

연구논문

Structural Equation Modeling Exercise to Examine Factors Affecting the Role Conflict of Public Officials Working for South Korean Central Government Ministries*

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〈 Abstract 〉

This study conducted a structural equation modeling analysis to examine how the political heteronomy of each ministry caused organizational goal ambiguity and how this goal ambiguity affected the role conflict of public officials. The results of this study confirmed that the stronger political heteronomy, perceived by the members of the administrative institutions, would increase the ambiguity of the perceived organizational goals. Additionally, the ministries tended to enforce centralization when the organizational goal became more ambiguous under stronger external political influences. The results of this study also revealed that this strengthened control system would lead a dysfunctional effect. For instance, when goal ambiguity exists within a governmental department and the department is largely controlled by only a few decision-makers, public officials will experience higher role conflict.

[Key words: Role conflict, Goal Ambiguity, Centralization, Structural Equation Modeling]

* This paper has been substantially revised based on some of the master's thesis. This work was supported by the National Research Foundation of Korea Grant funded by the Korean Government(NRF-2017S1A3A2066084).

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I . Introduction

Public management experts describe the state bureaucracy as an entity torn between political responsiveness and neutral competence (Moe, 1990). Practically, the bureaucrats in the ministries of South Korea's central government must respond to the conflicting demands of diverse policy stakeholders in the policy-making process all the time. They must also appropriately deal with sudden fluctuations associated with the transfer of political power. The society, on one hand, expects the bureaucrat to put efforts evenly and establish a long-term vision that can adequately respond to social and economic changes. On the other hand, it also wants the bureaucrat to be managers who offer high-quality service with minimal governmental interference under the 'new public management theory.' Consequently, the very nature of their work causes them to experience role conflict.

Previous studies on the organizations and business administration have shown that 'role conflict' of personnel is a key factor determining the organizational performance (O'rtqvist and Wincent, 2006; Brief et al., 1976; Bedeian and Aremakies, 1981; McCormick and Iligen, 1980; Beehr et al., 2009). Nevertheless, there are not enough studies evaluating the causes of role conflict in the central government officials. Furthermore, these studies, which examined the government officials at the front-line, analyzed only the variables proven in previous studies targeting private enterprise, without taking into consideration the distinct differences between the private enterprise and public agencies. Meanwhile, previous studies have contributed to the insightful explanations of the effects of the political environment surrounding governmental organizations on organizational phenomenon under the theory of public management (Wamsley and Zald, 1973; Rainey et al., 1976; Bozeman, 1987; Perry and Rainey, 1988; Wilson, 1989), though only a few studies connected these explanations to personal behavior. However, it shall not be ignored that the behavior of each member who constitutes the organization is the most important factor in determining the effectiveness of an organization.

The objectives of this study were to analyze the relationship between the role conflict of government officials and the organizational environment and evaluate the inner-characteristics of governmental organizations, which would be significantly different from those of private organizations.

In other words, this study aimed to identify the ambiguity between the political heteronomy of each ministry and the organizational goals and evaluate the effects of centralization on 'the role conflict of government officials'. The results of this study are expected to supplement the limitations of the previous studies. Moreover, the results of this study will contribute to establishing adequate organization management plans that will help government officials work effectively with a high-level of job satisfaction and low stress.

II . Literature Review

1. Theoretical Framework

Role theory is based on the assumption that an individual performs a role, which is originated from the expectations of the person's behavior for a position he or she has within a social structure (Kahn et al., 1978; Rizzo et al., 1970). Fulfilling this role can be understood as a process of the person in charge to recognize the expectations given to his or her role and, take appropriate actions through a cognitive process. Because the personal cognitive judgment is involved in this process, the person in charge may act differently from the expected role depending on his or her personal belief and values. Moreover,, the person can be confused because of the incompatibility between various role expectations. In other words, 'role stress' can be caused by organizational and personal factors during the process of recognizing and acting on the personal role (Agarwal, 1993; Kahn et al., 1978; Kast and Rosenwerg, 1974; House et al., 1972; Oliver et al, 1977; Morris et al, 1979; Rizzo et al., 1970; Szilagy et al., 1976; Van Sell et al., 1981.)

