# **Does Family-Friendly Policy Matter? Testing Its Impact on Turnover and Performance**

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## Abstract

This study investigates the relative effects of four types of family-friendly policies (i.e., child care subsidy, paid leave for family care, teleworking, and alternative work schedules) on turnover rate and effectiveness of federal agencies, using data from various sources. Based on social exchange theory, this research expected that an agency's average level of satisfaction with a specific family-friendly policy is negatively associated with the turnover rate of the agency and positively with the performance of the agency. Yet, analysis results are somewhat different from this expectation. Only a child care subsidy program had a positive and significant influence on reducing the turnover rate of the agency. Also, a child care subsidy program and an alternative work schedule policy had positive and significant influences on agency effectiveness. One interesting finding is that an agency's average satisfaction with a telework program had a significant, but negative, effect on agency performance.

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# **INTRODUCTION**

Family-friendly policies are broadly construed as a group of complementary benefits and programs designed to support employees faced with balancing the conflicting demands of work, family, and personal time in today's complex environment (Newman and Mathews 1999; Perry-Smith and Blum 2000; Roberts et al. 2004). In general, increased demand for family-friendly policies has been regarded as a practical response to the increase in the number of women in the work force (Lambert 2000). In other words, family-friendly policies are "a necessary first step to improve the goodness of fit between the lives of women and the workplace experience" (Newman and Mathews 1999, 35). According to the U. S. Federal Human Resources Data (i.e., FedScope), as of March 2010, more than half of the employees in 66 federal agencies among 119 agencies (including 15 cabinet level agencies) are female employees. The rise in the number of females or mothers in the work force challenges both organizations and employees to find new ways to balance work and family responsibilities (Ezra and Deckman 1996; Nigro and Nigro 2000).

In addition, in the federal government family-friendly policies are becoming even more important due to a dramatic change in the workforce (Moon and Roh 2010) and the federal government's role as a model employer for other public and private sectors (Ezra and Deckman 1996). Especially in terms of the nature of the contemporary workforce, the numbers of women, dual wage earners (i.e., employees with working spouses), single parents, and middle-aged workers having the need for elder care in the workforce have steadily increased because of recent government policies to increase these various kinds of nontraditional employees (Moon and Roh 2010; Mumford and Budd 2006; Newman and Mathews 1999; Saltzstein, Ting, and Saltzstein 2001). Along with these demographic shifts in the workforce, the pressures of global competition to hire and retain good workers have pushed employers to pay attention to their employees' family and work responsibilities (Cayer 2003; Saltzstein, Ting, and Saltzstein 2001). In the same context, former President Clinton and former British Prime Minister Blair emphasized that governments need to encourage more family-friendly policies as a reform effort in order to support their employees and improve their performance (Durst 1999; Mumford and Budd 2006) because a widely shared "work-family dichotomy" based on women's sacrifice at home is no longer valid (Bruce and Reed 1994; Kanter 1977; Saltzstein, Ting, and Saltzstein 2001, 452).

Family-friendly policies<sup>1</sup> that the U. S. federal agencies are providing include the following programs: alternative work schedules, telecommuting or teleworking, part-time employment, job sharing, dependent care programs, child care services, leave for family responsibilities, and so on (Cayer 2003; Newman and Mathews 1999). These family-friendly policies are formulated and implemented because they benefit both employers and employees. In terms of employees' needs, the underlying purpose of these various programs is offering employees flexibility in time at work, place of work, and leave options (Newman and Mathews 1999, 35). That is, family-friendly policies can provide employees with relief for non-work concerns through work flexibility and employees can feel that they are receiving special care from their organizations through that relief (Perry-Smith and Blum 2000).

From the employers' perspective, such family-friendly programs benefit them in that stresses of the employees' normal life routines can directly influence employees' work (Cayer 2003; Whigham-Desir 1993) and employees who perceived their managers as less supportive on family issues show higher degrees of stress (Rodgers and Rodgers 1989). A variety of employee-centered policies is likely to make employees act favorably and show additional effort for their organization (Perry-Smith and Blum 2000). Their favorable response to the organization can make the organization retain competent employees and employees' extra effort for their organization can help the organization improve or enhance its performance (Ostroff 1992; Whigham-Desir 1993; Pfeffer 1994; MacDuffie 1995; Durst 1999). According to Mumford and Budd (2006), organizations are realizing advantages of family-friendly policies in reducing absenteeism and enhancing productivity because such constraints as child-care or dependent-care issues may harm the organization's success if family-friendly programs are not available. Of course, family-friendly programs are not always good for the organization. Family-friendly policies such as subsidy for child care and paid leave cost the organization extra money. If these benefits do not show meaningful results unlike expectation, the organization will have a hard time in persuading its stakeholders, even if it can provide these benefits at reduced cost due to economies of scale and tax advantages (Durst 1999). Also, Perry-Smith and Blum (2000, 1108) argued that family-friendly policies may take workers outside of their organization or bring their family issues inside and this feature of work-family balance needs a huge amount of trust between employers and employees and the management's abandoning of control.

