

Higher Public Service Motivation for Accepting Public Sector Pension Reform? Evidence from Korean Government Organizations*

Yunho Kim,** Yunjin Jung,***

Dongwook Seoh,**** and Tobin Im*****

Abstract: Organizational reforms that employees do not voluntarily accept are likely to negatively affect organizational effectiveness in the long term. We conducted an empirical analysis with survey data by reviewing related studies on public service motivation (PSM) and acceptance of organizational changes, the goal being to verify the relationship between government employees' PSM and their acceptance of public sector pension reform in Korea. Results show that public servants highly driven by PSM are willing to accept this pension reform even though it reduces their own benefits. This study is distinguished from existing literature of PSM and responses to organizational changes because it reduces the possibility of endogeneity problems.

Keywords: public service motivation, public pension reform, acceptance of organizational change

* This research is supported by National Research Foundation of Korea (NRF-2017S1A3A2065838).

** Yunho Kim (first author) is a PhD student in the Graduate School of Public Administration at Seoul National University, Korea. E-mail: yuno84@snu.ac.kr.

*** Yunjin Jung is a PhD Candidate in the Graduate School of Public Administration at Seoul National University, Korea. E-mail: yjung7@snu.ac.kr.

**** Dongwook Seoh is a PhD Candidate in the Graduate School of Public Administration at Seoul National University, Korea. E-mail: dwseoh@snu.ac.kr

***** Tobin Im (corresponding author) is dean of and professor in the Graduate School of Public Administration and an adjunct researcher of the Korea Institute of Public Affairs at Seoul National University, Korea. E-mail: tobin@snu.ac.kr.

Manuscript received January 25, 2019; out for review February 22, 2019; review completed April 5, 2019; accepted April 8, 2019.

The Korean Journal of Policy Studies, Vol. 34, No. 1 (2019), pp. 23-42.

© 2019 by the GSPA, Seoul National University

INTRODUCTION

Hirschman (1970) and Golden (1992) categorize responses to organizational changes as exit, voice, loyalty and neglect. In the Korean context, exit, voice, and neglect are not typically options, but loyalty in the form of acceptance to changes is an interesting topic to discuss.

There are several reasons that acceptance of changes is important for public organizations. Organizational reforms that employees do not voluntarily accept may or may not be effective in the short term, but in the long term they are likely to negatively affect job satisfaction, organizational commitment, cooperative behaviors, productivity, and other aspects of organizational effectiveness (Becker, 1992; Greenhalgh & Rosenblatt, 1984; Meyer et al., 2002; Zaltman & Duncan, 1977; Wanberg & Banas, 2000; Oreg, 2006).

Coercive, utilitarian, or normative strategies may promote employees' acceptance of organizational changes (Jones, 1965; Etzioni, 1961). Compensation or penalty threats are insufficient for guaranteeing employees' voluntary cooperation (Tyler, 1998: 271), but voluntary acceptance might prove to be crucial to a successful change within organization. Chester Barnard's zone of indifference and Herbert Simon's area of acceptance both emphasize the significance of voluntary responses (1938: 168; 1957: 133).

Researchers have thus studied acceptance of organizational changes in various policy areas. Recent studies have increasingly adopted public service motivation (PSM) as an explanatory variable for public employees' predisposition. Despite their contributions, these analyses have several drawbacks regarding selection of samples or cases. Some studies exhibit selection bias by choosing samples only within groups of employees who have survived layoffs (e.g. Wright, Christensen, & Isett, 2013), and some others have focused on a bureaucrat-friendly internal deregulation cases in which PSM may have been positively affected (e.g., Naff & Crum, 1999; Moynihan & Pandey, 2007), which can lead to endogeneity biases. We expect this research to reduce the possibility of endogeneity bias, because all public employees in our study stayed with their jobs even if the pension reform has clearly negative consequences.

In this paper, we first provide an extensive discussion of policy, theories, and analyses. In our literature review, we describe the 2015 government employees pension reform in Korea and expected employee responses to it. Then we outline various theories of organizational change and acceptance of changes, generating dependent and independent variables from this outline. We use the review related studies on PSM and acceptance of organizational changes to form the main hypoth-

esis of the paper and discuss how if true it might contribute to organizational studies. The next part documents data and research methods and is followed by results from our empirical analysis. In the conclusion, we wrap up the study by providing a more detailed analysis of the results and offering policy implications.

LITERATURE REVIEW

Government Employees Pension Reform as Organizational Change

What Is the Government Employees Pension Reform?

Organizations attempt to make changes when they no longer seem able to guarantee their survival, sustainability, or competitiveness. Organizational changes may take various forms: changes in goal, function, members' roles, resource distribution, and so forth (Huber et al., 1993). In addition, organizational changes in the public sector may have more of an impact than those in the private sector because they may affect corresponding policies throughout a given nation (Im, 1998). The 2015 government employees pension reform in Korea is one example. It not only may lead to reforms in national pensions but also to the reemergence of arguments pertaining to government debt.

The 2015 government employees pension reform essentially amounts to "pay more, get less." The initial motivation of the pension plan when it was first adopted in January 1960 was to compensate for public employees' lower annual income than compared to private sector employees. While public employees are paid less than private sector employees before they retire, they receive more after they retire. The Korean government reserves a certain proportion of each public employee's monthly salary for the pension fund. It also subsidizes the fund, just as private employers do for their pensions.

