Marvin,

I wanted to verify that you are a real person before clicking your link. Please verify.

Thanks,

## **Appendix O: Emails from Respondents Regarding Race Questions**

**From:** < \*\*\*\*\*@fs.fed.us>

Sent: Thursday, May 11, 2017 4:24 PM

To: Marvin Bontrager

**Subject:** RE: Will You Help Out a PhD Student?

#### Dear Marvin

I would be happy to fill out this survey but it includes mandatory demographic questions which I <u>refuse!!!!!</u> To answer ( race, gender, etc.). I have always bent over backwards to help researchers but I will be unable (that is completely unwilling) to comply in this instance.

Good luck with your research but be advised, several of my coworkers who have the same opinion as me about demographic questions but little respect for science have purposefully answered your questions inaccurately so as to skew your results.

From: <\*\*\*\* @epa.gov>

Sent: Wednesday, June 7, 2017 9:29 AM

**To:** Marvin Bontrager

Subject: RE: Will You Help Out PhD Student by Completing a Survey?

It would be nice if this survey had an open response box at the end. Some of the questions seemed redundant. The race question some people prefer not to answer. They should have a prefer not to answer option for those personal questions.