Although scholars such as Kamerman and Kahn (1987) and Gonyea and Googins (1992) contended that family-friendly policies are beneficial to organizations and their performance, only a few empirical studies have investigated this argument (i.e., their impacts on organizational performance) in the private sector (Perry-Smith and Blum 2000). For example, Shepard, Clifton, and Kruse (1996) showed evidence of enhanced productivity associated with flexible work hours in the pharmaceutical industry. Also, using a national survey on 527 U.S. firms, Perry-Smith and Blum (2000) suggested that organizations with more extensive family-friendly policies such as leave policies, traditional dependent care (e.g., on-site day care, flexible scheduling, etc.), and less traditional dependent care (e.g., monetary assistance with day care, etc.) show higher perceived organizational performance.

Traditionally, government agencies have been renowned for their outstanding benefit packages in that they introduced and developed a number of family-friendly programs and policies that serve as models for firms (Bruce and Reed 1994). As mentioned before, these family-friendly policies are based on the assumption that such programs will benefit the organization either through retention or recruitment of high quality employees or through enhanced productivity (Durst 1999, 19). However, little is still known about whether this assumption is true, especially in the public sector. Although practitioners and scholars believe that the implementation of these policies will benefit the organization, they have little objective evidence to support this assumption (Durst 1999). Just as former President Clinton's stated goals of family-friendly policies included "increased worker commitment and productivity" (Clinton 1996, 1), family-friendly programs intend to benefit the government organizations by reducing employee turnover and enhancing organizational performance. Yet, in the public sector we found no empirical research investigating relative impacts of various family-friendly policies on their ultimate goals-i.e., employee turnover and organizational performance. Of course, a number of scholars have studied family-friendly policies in the public sector. For example, the work of Saltzstein, Ting, and Saltzstein (2001) addressed the impacts of work-family demands, family-friendly policies (e.g., child care, flexible schedule, work at home, etc.), and satisfaction with work-family balance on federal employees' job satisfaction, using the 1991 Survey of Federal Government Employees. Ezra and Deckman (1996) examined how family-friendly policies such as flexitime and on-site child care affect federal employees' satisfaction with their jobs and work-family balance, using the 1991 Survey of Federal Government Employees. Research studies of Bohen and Viveros-Long (1981) and Hochschild (1989) also investigated the effects of a number of specific family-friendly programs on job satisfaction of federal employees. Although these previous studies focus on a variety of family-friendly policies, their dependent variable is

employees' satisfaction with their job or work-family balance, not turnover or performance.

Therefore, this research attempts to move the studies on family-friendly policies forward in the following ways. First, we investigate relative impacts of various kinds of family-friendly policies on federal employees' turnover and federal agencies' performance. The ultimate goals of family-friendly policies are to reduce employee turnover rate and to enhance organizational performance, but few researchers have addressed these goals as dependent variables. Thus, this research focuses on employee turnover and agency performance as dependent variables. Second, a number of previous studies used employees' perceptual measures such as job satisfaction as a dependent variable (e.g., Bohen and Viveros-Long 1981; Ezra and Deckman 1996; Saltzstein, Ting, and Saltzstein 2001), but this research uses objective measures such as federal employees' turnover rate and federal agencies' performance as dependent variables. Also, the fact that the data sources of independent variables and dependent variables are totally different will help reduce the possibility of mono source bias from using only one data source. Third, as Perry-Smith and Blum (2000, 1107) pointed out, although supporters of family-friendly programs contend that these policies are beneficial to organizations, very little empirical research has examined the outcomes of family-friendly policies at the organizational level. While previous studies were usually conducted at the individual level, this study uses agency-level data for the analysis.

This study proceeds as follows. We offer a theoretical framework and hypotheses for understanding the relationship between family-friendly policies and employee turnover and agency performance. Second, we offer a specification of the model and explanations on the data of this research. We then describe our estimation approach and our analysis results, followed by discussion and conclusion on our findings.

### THEORY

According to Roberts et al. (2004, 310), research on family-friendly benefits is

divided into the following two types: (1) analysis of the effect of a solitary family-friendly policy on outcome variables such as absenteeism, turnover, commitment, and productivity (e.g., Allen and Russell 1999; Barham, Gottlieb, and Kelloway 1998; Ezra and Deckman 1996) and (2) research on the comprehensive understanding of the entire family-friendly policies, not related to a specific outcome variable (e.g., Durst 1999; Frederickson and Soden 1998; Grover and Crooker 1995; Hoyman and Duer 2004; Newman and Mathews 1999). This study intends to combine these two research streams by assessing the relative contribution of various family-friendly policies to important outcome variables such as employee turnover rate and agency performance in the federal government. To demonstrate that family-friendly programs benefit the government organizations by reducing turnover and enhancing performance will be "one of the greatest challenges facing human resource professionals" (Durst 1999, 22). However, public sector organizations cannot avoid the fact that they have to provide meaningful evidence that family-friendly policies produce anticipated results in that family-friendly benefits cost the government, that costs come from tax, and thus government needs to justify that costs to the public. Based on this research idea, in this section we will discuss the theoretical framework of this study.