However, recent low birth rates, a low economic growth rate, and an aging society have made financing the pension fund more challenging. The government employees pension fund has experienced extensive losses since 1990s. The fund started to shrink in 1995, and the major intention behind the reform was to prevent further financial losses (Jung & Kim, 2015; Kim & Chang, 2015; Kwon & Kim, 2011). The reform in 2000 increased the percentage of monthly salary that each employee had to set aside for pension (Choi, 2010; Kim & Chang, 2015). However, this was not enough, and so the government made up remaining losses with taxes (Choi, 2010; Kim & Chang, 2015). Under the current financing structure, the gov-

ernment subsidy is projected to increase 100 billion Korean Won each year, starting in 2020. In order to prevent a financial disaster, the government is planning to increase the monthly employee payment by 25-30%, to reduce the monthly compensation by 10-15%, and to postpone the first pension payment until later in retired life. Numerous events that were likely instigated by incompetent bureaucrats, including the Sewol Ferry disaster in 2014, accelerated a sector-wide reform in the Korean bureaucracy (Lee & Kim, 2015; Kim & Chang, 2015). Numerous measures were introduced by the Park Geun-hye administration, and the government employees pension reform took effect almost immediately.

The government employees pension reform differs from most other organizational changes because its goal is not to enhance efficiency and improve organizational productivity, and it is likely to decrease how much each pensioner receives in the future. The nominal goal of reform in an organization's structure is to eliminate overlapping functions and reduce intra-department discontinuity. However, the real purpose of these measures is to accommodate political leadership. But such changes inevitably mean that the structure for resource distribution within the organization changes, and these changes in resource distribution tend to specifically affect the employee promotion process. However, public employees are often denied the opportunity to express their concerns about changes because they are typically seen as the target of the reform.

Employees' resistance to changes is a behavioral response that is readily observable and thus is less likely attract attention from researchers. The cognitive and emotional attitudes of employees, however, are harder to discern before, during, and after changes. This is the reason more research should be carried out regarding public employees' compliance with organizational changes.

Expected Responses from Public Employees

The 2015 public sector pension reform in Korea negatively affects public employees' financial benefits. Employees need to pay more while they are expected to get less: both incomes today and in the future diminish. Despite this, the Union of Public Employees publicly identified itself as a proponent of the pension reform (Lee & Jung, 2018), although this ostensible support may simply be rhetoric that conceals public employees' true feelings about the reform. Members of the public often vilify those who work in the bureaucracy because they falsely believe public employees have relatively stable employment and receive a pension for doing nothing, and so public employees in this case might be reluctant to voice their concerns about the reform. We can assume that individual public employees

will react negatively to diminishing financial benefits and subsequent uncertainties and anxieties (Bordia et al., 2004; Kiefer, 2005).

The nature of this particular pension reform is also likely to constrain psychological ownership of reform measures by public employees. Dirks et al. (1996) categorizes psychological ownership in terms of three factors: self-esteem, persistence, and sense of control. Public employees' self-esteem may be negatively affected by their being excluded from the reform processes, and their sense of control may also be compromised by external pressures for the change.

In addition, certain public-sector-specific organizational features are likely to engender negative responses to organizational changes such as pension reform. Researchers including Golembiewski (1969) have warned that public employees may strongly resist an organizational change. Unlike private sector organizations, public organizations are less exposed to market forces, and their environments are relatively stable; they are also characterized by formal constraints that lead to structured work processes (Rainey, Backoff, & Levine, 1976). The theory of person-organization fit suggests that people who prefer these organizational features are more common in the public sector than in the private sector, and a person with a strong routine-seeking nature is likely more strongly resist changes than a person who is more spontaneous (Oreg, 2003).

Compliance with organizational changes may also be particularly difficult because such changes are often instigated by external factors rather than internal one. Politicians try to solve their political crises by turning the public's attention to bureaucratic incompetency and inefficiency. Criticisms of bureaucracy kindled by politicians lead to frequent public sector reform, which tends to result in a backlash from public employees. Many politicians and the government, for example, were blamed for the 2014 Sewol Ferry disaster. The government employees pension reform in 2015 coincided with numerous other organizational changes effected in the Korean government to rectify procedures that may have contributed to the tragic incident. When a given reform is associated with other corrective measures, there is a greater chance that public employees will perceive it as offensive (Dent & Goldberg, 1999). One's emotional reaction to organizational changes might prevent one from considering the changes in a rational way and result in severe opposition (Oreg, 2003).

Accepting Organizational Change

Concepts Related to the Acceptance of Organizational Change

While there has long been research on organizational changes and response to change, acceptance of organizational change is a relatively new topic (Frahm & Brown, 2007). There are many related concepts, and in this section, we distinguish acceptance of changes from these other related ideas.

The first concept is commitment to organizational change. Herold et al. (2007) define the term as a behavior required for successful changes that goes beyond a simple willingness. Herscovitch & Meyer (2002) outline three kinds of commitment—*affective commitment*, *continuance commitment*, and *normative commitment*—that is based on Allen & Meyer's account (1990). *Affective commitment* includes not only strong support for changes but also self-identification with the organization; it is thus an active commitment to changes. On the other hand, *continuance commitment* and *normative commitment* are categorized as *passive commitments*: they do not represent voluntary participation in organizational change but rather selfish and obligatory participation.