Role stress has been defined as the negative cognitive and psychological status

that can occur when a person in charge thinks that the expectations faced during the process of work move beyond a resolvable level (Barling et al., 2005). Role stress thus arises from demands and environmental constraints related to individual role performance (Prasuraman and Alutto, 1984). It can be explained by dividing the concept into role conflict and role ambiguity (Jackson and Schuler, 1985; Kahn et al., 1964; Churchill et al., 1979).

Role conflict means the recognition of a person in charge that he or she is facing expectations that cannot be met at the same time. Additionally, it is also described as the tension and anxiety that occur when the expectation of a person in charge conflicts with the expectations of others (Kahn et al., 1964; Rizzo et al., 1970; Kast, 1974; Bedeian, 1981; Dubinsky et al., 1992).

The organizational factor is an influential variable of the role stress in organizations that the theoretical models of previous studies have mainly focused on. In particular, the organizational structure (e.g., the level of formalization, the size of an organization, autonomy, the level of participation on decision making process, the level of centralization, and the span of control) has a great impact on the role stress (House et al., 1972; Morris, 1979). It is well known that role players in the middle or lower levels of an organization, which is highly centralized and makes all major decision solely by the high-ranking executives, experience a higher level of role conflict and ambiguity. Moreover, the directions of the impact on the role stress of role players may vary owing to the effects of organizational structure adjusting the organizational culture. Senatra (1980) identified organizational culture as an influencing factor and evaluated how corporate climate affects role conflicts based on accountants of accounting firms. Senatra (1980) showed that a culture emphasizing personal developments, the level of patience in solving problems, and the level of accommodation for opposing opinions influenced role conflict.

In addition to these factors, the validity of work adjustment, the level of information openness, and the validity of authority were influencing factors as well. Agarwal (1993) compared and analyzed the relationship among formalization, role conflict, and the organizational commitment of sales personnel in the United States

and India. The results of Agarwal (1993) showed that the formalization aggravated the role conflict and ambiguity of the U.S. sales personnel, who preferred individualism and were autonomy-oriented; in contrast, it reduced the role conflicts of Indian sales personnel. This result indicated that even if two organizations had the same structure, social culture could affect the direction of influence in the role conflict. Peterson et al. (1995) analyzed the effects of four cultural dimensions (Hofstede, 1984) - individualism and groupism, authority gap, escape from uncertainty, and value dimension of masculinity - on role stress in 21 countries. The study reported that there was no connection between role stress and authority gap, and masculinity and ambiguity; however, authority gap and groupism were significantly related with role stress.

2. Previous Studies and Limitations

Most of the studies on role conflict have proved that the role conflict affects the effectiveness and performance of an organization. On the contrary, a few studies evaluated the preceding factors of role conflict.

Rogers and Molnar (1976) examined the influence of organizational factors on role conflict and ambiguity by using top-level administrators of county offices in the U.S. They observed the level of organizational output, character of work responsibilities, accountability, and formality as organizational structure. They also evaluated the frequency of interaction with other organizations as an inter-organizational variable. They, particularly, analyzed the influence of the frequency of interaction with other organizations during the working process on role conflict with considering the nature of public organizations. They argued that officers of public agencies often negotiated in order to exchange resources with outside organizations, and verified that role conflict elevated because the officers had to interact with stakeholders. Miles and Perreault (1976) conducted an empirical study on specialized personnel at government research institutions and argued that the level of objectivity in directing work roles (i.e., precise division of work responsibilities, liability

specifications, methods of supervision, and the position and formal authority of a role sender) affected the level of role conflict and ambiguity the most. On the other hand, Pandey and Wright (2006) evaluated the effects of the obscureness of the organizational goals, centralization, red tape, and routinization on the obscureness of the role of public officials in the state government. It was noteworthy that the obscureness of the role, serving as role stress, was verified as a dependent variable but it validated the degree of the effects of organizational structure, which disagreed with the results of previous studies.