This research uses social exchange theory as a framework for studying the relationships between family-friendly policies and employee turnover and agency performance. Organizational researchers have used the social exchange concept to explain "the motivational basis behind employee behaviors and the formation of positive employee attitudes" (Blau 1964; Gouldner 1960; Konovsky and Pugh 1994; Settoon, Bennett, and Liden 1996, 219; Wayne, Shore, and Liden 1997). That is, social exchange theory relates to when people feel that they should reciprocate benefits that they get from others (i.e., other people or organizations) (Lambert 2000). The basic principle of social exchange theory is that "positive, beneficial actions directed at employees by the organization and/or its

representatives contribute to the establishment of high quality exchange relationships that create obligations for employees to reciprocate in positive, beneficial ways" (Settoon, Bennett, and Liden 1996, 219). In fact, traditional theories of organizational behavior such as Herzberg's (1968) two-factor theory argued that extrinsic factors such as benefits cannot affect employees' performance because benefits are hygiene factors that just remove dissatisfaction from employees but do not motivate employees to better performance. However, social exchange theory suggests the possibility that "workers may feel obligated to exert extra effort in return for extra benefits" from their organizations (Lambert 2000, 801).

According to Blau (1964), social exchange is differentiated from economic exchange: (1) while economic exchange expects clearly specified future return, social exchange means relationships that involve unspecified future obligations; (2) while economic exchange is based on transactions, social exchange relies on a trust with the other parties to the exchange. In addition, scholars such as Eisenberger et al. (1986) and Graen and Scandura (1987) identified two types of social exchanges: one is perceived organizational support (exchanges between employees and their organization) and the other is leader-member exchange (exchanges between employees and their leader, or supervisor). This study focuses on the concept of perceived organizational support between an employee and employing organization, as family-friendly policies are related to exchanges between these two parties. Perceived organizational support refers to employees' beliefs regarding the extent to which their organization cares about their well-being and those beliefs result in the employees' commitment to their organization (Eisenberger et al. 1986, 501). That is, social exchange theory argues that "high levels of perceived organizational support create feelings of obligation, whereby employees not only feel that they ought to be committed to their employers, but also feel an obligation to return the employers' commitment by engaging in behaviors that support organizational goals" (Wayne, Shore, and Liden 1997, 83). As a result,

employees' commitment to the organization can reduce employee turnover, and employees' favorable behaviors to organizational goals can enhance organizational performance. Empirical studies have shown that perceived organizational support is positively associated with performance of job responsibilities and commitment (e.g., Eisenberger, Fasolo, and Davis-LaMastro 1990; Shore and Wayne 1993).

There is no generally accepted list of family-friendly policies (Durst 1999, 20; Mitchell 1997) and thus, a listing of family-friendly policies varies across researchers. For example, Cayer (2003) argued that family-friendly packages include flexible work hours, dependent care, domestic partner benefits, employee assistance, legal assistance, and so on. Other scholars such as Goodstein (1994) and Osterman (1995) provided eight widely represented family-friendly programs such as on-site day care, help with day care costs, elder care assistance, information on community day care, paid parental leave, maternity (or paternity) leave with reemployment, and flexible scheduling. Newman and Mathews (1999) introduced a variety of family-friendly policies after an examination of the nine federal departments: alternative work schedules, telecommuting, part-time employment, dependent care, near-site child care centers, and leave for parental and family responsibilities. Durst's (1999) family-friendly benefits consist of health insurance, child care, flextime, job sharing, voluntary reduced hours, telecommuting, and so forth.

Considering these various kinds of family-friendly policies, four types of familyfriendly policies were chosen as independent variables in the current study: child care subsidy, telework (or telecommuting), paid leave for family care such as elder care, and alternative work schedule. These four kinds of policies were selected for the following reasons. First, these four types of benefits were frequently identified as family-friendly policies in previous studies and literatures. Nigro and Nigro (2000) introduced flexible work arrangements (i.e., alternative work schedules and telework), family leave policy, and child/elder care programs as a response to the new American workforce. Second, according to surveys of employers, the provision of family-friendly initiatives has increased, with flexible work schedule, child care assistance, the ability to work at home, and some form of elder-care assistance (Families and Work Institute 1998; Saltzstein, Ting, and Saltzstein 2001, 453; Vincola 1998). That is, these four types of benefits made important contributions to the wide spread of family-friendly policies. Third, as mentioned above, a list of family-friendly policies varies across scholars and there is a disagreement over what constitutes a package of family-friendly policies (Mitchell 1997). By definition, however, family-friendly policies are programs that help employees balance their work and their family-related affairs. Therefore, we try to narrow our analysis scope down to the four policies above that have relatively more direct relationships with family issues such as child care or elder care than other policies in that, by doing so, most scholars can agree that those four policies are clearly family-friendly policies. Child care subsidy and paid leave for family care are definitely linked to family issues. Also, according to Roberts (2000), flexi-place (i.e., telecommuting), flextime, and flexible schedule (i.e., alternative work schedule) are widely represented as family-friendly policies.