Compliance with organizational change is another concept related to acceptance. Loyalty irrespective of agreement or disagreement with a policy describes compliance (Golden, 1992: 33). Compliance may range from active support to passive obedience, but it is essentially about embracing changes (Rusbult et al., 1998; Kolarsk & Aldrich, 1980; Withey & Cooper, 1989).

Supportive attitudes toward change and positive expectations regarding the results of change characterize an openness to change (Wanberg & Banas, 2000). Similarly, a readiness to accept change is buttressed by organization members' beliefs that their organization is capable of change (Armenakis, Harris, & Mossholder, 1993). On the other hand, resistance to organizational change hinders the goal of change, and it is often deemed as a negative behavior (Chawla & Kellaway, 2004; Kotter, 1996).

Acceptance of organizational change is a comprehensive concept that refers to how willing organization members are to accept changes (Miller, Johnson, & Grau, 1994). Responses to organizational change can be categorized as *cognitive*, *affective* and *behavioral* (Oreg, 2006; Oreg, Vakola, & Armenakis, 2011), but only *cognitive* and *affective* acceptance can be identified as *true acceptance*. This distinguishes acceptance from compliance. Compliance only measures an ostensible behavioral change, while acceptance delineates changes in a value system and attitudes (Duncan, 1981: 192). High acceptance of changes may suggest low resis-

tance to changes, but they are two distinct concepts: resistance occurs after implementation of changes, but acceptance measures how people think about imminent changes.

Lewin (1947; 1951) identifies three stages of organizational changes: unfreezing, moving, and refreezing. Acceptance, openness, and readiness to change are related to the unfreezing stage, and commitment, which is an internalization of changes, pertains to every stage. Commitment differs from acceptance and others because it not only includes cognitive and affective responses but also behavioral responses. On the other hand, while acceptance, openness, and readiness all are connected to the prechange stage, acceptance differs from two others because it constitutes a psychological response to change rather than an attitude toward it. Therefore, those who accept changes may or may not be open to or ready for organizational changes (Armenakis & Bedeian, 1999).

To sum up, acceptance of organizational changes is distinguished from compliance and resistance in terms of the intensity of response. It is also distinguished from commitment, openness, and readiness. These characteristics make acceptance a suitable measure for public employees' responses to the Korean public sector pension reform. Compliance, resistance, and commitment are not relevant to the value-oriented PSM that characterizes public employees in Korea. Compliance is less likely to be associated with PSM because it pertains to showing loyalty regardless of one's value system. Resistance is not applicable because the authoritarian culture inherent in Korean public organizations suppresses negative behavioral responses. The reform itself does not involve specific implementation processes to which public employees could commit themselves, and openness and readiness are not useful because they cannot measure responses to changes themselves. Therefore, we use acceptance as a measure of public employees' responses to the pension reform.

PSM and Accepting Organizational Change

Studies have identified several determinants of employees' acceptance of organizational change. These factors are broadly categorized as either individual or organizational. In older studies, scholars tended to focus on organizational-level factors (e.g., structure, system, policies, and procedures) (Armenakis & Bedeian, 1999). Recently, however, attention has shifted to individual-level factors, especially psychological aspects of employees (Oreg, 2003; Oreg, 2006; Oreg et al., 2011), including issues such as locus of control, openness to experience, self-efficacy, organizational commitment, trust in leaders, so on (Holt, Armenakis, Harris, &

Feild, 2007; Oreg, 2003; 2006; Oreg et al., 2011; Wanberg & Banas, 2000; van Dam, 2005; Parish, Cadwallader, & Busch, 2008; Herold, Fedor, & Caldwell, 2007; Fedor, Caldwell, & Herold, 2006).

In a public organization setting, PSM is understood to be a psychological characteristic that facilitates acceptance of organizational change. There are a few studies that examine this relationship in context of public management. Naff & Crum (1999) examine whether federal employees' PSM relates to support for the national performance review reform initiated by the Clinton administration. It is assumed that federal workers with high PSM react favorably to review efforts because they want the government to make succeed in the long run. As expected, empirical results with survey data find that federal employees with high PSM do show more positive attitudes toward the review. Similarly, Wright et al. (2013) test the hypothesis that PSM has a positive effect on employees' commitment to organizational changes in a city government. Specifically, they measure how employees perceive reorganizational changes including relocations, personnel reductions, and structural changes. They construct the measures of PSM by drawing on four dimensions: attraction to public service, commitment to public values, compassion, and self-sacrifice. Their results show that only self-sacrifice positively influences employees' perception of organizational changes. Despite the fact that the austerity-driven organizational changes the study examines can threaten their position or rewards, employees with high self-sacrifice scores perceive organizational changes as necessary. This finding provides an important insight that public employees with strong PSM, especially those who are willing to make a lot of sacrifices, are willing to accept organizational changes that improve public service delivery. However, these studies are empirical and do not ground their arguments in theory. In this paper we draw on Fritz Heider's balance theory to predict public employees' attitudes toward public pension reform because it helps to account for why public employees with higher PSM are likely to accept public sector pension reform.