Kim (2006) re-validated the application of analysis tool developed by Rizzo et al. (1970) to the local public officials in South Korea. The results of this study revealed that public officials working for the South Korean local government had a high level of formalization in the organization, which were similar to the results of private corporates in the United States. In addition, the presence of supportive leadership and many opportunities to participate in a decision-making process of the organization decreased the level of role conflict.

The literature review revealed that previous studies have not addressed the cause of role stress fully. For example, most of the previous studies examining the factors affecting role stress were only based on personal characteristics or the inner-structure of organizations. However, most of them did not recognize the importance of the influence of the external environment of an organization on role stress. Moreover, these studies mainly focusing on private companies' employees failed to properly focus on the characteristics and bureaucracy of governmental organizations. Although several studies evaluated people working in the field of public service, these studies either solely focused on role ambiguity or only confirmed the variables used in the studies for private companies. In addition, most of the studies evaluated the street-level bureaucrats of the state or city government because they were easily approachable. Lastly, only a few studies analyzed the variables of role stress themselves, and most of the studies solely tried to treat the role stress(role conflict and role ambiguity) as a moderating variable instead of seeking the cause of it. Therefore, the factors influencing role stress have not been evaluated fully.

III. Methodology

1. Hypothesis

The following hypotheses were established in order to examine the effects of internal and external characteristics of governmental organizations on the role stress of personnel at the middle-management level of central governmental organizations. First of all, based on the theory of characteristics of public organizations, low political autonomy (or heteronomy) was selected as an external variable. As heteronomy increases within a ministry, it was anticipated that the recognition towards organizational goal would become vague and, as such ambiguity of organizational purpose became higher, the strengthened centralization would be used by the organization to control its constituents. This centralization has been confirmed as a meaningful predictor in the previous studies on role conflict. Thus, it was hypothesized that the organizational purpose ambiguity would influence, directly and indirectly, the role conflict of officials.

1) Political Heteronomy and Organizational Goal Ambiguity of the Ministry

The studies evaluating the characteristics distinguishing public organizations from private organizations (Baldwin and Farley 2001; Moynihan, 2008; Perry and Rainey, 1988; Rainey, 2003) argued that governmental organizations, which have strong publicness, were different from private companies in organizational environment and structure (Nutt and Backoff, 1993; Chun and Rainey, 2005). Governmental organizations compete with other organizations to acquire political resources and jurisdictions (Dahl and Lindblom, 1953). Therefore, they are required to be more open and fair under a strict scrutiny of the public than private organizations (Rainey et al., 1976). As a result, they always have to work well with external powers, and the decision of the organization is often swayed by such external stakeholders.

The political environment, faced by government institutions, is the cause of 'goal ambiguity', which is known as the characteristic of public institutions (Stazyk and Goerdely, 2011). This tendency is more prominent in modern governments where the network-based policy-making process has become common (Davis and Stazyk, 2015). The path that the political environment affects the goals of government agencies can be evaluated in two aspects. First, it is necessary for government agencies to frequently interact with a number of official and unofficial stakeholder groups in the process of establishing and implementing policies. Particularly, the central government ministries need to make decisions in response to the demands of the public and the press as well as those of the president and the parliament, who exercise direct authority. In this process, multiple goals that are ambiguous and conflictual may arise and they may lose their clarity resulting in manifold interpretations on these goals. It is natural that conflicts occur in the process of coordinating different opinions with external organizations and the unique goals and missions of an organization tend to become vague due to the compromise with these organizations in order to resolve these conflicts (Rogers and Molnar, 1976; Bozeman, 1987). Secondly, government agencies are expected not only to have the efficiency of the organization itself, but also to provide appropriate political responses. In other words, they must quickly respond to the rapidly changing environment, the diverse needs of the people, and unforeseen circumstances. Therefore, setting a goal that can be interpreted differently according to the circumstance can be a more reasonable strategy to justify the organization than establishing a robust and clear goal. As a result, it makes a government organization have ambiguous goals by setting multiple ambiguous and conflictual goals in response to political demands (Davis and Stazyk, 2014; Moynihan and Pandey, 2004).