*Child Care Subsidy.* Child care can be extremely expensive. Therefore, contemporary employers recognize that help with dependent care, especially child care, can be effective in recruiting and retaining competent employees in that families that have difficulty arranging child care are likely to experience frequent work disruptions and high absenteeism (Weisberg and Buckler 1994). Some employers have already begun helping with child care, usually by subsidies for child care expenses (Cayer 2003, 174). According to Section 630 of Public Law 107-67, an Executive agency which provides or proposes to offer child care services for federal employees may use appropriated funds to provide child care. This child care subsidy program applies to employees whose children are enrolled, or will be enrolled, in licensed family child care homes or center-based child care.

According to social exchange theory, if employees of an agency are satisfied with a child care subsidy program, this satisfaction can lead to employees' perceived organizational support because employees think that their organization cares about their well-being. As a result, employees feel that they should show their loyalty to their organizations and this thought can reduce employees' turnover. In addition, employees who have perceived organizational support by engaging in behaviors that support organizational goals and, thus, employees' satisfaction with agencies' child care subsidy policy can enhance agency performance. Therefore, this study expects that employees' satisfaction with a child care subsidy policy will reduce employee turnover rate and improve agency performance.

- H1: An agency's average level of satisfaction with a child care subsidy policy is negatively associated with the turnover rate of the agency.
- H2: An agency's average level of satisfaction with a child care subsidy policy is positively associated with the performance of the agency.

*Teleworking (Telecommuting).* According to the Office of Personnel Management's guide<sup>2</sup> to telework, telework can be defined as work arrangement in which an employee regularly performs officially assigned duties at home or other worksites geographically convenient to the residence of the employee. Telework or telecommuting focuses on flexibility in the place at which work is done (Cayer 2003; Newman and Mathews 1999). IT innovations such as sophisticated computer systems and electronic communication tools make work increasingly mobile and telework has become more and more widespread (Nigro and Nigro 2000). Telework can be attractive especially to those who have children, elders at home, or those who have some disability that makes travel difficult (Cayer 2003, 174). Section 359 of Public Law 106-346 states that each executive agency shall establish a policy under which eligible employees of the agency may participate in telecommuting to the

maximum extent possible without diminished employee performance.

According to social exchange theory, if employees of an agency are satisfied with a telework policy, this satisfaction results in the employees' perceived organizational support because they think that their organization pays special attention to their well-being. As a result, the employees feel that they should show their commitment to their organizations and this thought can decrease the employees' turnover. In addition, employees who have perceived organizational support through a telecommuting program feel an obligation to repay the employers' support by engaging in behaviors that pursue organizational goals; thus, employees' satisfaction with agencies' telework policy can improve agency performance. Therefore, this research expects that employees' satisfaction with a telecommuting policy will decrease employee turnover rate and increase agency performance.

- H3: An agency's average level of satisfaction with a telework (telecommuting) policy is negatively associated with the turnover rate of the agency.
- H4: An agency's average level of satisfaction with a telework (telecommuting) policy is positively associated with the performance of the agency.

*Paid Leave for Family Care.* Sections 6304, 6305, and 6307 of Title 5 of the U. S. Code state that government employees can have paid leave such as annual leave, sick leave, and home leave. Among them, paid sick leave is one of the family-friendly policies because it can be used for family care situations such as childbirth/adoption, family member care or a funeral, and so on. For example, according to section 6307 of the U.S. Code Title 5, sick leave may be used by an employee (1) to give care or otherwise attend to a family member having an illness, injury, or other condition which, if an employee had such condition, would justify the use of sick leave by such an employee; or (2) for purposes relating to the death of a family member, including to make arrangements for or attend the funeral of such family member. The Federal Employees Family Friendly Leave Act of 1994 states that federal

employees can use up to 13 workdays of sick leave to care for family members or to arrange for or attend the funeral of a family member (Nigro and Nigro 2000). Sick leave is almost universal with the public sector in that the federal government provides sick leave and 95% of state and local governments provide it (Cayer 2003, 171; U.S. Bureau of the Census 1994).

According to social exchange theory, if employees of an agency are satisfied with a paid leave for family care program, this satisfaction can lead to employees' perceived organizational support because they think that their organization cares about their well-being. As a result, employees feel that they should show their loyalty to their organizations and this thought can reduce employee turnover. In addition, employees who have perceived organizational support through a paid leave for family care policy feel an obligation to return the employers' support by engaging in behaviors that support organizational goals and, therefore, employees' satisfaction with agencies' paid leave for family care policy can enhance agency performance. Thus, this study expects that employees' satisfaction with a child care subsidy policy will reduce turnover rate and improve agency performance.