Heider's balance theory (1958) explains how social actors may change their attitudes toward certain other actors to mitigate the imbalance or tension between actors. Heider's POX (perceiver-other-x) triples model consists of actors A, B and C who are identified by A's attitude toward B, B's attitude toward C, and C's attitude toward A. If each attitude is either positive or negative, there are eight ($2 \times 2 \times 2$) possible combinations of attitudes among these actors. According to the Heider's theory, balanced social arrangements occur when attitudes of all three actors are positive or two of the actors have negative attitudes while the third has a positive attitude. But an imbalanced social arrangement ensues when one actor shows a negative attitude toward the others while the other two actors show positive atti-

tudes or when all three actors show negative attitudes. Tension or stress is prevalent in an imbalanced arrangement. In order to reduce tension and restore a balanced arrangement, one of the actors needs to change his or her relationship with others. The different strategies actors adopt in these situations determine who will choose to change their attitude (Hummon & Doreian, 2003).

The balance theory framework can be applied to the Korean pension reform. The configuration consists of public employees, citizens, and the pension reform. As we have noted, public employees' attitude toward the reform is generally negative. In contrast, citizens' attitude is positive, because the reform is likely to reduce citizens' tax burdens in the future. Lastly, the normative relationship between public employees and citizens is positive. This is due to the fact that public employees are unelected agents who are expected to serve public interests. These attitudes give rise to an imbalanced social arrangement, as one of the three attitudes is negative while the rest are positive.

Public employees have three options to alleviate the tension in this imbalanced social arrangement. The first is to try to show citizens that reform has potential negative effects for them. The second is to adopt an antagonist relationship with citizens. The third is to change their stance toward the pension reform. The public employees' union has tried the first option without much success. The union asserted that the pension reform was a disguised attempt on the part of the government to promote private pension plans. In addition, the first option is no longer possible once the negotiation period ends. The second option is not feasible because citizens are the end users of public services provided by public employees; pension reform is also financed by tax money, making the second option unworkable. Still, the job satisfaction level of certain public employees may diminish as they further provide public services to citizens. Public employees with higher levels of PSM may be more likely to accept the pension reform and thus choose the third option. Different aspects of PSM are key variables of our research.

First, rational motives inform one's participation in policy process (Perry & Wise, 1990). People who are interested in political and policy processes understand how and why specific decisions are made. This can result in a higher level of acceptance of reforms. Thus, our first hypothesis is that public employees whose PSM is rationally motivated, that is, whose PSM is underwritten by an attraction to and interest in policy making, are likely to accept public sector pension reform.

Second, norm-based motives of PSM are grounded in one's willingness to serve public interests. Public employees with a higher level of PSM have a sense of obligation to society and will seek to reinforce public values by tackling societal problems. Public employees are thus likely to support the pension reform if they can be

convinced that the public sector pension system is unfair. Our second hypothesis is therefore that public employees whose PSM is guided by norm-based motives, that is, by a greater sense of civic duty, a greater commitment to public interest, and a greater commitment to social justice, are likely to accept public sector pension reform.

Lastly, affective motives are triggered by human emotion that leads an individual to make sacrifice on behalf of others. Although the reform is likely to result in the loss of benefits, public employees may be willing to accept this consequence if they can help increase social welfare. In a similar vein, the existing literature regarding readiness for change indicates that employees are likely to support changes if they perceive those changes as being desirable for their society (Choi, 2011). So our third hypothesis is that public employees whose PSM is informed by affective motives (self-sacrifice and compassion) are likely to accept public sector pension reform.

METHOD AND ANALYSIS

Data

To investigate the relationship between PSM and acceptance of organizational reform, this study uses data from 2015 Public Employee Survey conducted by the Knowledge Center for Public Administration and Policy affiliated with the Graduate School of Public Administration at Seoul National University. The main purpose of the survey was to explore employees' perceptions of the performance management system in 41 central government agencies. The survey included questions about attitudes toward and behavioral responses to the performance management and general organizational systems. Before analyzing the data, we excluded missing or incomplete data. The total number of respondents for the analysis was 1,807. Table 1 presents the demographic characteristics of respondents. These characteristics were included in the model as control variables. In addition, the agency respondents worked for was controlled in the analysis, although the information is not shown in table 1 due to lack of space. Theoretical studies point out that organizational-level factors are closely associated with individual's attitudes toward organizational change and with personal characteristics (e.g., Armenakis et al., 1999; Holt et al., 2007; Oreg et al., 2011). Thus, each agency as a categorical variable was included in the model.

Table 1. Characteristics of Respondents

Age (mean years)	39.79 yrs. old	Rank	
Gender		3	20 (1.11%)
female	583 (32.26%)	4	114 (6.31%)
male	1,224 (67.74%)	5	423 (23.41%)
Marital Status		6	477 (26.40%)
married	1,373 (75.98%)	7	537 (29.72%)
single	434 (24.02%)	8	100 (5.53%)
Education		9	136 (7.53%)
high school diploma or less	40 (2.21%)	Tenure (mean years)	12.19 yrs.
associate degree	70 (3.87%)		
bachelor's degree	1,367 (75.65%)	Total Observations	1,807 (100%)
master's degree or higher	330 (18.26%)		

Measures

Each variable was measured on a 5-point Likert scale, ranging from 1 (not likely at all) to 5 (very likely). Summary statistics are shown in table 2. The Pearson correlations among variables reported in table 2 implies that there is a low possibility of multicollinearity.