The mission and goal of an organization perceived by members can be conflicting and unclear in the process of responding to different needs, which are different by the interests of each group, issue, and season. It means that the members of an organization perceive the goal of the organization more ambiguously when the influence of diverse political actors on the organization increases or the

heteronomy of the policy in charge or organization's operation increases due to it. Especially, the central government ministry, the president, and the parliament, which exercise direct authority, must address the requests of citizens, NGOs, and mass media when making decisions. Consequently, this study established the following hypothesis.

H1: A higher ministry's political heteronomy will increase the ambiguity of an organization's goal.

2) Organizational Goal Ambiguity and Role Conflict

Government agencies tend to set the goals of organizations ambiguously for a variety of reasons.

First, when government officials establish a ministry's mission and political goal, they make them ambiguously owing to the need of political compromise. Secondly, the economical signs that are useful to clarify the goals of private companies often cannot be used for the public sector (Pandey and Wright, 2006). Thirdly, governmental organizations are required to be fair and responsible in addition to be economic. These various requests often conflict to each other, thus the goal of governmental organizations are decided by compromises between conflicting requests (Meier, 2000).

However, the ambiguity of an organizational goal can cause confusion in the direction of organizational actions as well as conflicts between organizations' officers (Nutt and Backoff, 1993). Locke and Latham (1990) argued that the clear organizational goal could help officials focus their attention and search for alternatives. Conversely, when an organization has ambiguous, complicated, and conflicting goals, it cannot offer a guideline for its officials to find alternatives (Stazyk and Goerdel, 2010). In such circumstances, officials experience conflicts because they cannot understand their roles clearly or have to consider various conflicting goals simultaneously.

Role conflict is known to be triggered when role players perceive that their

requirements are contradictory or incompatible (Dubinsky and Mattson, 1979; Rizzo et al., 1970). According to the role formation and behavior model (Kahn et al., 1978), which is the foundation of the role stress theory, the organizational factor influences a role sender (those who asks a specific role based on role expectation) and a role player performs a role received by a role player. Basically, role conflict is a psychological phenomenon that arises due to the gap between the role expectation and the role behavior that occurs between senders and players. An ambiguous goal of an organization means that the interpretation of the goal may vary from person to person and role senders may have a higher chance to judge and demand the direction and contents of the role player's work differently. In other words, each stakeholder may make a different request to an official, a role player, and these requests are highly likely to be contradictory. Furthermore, it is highly likely that 'the role to be played' and 'the role to be asked to play' have a gap. Previous empirical studies on private organizations (Cohen, 2002) also suggested that ambiguity and contradictory situations increased negative attitudes such as role stress.

Accordingly, it can be expected that having ambiguous or conflicting organizational missions or goals at the same time would exacerbate the public officials' role conflict. In other words, ambiguity in a ministry's goal can trigger conflicts due to the associated inconsistent roles and values among officials, which have to be satisfied. Thus, this study has set up the following hypothesis regarding the influence of an ambiguous goal of a ministry on the role conflict of the public officials.

H2: Increased organizational goal ambiguity is positively correlated with the increased role conflict of the middle-level public officials.

3) Mediated Effect of Centralization

Organizations design structures that congruence with the needs and expectations of the environment in order to be justified. A structure of an organization is

associated with organizational activities or policies that determine the behavior of an organization's members (Daft, 2004). Therefore, many previous studies have evaluated the factors determining the perception of members about job satisfaction and organizational commitment (Ryu and Ryu, 2012). 'Centralization' is one of the factors that determine this organizational structure.