- H5: An agency's average level of satisfaction with a paid leave for family care policy is negatively associated with the turnover rate of the agency.
- H6: An agency's average level of satisfaction with a paid leave for family care policy is positively associated with the performance of the agency.

*Alternative Work Schedule.* Alternative work schedule means both flexible work schedules<sup>3</sup> and compressed work schedules<sup>4</sup> for employees' substantial control of their work schedules (Newman and Mathews 1999). Flexible work schedules require employees to be on the job during core time, but allow for variations in starting and stopping (Nigro and Nigro 2000). Compressed work schedules provide various choices for employees who want to free up a day or two for family use (Nigro and Nigro 2000). These options focus on flexibility in the time or schedule of work. Congress established an experimental flextime program in 1979

through the Federal Employees Flexible and Compressed Work Schedules Act of 1978 and authorized agencies to make alternative work schedules permanent in the federal government with Public Law 99-196 (Ezra and Deckman 1996, 175).

According to social exchange theory, if employees of an agency are satisfied with an alternative work schedule policy, this satisfaction induces their perceived organizational support because they think that their organization takes into account their well-being. As a result, employees feel that they should show their commitment to their organizations and this thought can decrease employee turnover. In addition, employees who have perceived organizational support through an alternative work schedule program feel an obligation to repay the employers' support by engaging in behaviors that pursue organizational goals and, therefore, employees' satisfaction with agencies' alternative work schedule policy can improve agency performance. Thus, this research expects that employees' satisfaction with an alternative work schedule policy will diminish turnover rate and enhance agency performance.

- H7: An agency's average level of satisfaction with an alternative work schedule policy is negatively associated with the turnover rate of the agency.
- H8: An agency's average level of satisfaction with an alternative work schedule policy is positively associated with the performance of the agency.

### MODEL SPECIFICATION

As mentioned earlier, this study assesses the relative impacts of four kinds of familyfriendly policies (i.e., child care subsidy, telework, paid leave for family care, and alternative work schedule) on employee turnover rate and agency performance in the federal government. To this end, this research uses data from several sources and the unit of analysis is an agency which includes both 15 cabinet agencies and other independent agencies. In addition, data for independent variables are collected using the 2004 and 2006 Federal Human Capital Surveys and data for dependent variables are gathered using FY 2005 and FY 2007 data in order to make sure that independent variables precede dependent variables. Table 1 shows the descriptive statistics of variables in this study.

# [Insert Table 1 about here]

Dependent Variables. This study has two dependent variables that are ultimate goals of family-friendly policies: employee turnover rate and agency performance. In general, employee turnover includes quits, transfers, reductions in force, death, and terminations after temporary appointments (Lewis 1991; Lee and Whitford 2008). Among them, this study focuses on quits, which are probably the most frequent designation for voluntary turnover because quits mean the loss of talented employees by the choices of employees themselves; thus, this phenomenon is very critical to the organization's success (Price 1997; Selden and Moynihan 2000). According to Price (1997, 532), turnover rate (quit rate) refers to the division of the number of employees who leave voluntarily during the period by the average number of employees during the period. For this study, an agency's turnover rate is calculated by dividing the number of quits in a given fiscal year (FY) by the average number of employees during that period. Agency turnover rates are computed using the data from the web site of the Federal Human Resources Data<sup>5</sup> built by the Office of Personnel Management. For FY 2005, 34 federal agencies' turnover rates are obtained and for FY 2007, 71 federal agencies' turnover rates are acquired.

The second dependent variable is agency performance (effectiveness). This study uses the traditional concept of effectiveness—i.e., the degree to which an organization achieves its goals (Daft 2001, 22)—to measure agencies' organizational performance. The data for this dependent variable are gathered from each agency's Performance and Accountability Report (PAR) of FY 2005 and FY 2007. This report provides the information about an agency's annual performance targets (indicators) and actual performance results. Based on this information, an agency's effectiveness is measured by the percentage of met or exceeded annual performance indicators in an agency's total annual performance indicators (i.e., number of met or exceeded annual performance indicators / number of total annual performance indicators). For FY 2005, 31 federal agencies' performance data are obtained and for FY 2007, 40 federal agencies' effectiveness data are acquired.