The main dependent variable of this study is public employees' acceptance of public sector pension reform. Three survey items were utilized to measure the degree to which employees support public pension reform: "I view the implementation of the public sector pension reform as positive," "I view the results of the public sector pension reform as positive," and "The public sector pension reform motivates employees." Internal consistency was assessed by Cronbach's alpha among these three items: the value of Cronbach's alpha was 0.80. This indicates that three survey items are reliable (Bonett & Wright, 2015).

PSM, the main explanatory variable, was constructed with reference to six dimensions: self-sacrifice (three items), civic duty (three items), compassion (three items), attraction to policy making (three items), commitment to public interest (three items), and commitment to social justice (three items). The total number of survey items for PSM was 17. These six dimensions of PSM were measured using the commonly used survey items developed by James Perry (1996). The highest significant correlation among PSM measures is 0.60 between self-sacrifice and civic duty; therefore, multicollinearity was not a critical issue in the model of this study (Taylor, 2008).

Three variables that may have a relationship with the dependent variable were

also included as control variables in the model: the level of job satisfaction, transformational leadership, and organizational commitment. Many studies have verified the relationship between these variables and compliance with or acceptance of organizational change. According to Wright et al. (2013), for instance, employees with higher levels of job satisfaction are more likely to support changes in their organization. Iverson (1996) also found that higher levels of both job satisfaction and organizational commitment had a positive effect on the acceptance of organizational changes in a public hospital. In the process of organizational change, transformational leadership plays an important role in encouraging employees to embrace changes (Chou, 2014). In our study, job satisfaction is measured by three survey items: respondents' satisfaction with their job in general, their salary, and their organization. In addition, we drew four items from the survey regarding inspirational motivation and intellectual stimulation to measure the presence or lack of transformational leadership. With respect to organizational commitment, respondents were asked to evaluate their loyalty to the organization by answering five survey questions in the vein of "I have a sense of 'ownership' in this organization rather than just feeling like an employee" and "I talk up the university to my friends as a great organization to work for."

Table 2. Descriptive Statistics and Correlations

	Mean	Standard Deviation	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)
Dependent Variable												
1) acceptance of pension reform (1-5)	2.60	.89	1.00									
Independent Variable (Public Service Motivation)												
2) self-sacrifice (1-5)	3.43	.59	.18	1.00								
3) civic duty (1-5)	3.39	.65	.19	.60	1.00							
4) compassion (1-5)	3.67	.52	-.04	.40	.41	1.00						
5) attraction to policy making (1-5) ^a	2.61	.68	.07	-.02	.05	.03	1.00					
6) commitment to public interest (1-5)	3.36	.59	.18	.49	.40	.31	-.07	1.00				
7) commitment to social justice (1-5)	3.63	.56	.004	.54	.50	.59	.01	.37	1.00			
Control Variables												
8) job satisfaction (1-5)	3.35	.68	.23	.30	.40	-.21	.21	.21	.26	1.00		

9) transformational leadership (1-5)	3.63	.63	.10	.33	.42	-.10	.10	.24	.35	.45	1.00	
10) organizational commitment (1-5)	3.44	.60	.10	.36	.46	-.16	.16	.28	.36	.58	.57	1.00
Cronbach's Alpha Coefficient			.801	.719	.721	.584	.727	.584	.564	.698	.829	.759
Explained Variance by the First Factor			.721	.641	.645	.547	.652	.697	.550	.632	.662	.524

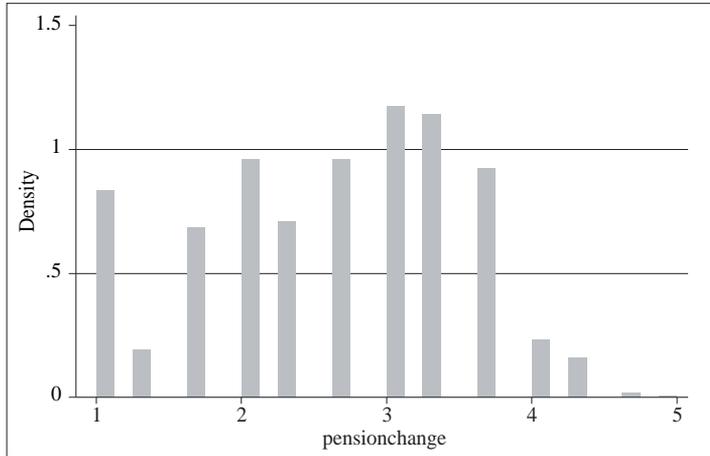
Bolded $p < 0.05$

a: This scale is reversely coded to make positive and negative dimensions consistent.

Since we constructed each variable using several survey items, we tested the reliability and validity of the variable measures (see the last two lines at the bottom of table 2). The results of factor analysis reveal that each concept is identified as a single factor. On average, 60% of the variance is explained by common factor. Regarding reliability, it is generally required that Cronbach's alpha coefficient is greater than 0.6. However, this is not the absolute standard; it is acceptable to adopt 0.5 as criterion when personal perceptions are measured (Nunnally, 1978). In this study, therefore, it seems that there are no serious reliability problems although the alpha coefficient for three variables (compassion, commitment to public interest, and social justice) is lower than 0.6.