Centralization refers to the degree of decision-making done by high-ranking officials of an organization and it is a concept including the participation in decision making and the hierarchy of authority (Alexander and Bauerschmidt, 1987; Rainey, 1997). Histological studies have paid attention to the influence of the level of an organization's centralization on the behavior of government officials. Previous studies have shown that members of an organization with strong centralization have fewer opportunities to participate in the decision-making process within the organization and this leads to negative attitudes toward jobs and organizations (low job satisfaction and organizational commitment) (Davis and Pandey, 2005). Some researchers pointed out that a centralized organization had a higher possibility to increase the chance of obstructing the communication of necessary information because it had to go through more hierarchical paths as a result of centralization (Song et al., 2006).

Previous studies, which analyzed the cause of role conflict, have emphasized the frequency of communication, the level of participation of subordinates, and autonomy as organizational explanatory variables. Additionally, these studies have looked for solutions to decrease role conflict while changing these factors. When the level of an organization's centralization is high, decision-making is concentrated only on the high-ranking officials and the communication with the lower-ranking officials is not active. Therefore, a role player has a fewer chances to discuss the duties and roles with high-ranking role-senders. It means that there are only a few ways that a role-player can actively resolve an issue when conflicting role expectations occur. Moreover, whether role-senders stick to 'the principle of command unification' or not is important to reduce the role conflict (Rizzo et al., 1970). It is also highly likely that an official may be expected to do different roles from different ranks n a

centralized organization due to the difficulties in information communication. Of course, not all organizations have a negative association between centralization and role conflict. A recent study evaluating the employees of private companies in the United States and India reported that centralization may reduce role conflict depending on the characteristics of the associated culture. This study aims to analyze the effects of centralization on the role conflict of South Korean government officials within a strongly hierarchical organization.

This study mainly focused on the mediated effects of centralization. Experts in public management have argued that organizational goal ambiguity influences the level of centralization, which is an element of bureaucracy culture (Chun, 2004). When the objectives of an organization are clear, it is possible to present useful and valuable guidelines for employees. Moreover, free decision-making becomes possible within the scope of these behavioral guidelines. It is also possible to decide one's own working pattern (Wilson, 1989; Chun and Rainey, 2005). Behavioral guidelines coordinate the pattern of work for organization members to ensure that they comply with the values of the organization in a virtual manner. They also serve as objective assessment criteria and, consequently, it is not necessary to supervise or guide every detail of each task. It is also easy to provide relevant information for employees and to encourage them to participate in a decision-making process of deciding on the mission or work of an organization. Because an organization tends to have declared objectives, it is possible to collect various opinions on how to achieve these objectives. It is also easy to assign the authority to others. If there is no clear objective, supervisors need a control mechanism in order to balance the different behaviors of members and the control mechanism typically becomes structuralized (Chun and Rainey, 2004; Rainey, 1993).

This means that, when senior officials face ambiguous organizational goals, they tend to minimize autonomous work process and participation in the main decision makings of subordinates (Rainey, 1993; Warwick, 1975). This phenomenon is called 'centralization.' Early theoretical studies reported that there was no relationship between them. However, recent studies (Pandey and Wright, 2006) confirmed that

centralization was strengthened with larger ambiguity in organizational goals.

When political heteronomy is high and the long-term direction of an organization is ambiguous, the ministry centralizes the organization in order to control it. However, in this situation, strengthened centralization means that mid-level bureaucrats, who are involved in administrative responsibilities and policy creation, will be required to be obedient to their superiors' command structure. Therefore, centralization can intensify the influence of heteronomy and goal ambiguity on bureaucrats' work stress. Particularly, even though the direct influence of ministry's heteronomy on constituents' role conflict may be low, it can have indirect influence on centralization and ambiguity of organizational goals.

H3: Increased political heteronomy and ambiguity of organizational goal will increase role conflict due to its effect on organization's bureaucratic structure.

2. Sampling Procedure

This study used the survey data of mid-level administrative positions within central governmental ministries. Questionnaires were handed out to selected organizations that were deemed to adequately reflect the opinions of 'mid-level administrative positions within central governmental ministries. With reference to previous studies (Kim, 2005), 15 ministries of South Korea were categorized into three sections: customer groups, policy types, and characteristics of work(function). Nine ministries were selected to represent each category (Appendix 1). Personal self-administration method was used to collect data. Three hundred fifty copies of questionnaires were distributed for ten weeks (Feb ? Apr, 2010) and 300 copies of questionnaire were retrieved. Total 255 copies (72.9%) were considered valid after careful examination and they used for analyses.