Independent Variables. This research has four independent variables of interest. They are four kinds of family-friendly policies: child care subsidy, telework, paid leave for family care, and alternative work schedule. To measure these independent variables, the 2004 and 2006 Federal Human Capital Surveys<sup>6</sup>, conducted by the Office of Personnel Management (OPM), are used. The 2004 Federal Human Capital Survey was administered to over 275,000 executive branch employees and OPM achieved an overall response rate of 54%, which means that almost 150,000 employees completed the survey. For the 2006 survey, of the 390,657 employees receiving surveys, 221,479 completed the survey with a response rate of 57%. These surveys are individual-level surveys and thus we aggregate responses by agency because the unit of analysis of this study is an agency. That is, our independent variables reflect the mean score for satisfaction with a specific family-friendly policy from the respondents of that agency. To measure employees' satisfaction with a child care subsidy program, this study uses the question "How satisfied are you with child care subsidies?" The item is scaled from 1 (very poor) to 5 (very good). Employees' satisfaction with a telework policy is measured using the item "How satisfied are you with telework/telecommuting?" This item is also scaled from 1 (very poor) to 5 (very good). Employees' satisfaction with a paid leave for family care policy is measured by the following question: "How satisfied are you with paid leave for illness (e.g., personal), including family care situation (e.g., childbirth/adoption or eldercare)?" To measure employees' satisfaction with an alternative work schedule program, this study uses the question "How satisfied are you with alternative work schedules?" These two items are also scaled from 1 (very poor) to 5 (very good).

This study includes three control variables that might be antecedents of employee turnover and agency performance: employees' satisfaction with their pay, training, and physical conditions. The questions for these control variables are "Considering everything, how satisfied are you with your pay?," "How satisfied are you with the training you receive for your present job?," and "Physical conditions (for example, noise level, temperature, lighting, cleanliness in the workplace) allow employees to perform their jobs well." These items are scaled from 1 (very poor) to 5 (very good), too.

# **ESTIMATION AND RESULTS**

This study uses ordinary least squares (OLS) regression analysis as a way to estimate the directions and magnitudes of the relationships between the independent variables and dependent variables because the two dependent variables are continuous variables. This research tests hypotheses 1, 3, 5, and 7 in the first model and hypotheses 2, 4, 6, and 8 in the second model. Both models include the three control variables listed above.

#### [Insert Table 2 about here]

Table 2 shows the OLS regression results for a model with employee turnover rate as a dependent variable. We checked the normality of the dependent variable, but it was not normally distributed. Therefore, the square root transformation was conducted for the turnover rate variable. The F statistic indicates that the model fits the data well. A histogram of the standardized residuals shows that they are normally distributed. The Breusch-Pagan test for heteroskedasticity ( $\chi^2 = 6.64$ ) showed that the null hypothesis of constant variance was rejected at .05 level. Thus, we used robust option to take care of heteroskedasticity. We also checked the variance inflation factor (VIF) to detect multicollinearity. Telework was the variable with the highest VIF (2.63), which means that there is no serious concern about the multicollinearity issue (Gujarati 2003).

This study expected that satisfaction with specific family-friendly policy would be negatively associated with employee turnover rate, based on social exchange theory. According to Table 2, however, only one family-friendly policy (i.e., child care subsidy) had a significant and negative impact on the employee turnover rate at the .05 level. This result supports H1. This means that higher satisfaction with a child care subsidy program can lead to employees' perceived organizational support because employees think that their organization cares about their well-being. As a result, employees feel that they should show their loyalty to their organizations and this thought can reduce the turnover rate of the agency. Unlike our expectation, the other three family-friendly policies (i.e., paid leave for family care, telework, and alternative work schedule) did not have statistically significant effects on the employee turnover rate. That is, hypotheses 3, 5, and 7 were rejected. Three control variables did not have significant relationships with employee turnover either.

# [Insert Table 3 about here]

Table 3 shows the OLS regression results for a model with agency performance as a dependent variable. We checked the normality of the dependent variable, but it was not normally distributed. Therefore, the square transformation was conducted for the agency performance variable. The F statistic indicates that the model fits the data well. A histogram of the standardized residuals shows that they are normally distributed. The Breusch-Pagan test for heteroskedasticity ( $\chi^2 = 0.03$ ) showed that the null hypothesis of constant variance was not rejected. We also checked the variance inflation factor (VIF) to detect multicollinearity. Alternative work schedule was the variable with the highest VIF (2.82), which means that there is no serious concern about the multicollinearity issue (Gujarati 2003).

We expected that satisfaction with specific family-friendly policy would be positively associated with agency performance, based on social exchange theory. According to Table 3, satisfaction with a child care subsidy policy and satisfaction with an alternative work schedule had statistically significant and positive impacts on agency performance at the .05 and .01 levels, respectively. That is, H2 and H8 were supported. This means that satisfaction with a child care subsidy program and satisfaction with an alternative work schedule policy can lead to employees' perceived organizational support because employees may think that their organization cares about their well-being. Employees who have perceived organizational support through an alternative work schedule program or a child care policy feel an obligation to repay the employers' support by engaging in behaviors that pursue organizational goals and, thus, higher satisfaction with agencies' child care subsidy program or alternative work schedule policy can improve agency performance. In addition, among the three significant family-friendly policies, alternative work schedule had the biggest impact (.465) on agency performance.