Empirical Results

To test the main hypotheses of this paper, the Tobit model is used. Since the measure of the dependent variable is piled up at the lowest point on the scale (see figure 1), the ordinary least squares (OLS) estimation does not provide adequate causal inference for this study. That is, it is expected that OLS estimator is neither unbiased nor consistent. If observations are censored at one extreme, that means it is possible there are corner solution problems. In this case, OLS will not properly utilize the information in the censored data, and this will lead to errors in the model and to an inconsistent estimator. To deal with these potential problems, the robust Tobit regression model using maximum likelihood is the best option for the analysis (Wooldridge, 2010). The model F-statistic is 34.81, and it is statistically significant at 1%. This means that predictors in the model have linear relationship with the dependent variable (see table 3).

Figure 1. Left-Censored Dependent Variable

To address multicollinearity concerns, the variance inflation factors (VIF) for independent variables were computed. In this case, we conducted an OLS estimation to derive the VIFs because the Tobit model cannot directly calculate them. This is acceptable because multicollinearity is tested only among independent variables. Multicollinearity is considered severe if the VIFs are greater than 10. As indicated in the last column of table 3, however, the VIFs for every independent variable are below 10 for this study. This means that multicollinearity among independent variables can be ruled out in this study.

As table 3 demonstrates, only three dimensions of PSM were statistically significant at the 5% level. Both self-sacrifice and civic duty positively influence acceptance of public sector pension reform. That is, it seems that public employees acknowledge the problems with public sector pension plans. The government has used taxpayer money to cover deficit of the public employees' pension system, while the national pension fund for private sector workers is in danger of being exhausted. There is also a positive relationship between an attraction to policy making and the dependent variable. Employees who are attracted to policy making tend to accept the reform as an aggregated result of the political process, even if they do not participate in that process.

Certain control variables are statistically significant. Higher job satisfaction is likely to lead to a stronger acceptance of organizational change. However, there is a negative relationship between organizational commitment and the dependent variable. This direction is opposite to what has been found in other studies. In the Korean context, the public sector pension is seen as compensation for the low

income public employees earn while they are working. If the reform reduces the amount of pension benefit and also increases the amount of salary deducted for the pension fund, government employees' organizational commitment is likely to be undermined. Employees with higher organizational commitment thus may have weak motivation to support the reform. Lastly, younger employees, specifically those in their 20s and 30s, are less likely to support the pension reform because they are more directly affected. The amount of pension for the older group will not be drastically reduced, while the younger group have to pay more. Likewise, tenure shows a negative impact on the dependent variable. The tenure of younger employees is shorter than that of older employees.

Table 3. Results of Tobit Model

Variable	Coefficient	Robust Standard Error	Variance Inflation Factors
Public Service Motivation			
self-sacrifice	0.110**	0.0495	2.03
civic duty	0.136***	0.0453	2.09
compassion	-0.0803	0.0523	1.73
attraction to policy making	0.131***	0.0352	1.16
commitment to public interest	0.0376	0.0434	1.48
commitment to social justice	-0.00538	0.0516	2.17
Control Variables			
job satisfaction	0.273***	0.0386	1.77
transformational leadership	-0.0149	0.0454	1.71
organizational commitment	-0.0994**	0.0487	2.11
age	0.0228***	0.00692	6.66
rank (1-9)	-0.00376	0.0187	2.03
gender (0 = female, 1 = male)	0.00764	0.0433	1.37
marital status (0 = single, 1 = married)	-0.0961*	0.0519	1.56
education	-0.0151	0.0403	1.29
tenure (years)	-0.0167***	0.00612	6.01
(Constant)	0.948**	0.396	
Sigma	0.761***	0.0161	
Number of Observations		1,807	
F (55, 1752)		34.81***	
Log Pseudolikelihood		-2085.7237	
Pseudo R²		0.1683	

*** p<0.01, ** p<0.05, * p<0.1

CONCLUSION

Changes in government organizations require sacrifices on the part of public employees, and therefore, the success of organizational change relies on the degree to which public employees accept or support those changes. Public employees will not accept organizational reforms or changes if their self-interest is at risk. On the other hand, however, we can expect that public employees with high PSM are willing to make sacrifices if they believe that by doing so they can contribute to public interest.

This study starts from the question of how public employees will react to organizational reform that is not in the interest of employees but is in the interest of the public. Empirical analysis with survey data verifies the relationship between government employees' PSM and their acceptance of public sector pension reform. That is, public servants highly driven by PSM are willing to accept the pension reform for government workers even though the reform reduces their own benefits. PSM theory suggests that these attitudes are grounded in the desire to contribute to the public interest. The results of the analysis indicate that a deep sense of civic duty and a willingness to make sacrifices have a statistically significant effect on the acceptance of the reform. These findings are consistent with empirical results in previous studies (e.g., Wright et al., 2013). In particular, the salience of self-sacrifice was reconfirmed by this study. In a Korean context, public employees are expected to act in the interest of the public because of the legacy of Confucian culture. This cultural aspect may be reflected in findings of this study. Another interesting finding is that the attraction to policy making also has a significant effect. This implies that public employees are likely to accept a reform that is democratically decided through legitimate political and policy processes.

This study has limitations. First of all, the analysis is based on cross-sectional survey data. This may cause common method bias (Ritz, Brewer, & Neumann, 2016). To address this potential problem, we performed Harman's one-factor test, which revealed that the most powerful single factor accounts for 25% of the variance. This is below 50%, and below any result below 50% can indicate the presence of common method bias. Second, we were not able to include diverse psychological factors that could affect the dependent variable because we relied on secondary data. Lastly, variables negatively influencing the perception of organizational reform ought to be tested in future studies. For example, it is possible that members of labor unions resist the reform, but participation in a labor union was not included in the model of this study.