It was found that 227 of respondents (66.2%) were men and 115 of respondents (33.8%) were women. The results indicated that men accounted for a higher proportion of the respondents. In terms of the age group, 33 respondents were in their 20s (9.6%), 129 respondents were in their 30s (37.7%), 93 respondents were in their 40s

(37.4%), and 52 respondents were in their 50s (14.9%). Fifty-three respondents (15.5%) worked for Ministry of Health and Welfare, the highest proportion, followed by Ministry of Public Administration and Security (49 people, 14.3%), Ministry of Environment (46 people, 13.5%), Ministry of Land, Transport and Maritime Affairs (39 people, 11.4%), Ministry of Unification and Ministry of Foreign Affairs and Trade (31 people, 9.1%), Ministry of Culture, Sports and Tourism (30 people, 11.8%), Ministry of Employment and Labor (30 people, 8.7%), and Ministry of Strategy and Finance (25 people, 7.3%). Although there was a slight variability among the departments, the overall pattern of distribution was consistent.

3. Measures

Role conflict can be defined as a negative psychological status of a role player when he or she recognizes conflicting and inconsistent role expectations. Five items out of standards developed by Rizzo et al. (1970) and they were modified according to a objective of study. These scales have been widely used and are consistent with previous studies on role conflict (Van Sell et al., 1981; Jackson and Schuler, 1985; Sawyer, 1992). Numerous previous studies have proved the validity of this method (Schuler et al., 1997; Kelloway and Barling, 1990; Netemeyer et al., 1990).

Weber (1947) evaluated organizational autonomy and defined ministry's heteronomy as "the level of violating autonomy in the decision-making for a policy or a mission due to the political influence of other stakeholder". Four items were analyzed in order to measure this (Rogers and Molnar, 1976).

The operational definition of a ministry is "ambiguity in a constituent's recognition of the ministry's goal and mission". In order to measure the level, this study used a reverse-indicator method by asking the clarity and specificity of a relevant ministry's goal and the level of harmonization recognized within the ministry's mission through a questionnaire.

Centralization is defined as "concentration of decision making authority to a certain person, class or group, or the level of stratification of such authority"

(Robbins, 1983). Other researchers defined the concept as “signifying who has the authority to make decisions, that is, the division of authorities within an organization” (Fry and Slocum, 1984). In short, centralization can be considered as “monopolization of authority” and “restriction on participation in decision-making process”. This study uses standards developed by Hage and Aiken (1967) to evaluate the level of restriction on participation in decision-making process. In terms of the monopolization of authority, this study established six items modified from the standards developed by Fredrikson (1980). This study restructured them into three observation variables for conducting structural equation modeling (SEM).

Lastly, the relationship among these factors can be affected by subjects’ demographical characteristics. This study evaluated the effects of subject’s sex, age, and position.

Questions in the survey for materialization of the concepts were measured with Likert point scale (Appendix 2). Furthermore, in order to test the proposed hypotheses, this study examined the relationship among variables using the SEM technique. For this analysis, AMOS 24.0 version was used.

4. Assessment of Measurements

This study used Cronbach’s α to check the questionnaires’ reliability. The results confirmed that the questions used in this study have adequate reliability (Cronbach’s α coefficient = 0.65-0.82).

Table 1. Reliability of Questionnaires

Variables	No. items	Cronbach’s α
Role Conflict	5	.728
Political Heteronomy	3	.649
Goal Ambiguity	3	.676
Centralization	3	.819

As the results of a confirmative analysis of the factors for the purpose of

verifying the appropriateness, the model's goodness of fit was $\chi^2 = 76.576$, p value=.304 in chi-square test. According to these standards of goodness of fit, this model was found to be adequate.