Teleworking showed a statistically significant relationship with agency performance at the .05 level, but it was a negative relationship, unlike our expectation. It is worth noting that teleworking (telecommuting) had a negative and significant effect on agency performance. This result seems to be consistent with the research of Saltzstein, Ting, and Saltzstein (2001), even though their dependent variable is somewhat different from ours. According to their study, working at home had a significant negative impact on employees' satisfaction with work-family balance. Teleworking (i.e., working at home) may have both advantages and disadvantages that vary across the home working environment (Saltzstein, Ting, and Saltzstein 2001). Scholars such as Christensen (1988), Hall (1990), and Metzger and Von Glinow (1988) argued that working at home may be very demanding for employees with children at home because of the negative impacts of the children's interruption on work performance. Also, telework may cause greater demands for household care and maintenance (Saltzstein, Ting, and Saltzstein 2001). In addition, telework may mean management's relinquishing of control over employees (Perry-Smith and Blum 2000) or no supervisors at the work place to watch over employees (Newman and Mathews 1999). This kind of flexibility in a telework policy may lead to employee's moral hazard that may have a negative effect on agency performance. According to Nigro and Nigro (2000, 319), "there were some reasons found for not using telecommuting, such as isolation, inadequate work space at home, and lack of self-discipline."

Paid leave for family care had a negative and statistically insignificant relationship with agency performance, unlike our expectation. That is, hypothesis 6 was not supported. Among the three control variables, only the pay satisfaction variable showed a positive and significant influence on agency performance.

## **DISCUSSION AND CONCLUSION**

In his July 11, 1994 policy memorandum on "Expanding Family Friendly Work Arrangements in the Executive Branch," former President Clinton argued that "Broad use of flexible work arrangements to enable federal employees to better balance their work and family responsibilities can increase employee effectiveness and job satisfaction, while decreasing turnover rates and absenteeism." In addition, in his July 21, 1996 policy memorandum titled "Implementing Federal Family Friendly Work Arrangements," he reemphasized that the result of providing an environment supportive to families for civilian and military employees is "greater cost efficiency, increased worker commitment and productivity, better customer service, and improved family life". As Clinton pointed out, retaining good workers (i.e., reducing employee turnover rate) and enhancing performance are two important and ultimate goals of adopting family-friendly policies. Yet, little empirical research on family-friendly programs was conducted in terms of these two goals. Therefore, this research intended to fill the gap in the study of family-friendly policies by testing whether family-friendly policies are beneficial to the organization.

This study investigated the relative effects of four types of family-friendly policies

(i.e., child care subsidy, paid leave for family care, teleworking, and alternative work schedules) on turnover rate and effectiveness of the organization, including three control variables (i.e., satisfaction with pay, training, and physical work environment). Based on social exchange theory, this research expected that agency's average level of satisfaction with a specific family-friendly policy is negatively associated with the turnover rate of the agency and positively associated with the performance of the agency. However, analysis results were somewhat different from this expectation. Only the child care subsidy program had a positive and significant influence on reducing the turnover rate of the agency, while the other three family-friendly policies and three control variables did not play significant and positive roles in lowering the turnover rate of the agency. Also, a child care subsidy program and an alternative work schedule policy had positive and significant influences on agency effectiveness, while paid leave for family care did not show any statistically significant impact on agency performance. One interesting finding is that the agency's average satisfaction with a telework program had a significant but negative effect on performance.

This study found that certain family-friendly policies help reduce turnover rate and enhance agency performance. More specifically, an agency that has higher satisfaction with a child care subsidy policy showed a lower turnover rate and better agency performance. That is, among the four types of family-friendly policies of this study, a child care subsidy program can be a source of competitive advantage for the federal organizations because it has a positive and significant effect on both decreasing the turnover rate and increasing agency effectiveness. In other words, this finding may mean that the child care issue is the most critical factor to federal employee turnover and federal agency effectiveness in terms of family-friendly policies.

In the case of agency performance, an alternative work schedule program seems to be another competitive advantage of the federal organizations because it has the biggest impact on agency effectiveness. Satisfaction with pay that is widely represented as an important motivator showed meaningful influence on agency performance. These findings suggest that the use of these family-friendly policies should be encouraged by the government agencies. In contrast, an agency that has higher satisfaction with a teleworking program had a significant and negative effect on agency performance, unlike our expectation. This analysis result can be interpreted as follows: Even if employees' average satisfaction with a telework policy of an agency is high, it may not be connected to agency effectiveness in that there is a possibility of tradeoffs between working at the workplace and working at home such as blurring of home and work boundaries, lack of active communication or useful interaction with colleagues, and release from direct control or supervision. Therefore, scholars such as Newman and Mathews (1999) argued that training or education on how these family-friendly programs can improve employee effectiveness and productivity is critical. Employees' sufficient awareness of the goals and procedures of these family-friendly policies can help alleviate those tradeoffs. In addition, these family-friendly policies are indispensable to today's workforce; thus, federal agencies have to investigate what is wrong with certain family-friendly programs that did not have significant and positive impacts on reducing turnover rate and enhancing agency performance. By doing so, federal organizations can provide family-friendly policies that are fit for their employees' needs and are beneficial to them. In this vein, the U. S. Government Accountability Office (GAO) (2007) already pointed out that the following suggestions that the GAO made in a 2003 report for developing telework programs were not effectively implemented: establishing measurable telework program goals, establishing systems to collect data for telework program evaluation, and identifying problems and making appropriate adjustments.