REFERENCES

- Allen, N. J., & Meyer, J. P. 1990. The measurement and antecedents of affective, continuance, and normative commitment to the organization. *Journal of Occupational Psychology*, 63 (1): 1-18.
- Armenakis, A. A., Harris, S. G., & Mossholder, K. W. 1993. Creating readiness for organizational change. *Human Relations*, 46 (6): 681–703.
- Armenakis, A. A., & Bedeian, A. G. 1999. Organizational change: A review of theory and research in the 1990s. *Journal of Management*, 25 (3): 293–315.
- Barnard, C. 1938. *The functions of the executive*. Cambridge, MA: Harvard University Press.
- Becker, T. E. 1992. Foci and bases of commitment: Are they distinctions worth making? *Academy of Management Journal*, 35 (1): 232-244.
- Bonett, D. G., & Wright, T. A. 2015. Cronbach's alpha reliability: Interval estimation, hypothesis testing, and sample size planning. *Journal of Organizational Behavior*, 36 (1): 3-15.
- Bordia, P., Hobman, E., Jones, E., Gallois, C., & Callan, V. 2004. Uncertainty during organizational change: Types, consequences, and management strategies. *Journal of Business and Psychology*, 18 (4): 507-532.
- Chawla, A., & Kelloway, E. K. 2004. Predicting openness and commitment to change. *Leadership & Organizational Development Journal*, 25 (6): 485-498.
- Choi, J. 2010. The government employees pension system. Seoul: Government Employees Pension Service.
- Choi, M. 2011. Employees' attitudes toward organizational change: A literature review. *Human Resource Management*, 50 (4): 479-500.
- Chou, P. 2014. Does transformational leadership matter during organizational change? *European Journal of Sustainable Development*, 3 (3): 49-62.
- Dirks, K. T., Cummings, L. L., & Pierce, J. L. 1996. Psychological ownership in organizations: Conditions under which individuals promote and resist change. In R. W. Woodman & W. A. Pasmore (eds.), *Research in organizational change and development* (vol. 9, pp. 1-23). Greenwich, CT: JAI Press.
- Dent, E. B., & Goldberg, S. G. 1999. Challenging "resistance to change." *Journal of Applied Behavioral Science*, 35 (1): 25-41.
- Duncan, J. W. 1981. *Organizational behavior*. Boston: Houghton Mifflin.
- Etzioni, A. 1961. *Comparative analysis of complex organizations*. New York: Free Press.
- Fedor, D. B., Caldwell, S., & Herold, D. M. 2006. The effects of organizational changes on employee commitment: A multilevel investigation. *Personnel Psychology*,

59 (1): 1-29.

- Frahm, J., & Brown, K. 2007. First steps: Linking change communication to change receptivity. *Journal of Organizational Change Management*, 20 (3): 370-387.
- Golden, M. M. 1992. Exit, voice, loyalty, and neglect: Bureaucratic responses to presidential control during the Regan administration. *Journal of Public Administration Research and Theory*, 2 (1): 29-62.
- Golembiewski, R. T. 1969. Organization development in public agencies: Perspectives on theory and practice. *Public Administration Review*, 29 (4): 367-377.
- Greenhalgh, L., & Rosenblatt, Z. 1984. Job insecurity: Toward conceptual clarity. *Academy of Management Journal*, 9 (3): 438-448.
- Heider, F. 1958. *The psychology of interpersonal relations*. New York: Wiley.
- Herold, D. M., Fedor, D. B., & Caldwell, S. D. 2007. Beyond change management: A multilevel investigation of contextual and personal influences on employees' commitment to change. *Journal of Applied Psychology*, 92 (4): 942-951.
- Herscovitch, L. & Meyer, J. P. 2002. Commitment to organizational change: extension of a three component model. *Journal of Applied Psychology*, 87 (3): 474-487.
- Hirschman, A. 1970. *Exit, voice, and loyalty: Responses to decline in firms, organizations, and states*. Cambridge, MA: Harvard University Press.
- Holt, D. T., Armenakis, A. A., Harris, S. G., & Feild, H. S. 2007. Readiness for organizational change: The systematic development of a scale. *Journal of Applied Behavioral Science*, 43 (2): 232-255.
- Huber, G. P., Sutcliff, K. M., Miller, C. C., & Glick, W. H. 1993. Understanding and predicting organizational change. In G. P. Huber & K. M. Sutcliff (eds.), *Organizational change and redesign* (pp. 215-265). Oxford: Oxford University Press.
- Hummon, N. P., & Doreian, P. 2003. Some dynamics of social balance processes: Bringing Heider back into balance theory. *Social Networks*, 25 (1): 17-49.
- Im, T. 1999. Comparative analysis of administrative reforms between France and Korea. *Korean Public Administration Review*, 32 (4): 67-80.
- Iverson, R. D. 1996. Employee acceptance of organizational change: The role of organizational commitment. *International Journal of Human Resource Management*, 7 (1): 122-149.
- Jones, G. N. 1965. Strategies and tactics of planned organizational change: Case examples in the modernization process of traditional societies. *Human Organization*, 24 (3): 192-200.
- Jung, C., & Kim, J. 2015. An evaluation of the Korean civil-service pension reform and its development plan. *Korean Social Security Studies*, 31 (4): 227-252.
- Kim, S., & Chang, H. 2016. The 2015 reform of government employees pension