Table 2. Goodness-of-Fit for Confirmative Factor Analysis

	$\chi^2(p)$	RMSEA	RMR	NFI	GFI	CFI
A standard of judgement	>.05	<.05	<.05	>.90	>.90	>.90
Results	76.576 ($p=.304$)	.015	.033	.995	.969	.925

This study also analyzed the hypothesized structural relationships among latent variables using SEM. Standardized parameter estimates of all items, showing the relationship between latent and measurement variables, were higher than 0.5 so it was concluded that latent variables explained the changes in relevant observation variables very well.

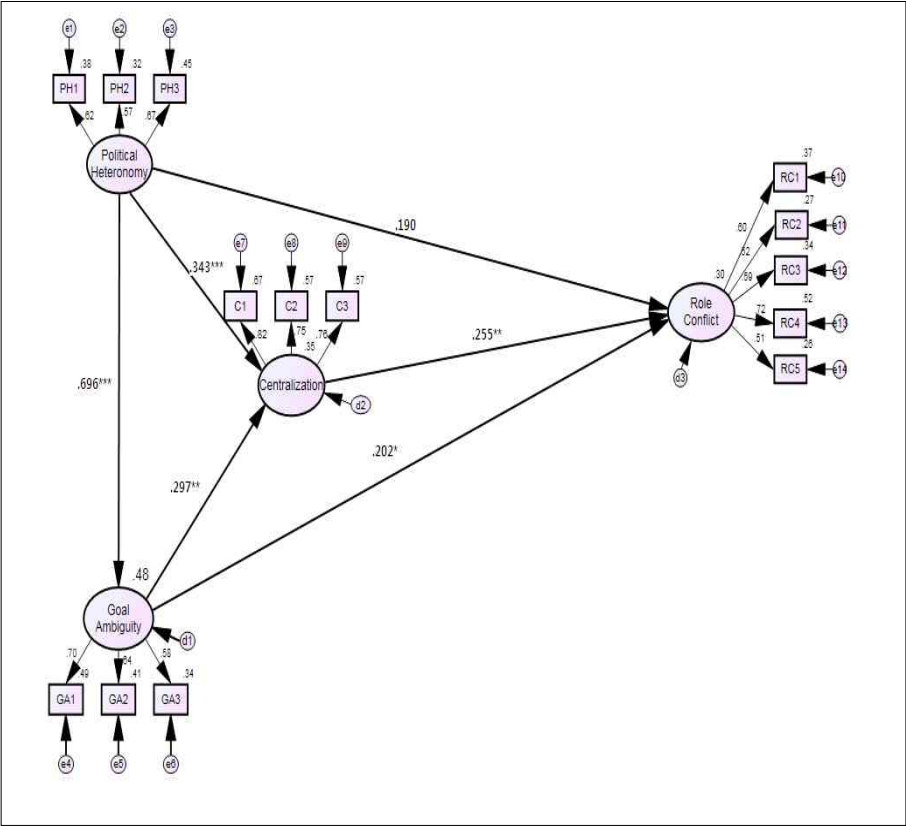
IV. Results and Discussion

In order to examine the goodness of the model, it was tested whether it satisfied the structural equation's goodness level. The results of the analysis showed that established model satisfied every suitable index standard and was suitable for the study.

Table 3. Goodness-of-Fit for Structural Analysis

Goodness Level	$\chi^2 (p)$	RMSEA	RMR	NFI	GFI	CFI
Model Examination Result	76.576 ($p=.154$)	.015	.035	.934	.966	.990

Figure 1. Final model with standardized coefficients



A ministry's political heteronomy can create organizational goal ambiguity. ($\beta = .696$, $p < .05$). As the political interest stakeholders' influence on a ministry becomes stronger, the organization's mission and goal recognized by bureaucrats can become unclear. It means that the mission or goal perceived by a public official becomes ambiguous as the influence of the stakeholders becomes stronger (Stillman, 1996). Public officials currently have to face very complex political environment because the division of powers has been challenged and the political authority of official and unofficial political actors in agencies of an administration has been fragmented. (Stillman, 1996). In this environment, it is hard for government entities to establish a objective systematically because they should simultaneously respond to multiple

political organizations. The previous theoretical studies on public management have shown that governmental organizations, heavily influenced by outside organizations, tend to have conflicting, redundant, and neutral goals to inhibit the efficient operation of the organizations (Meier, 1987; Rainey, 1983; Bozeman, 1987).