This research may have limitations due to the fact that it relied on organization-level data, rather than on employee-level data because our dependent variables of interest are

turnover rate and performance of the agency, which have not yet been addressed by previous studies on family-friendly policies. Organization-level data may not fully capture the complexities of the relationship between the provision of family-friendly programs and performance in the organization (Durst 1999, 31) and the influences of family-friendly policies are diverse within and across various groups of similarly situated employees (Saltzstein, Ting, and Saltzstein 2001, 463). Therefore, future study needs to pay more attention to incorporate individual-level data and organization-level data to provide additional insights into the family-friendly programs. Also deserving of further consideration are the moderating roles of managerial attitudes and organizational culture towards family-friendly policies between family-friendly programs and turnover and performance (Perry-Smith and Blum 2000).

# **ENDNOTES**

<sup>1</sup> Hoyman and Duer (2004) use the term "worker-friendly policies," instead of "familyfriendly policies," in a more broad sense. They argue that worker-friendly policies are divided into four distinct categories: family/personal (e.g., pregnancy leave, paid vacation, child care, etc.), removing impediments to work (e.g., telecommuting, flexitime, etc.), training & education (higher education, skill acquisition, etc.), and nontraditional incentives (company car, gyms, stress management, etc.).

<sup>2</sup> http://www.opm.gov/pandemic/agency2a-guide.pdf

 $^{3}$  Flexible work schedule means a work schedule established under 6122 of Title 5 of the U.S. Code that (1) in the case of a full-time employee, has an 80-hour biweekly basic work requirement that allows an employee to determine his or her own schedule within the limits set by the agency; and (2) in the case of a part-time employee, has a biweekly basic work requirement of less than 80 hours that allows an employee to determine his or her own schedule within the limits set by the agency.

<sup>4</sup> Compressed work schedule means (1) in the case of a full-time employee, an 80-hour biweekly basic work requirement that is scheduled by an agency for less than 10 workdays; and (2) in the case of a part-time employee, a biweekly basic work requirement of less than 80 hours that is scheduled by an agency for less than 10 workdays and that may require the employee to work more than 8 hours in a day. (See 6121(5) of Title 5 of the U.S. Code)

<sup>5</sup> http://www.fedscope.opm.gov/

<sup>6</sup> This study uses the items that have exactly the same wording from these two surveys.

Variables	Ν	Mean	SD	Min	Max
Turnover Rate (Square Root Transformed)	105	.21	.07	0	.44
Agency Performance (Square Transformed)	71	.58	.19	.11	1
Paid Leave for Family Care	105	4.16	.18	3.33	4.63
Child Care Subsidy	105	3.09	.21	2	4
Teleworking	105	3.19	.36	2.2	4.8
Alternative Work Schedule	105	3.65	.44	2	4.8
Pay Satisfaction	105	3.66	.19	3.1	4.33
Training Satisfaction	105	3.46	.28	2.33	4.25
Physical Conditions Satisfaction	105	3.89	.29	2.67	4.67

# Table 1: Descriptive Statistics of the Variables

# Table 2: OLS Regression Results (DV: Turnover Rate)

Independent Variables	Coefficient	SE	Beta
Paid Leave for Family Care	.001	.049	.001
Child Care Subsidy	090 *	.037	262
Teleworking (Telecommuting)	024	.029	119
Alternative Work Schedule	.005	.025	.032
Pay Satisfaction	045	.037	114
Training Satisfaction	027	.040	105
Physical Conditions Satisfaction	.033	.028	.131
Constant	.679 **	.249	
Ν	105		
F Value	2.84**		
$\mathbf{R}^2$	.17		
p < .05; **p < .01			

# Table 3: OLS Regression Results (DV: Agency Performance)

Independent Variables	Coefficient	SE	Beta
Paid Leave for Family Care	117	.212	085
Child Care Subsidy	.335 *	.138	.296
Teleworking (Telecommuting)	271 *	.120	332
Alternative Work Schedule	.312 **	.115	.465
Pay Satisfaction	.442 **	.161	.306
Training Satisfaction	159	.121	188
Physical Conditions Satisfaction	.235	.121	.250
Constant	-2.241 **	.831	
N	71		
F Value	4.64***		
$R^2$	.34		
p < .05; **p < .01; ***p < .001			

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