- revisited through Kingdon's multiple streams framework. *Korean Society and Public Administration*, 27(3), 65-91.
- Kline, R. B. 2015. *Principles and practice of structural equation modeling*. New York: Guilford Press.
- Kolarska, L., & Aldrich, H. (1980). Exit, voice, and silence: Consumers' and managers' responses to organizational decline. *Organization Studies*, 1(1): 41-58.
- Kotter, J. P. 1996. *Leading change*. Boston: Harvard Business School Press.
- Kwon, H. J., & Kim, E. (2011). Transition from the Developmental State: The Deliberative Policy Process of Civil Service Pension Reform in Korea. *Korean Journal of Policy Studies*, 26 (3): 91-111.
- Lee, K., & Jung, K. 2018. Exploring the institutional reform of the Korean civil service pension scheme: Advocacy coalition framework, policy knowledge, and social innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 4: 1-23.
- Lee, Y., & Kim, W. 2015. Evaluating the 2015 reform and the new reform plan of the Government Employees Pension Scheme. *Korean Journal of Applied Statistics*, 28 (4): 827-845.
- Lewin, K. 1947. Group decision and social change. *Readings in Social Psychology*, 3 (1): 197-211.
- Meyer, J. P., Stanley, D., Herscovitch, L., & Topolnytsky, L. 2002. Affective, continuance and normative commitment to organization: A meta-analysis of antecedents, correlates and consequences. *Journal of Vocational Behavior*, 61 (1): 20-52.
- Miller, V. D., Johnson, J. R., & Grau, J. 1994. Antecedents to willingness to participate in a planned organizational change. *Journal of Applied Communication Research*, 22 (1): 59-80.
- Moynihan, D. P., & Pandey, S. K. 2007. The role of organizations in fostering public service motivation. *Public Administration Review*, 67 (1): 40-53.
- Naff, K. C., & Crum, J. 1999. Working for America: Does public service motivation make a difference? *Review of Public Personnel Administration*, 19 (4): 5-16.
- Nunnally, J. C. 1978. *Psychometric theory*. New York: McGraw-Hill.
- Oreg, S. 2003. Resistance to change: Developing an individual differences measure. *Journal of Applied Psychology*, 88 (4): 680-693.
- Oreg, S. 2006. Personality, context, and resistance to organizational change. *European Journal of Work and Organizational Psychology*, 15 (1): 73-101.
- Oreg, S., Vakola, M., & Armenakis, A. 2011. Change recipients' reaction to organizational change: A 60-year review of quantitative studies. *Journal of Applied Behavioral Science*, 47 (4): 461-524.

- Perry, J. L. (1996). Measuring public service motivation: An assessment of construct reliability and validity. *Journal of public administration research and theory*, 6(1): 5-22.
- Perry, J. L., and Wise, L. R. 1990. The motivational bases of public service. *Public Administration Review*, 50 (3): 367-73.
- Parish, J. T., Cadwallader, S., & Busch, P. 2008. Want to, need to, ought to: Employee commitment to organizational change. *Journal of Organizational Change Management*, 21 (1): 32-52.
- Rainey, H. G., Backoff, R. W., & Levine, C. H. 1976. Comparing public and private organizations. *Public Administration Review*, 36 (2): 233-244.
- Ritz, A., Brewer, G. A., & Neumann, O. 2016. Public service motivation: A systematic literature review and outlook. *Public Administration Review*, 76 (3): 414-426.
- Rusbult, C. E., Farrell, D., Rogers, G., & Mainous III, A. G. (1988). Impact of exchange variables on exit, voice, loyalty, and neglect: An integrative model of responses to declining job satisfaction. *Academy of Management journal*, 31(3): 599-627.
- Simon, H. A. 1957. *Administrative Behavior*. New York: Free Press.
- Taylor, J. 2008. Organizational influences, public service motivation and work outcomes: An Australian study. *International Public Management Journal*, 11 (1): 67-88.
- Tyler, T. R. 1998. Trust and democratic governance. In V. Braithwaite & M. Levi (eds.), *Trust and governance* (pp. 269-294). New York: Russell Sage Foundation.
- van Dam, K. 2005. Employee attitudes toward job changes: An application and extension of Rusbult and Farrell's investment model. *Journal of Occupational and Organizational Psychology*, 78 (2): 253-272.
- Wanberg, C. R., & Banas, J. T. 2000. Predictors and outcomes of openness to changes in a reorganizing workplace. *Journal of Applied Psychology*, 85 (1): 132 -142.
- Withey, M. J., & Cooper, W. H. 1989. Predicting exit, voice, loyalty, and neglect. *Administrative Science Quarterly*, 34 (4): 521-539.
- Wooldridge, J. M. (2010). *Econometric analysis of cross section and panel data*. MIT press.
- Wright, B. E., Christensen, R. K., & Isett, K. R. 2013. Motivated to adapt? The role of public service motivation as employees face organizational change. *Public Administration Review*, 73 (5): 738-747.
- Zaltman, G., & Duncan, R. 1977. *Strategies for planned change*. New York: Wiley.