The results of this study empirically verified such theoretical arguments. Additionally, the results of this study indicate that government entities cannot help establish their directions on a case-by-case basis based on timing, policy issues, and conflicts of stakeholders. Furthermore, the results of this study agreed with the previous reports recognizing the obscured objectives of organizations (Waterman et al., 2004; Rogers and Molnar, 1976). The results of this study empirically verified such theoretical arguments. Additionally, the results of this study indicate that government entities cannot help establish their directions on a case-by-case basis based on timing, policy issues, and conflicts of stakeholders. Furthermore, the results of this study agreed with the previous reports recognizing the obscured objectives of organizations (Waterman et al., 2004; Rogers and Molnar, 1976).

Table 4. Path Coefficients

Path	Direct Effect	Indirect Effect	Total Effect
Political heteronomy → Organizational goal ambiguity	.696**		.696**
Political heteronomy → Centralization	.343**	.207**	.550**
Political heteronomy → Role conflict	.190	.280**	.471**
Goal ambiguity → Centralization	.297**		.297**
Goal ambiguity → Role conflict	.202*	.076**	.277**
Centralization → Role conflict	.255**		.255**

Note: Each measurement is standardization coefficient, * $p < .01$, ** $p < .05$, *** $p < .001$

The results of this study revealed that, as organizational goals become ambiguous, officials recognize more role conflicts ($\beta = .202$, $p < .01$). Wright (2004) developed 'Goal Setting' theory and argued that a more ambiguous organizational goal decreased work-related information and increased officials' role stress. The obscurity of organizational objectives would impair the contents and directions of employees' work. Moreover, there is also great variability in the requirements of

'role senders' who assign tasks to role players (Rizzo et al., 1970; Peterson et al., 1995). Role players work in situations where results are obscure depending on the role expectations, methods for reaching the degree of their expectations, and their own attitudes (Beehr, 1985; Steers and Wallace, 1990). From the aspect of role players, this work environment would become a factor causing stress. This speculates that the obscurity of government entities' objectives will make officials experience role conflict. This theory has been confirmed by Pandey and Wright (2006) as well, who studied the United States state agency public officials and their results agreed the results of this study.

The most interesting findings of this study were the mediated effect of centralization. Previous studies on role stress (Kast and Rosenwerg, 1974; Sell et al., 1981; Senatra, 1980; Pandey and Wright, 2006) argued that role conflict could be increased when communication between superiors and subordinates was not active, when subordinates were excluded from the main decision-making process, and when there was a lack of autonomy in the work responsibility process. The results of this study also found a significant influence of role conflict ($\beta = .255$, $p < .05$). This result is different from the results of studies conducted on private company employees of the United States and signifies that, depending on social culture, the influence of an organizational structure on role conflict can be different. As organizational goal ambiguity increases, the inside of the organization tries to centralize in order to control the confusion caused by ambiguity and such control mechanism can have an adverse effect. This study was based on Korean central government's ministry bureaucrats and empirically supported the arguments of Rainey (1983) argument that, when an organizational goal was ambiguous, the organization strengthened the order-of-rank oriented control in order to control officials.

It is also noteworthy that centralization not only has a direct effect on role conflict, but also has a meditated effect. Political heteronomy and organizational goal ambiguity can increase their influence on role stress via an inner-organizational characteristic, called centralization. As a result of an actual analysis, because of an

indirect effect mediated via a controlling organizational characteristic, a ministry's goal ambiguity strengthens its negative effect. Organizations' goal ambiguity has a meaningful influence on the organization to have more centralized characteristics in order to control or decrease the ambiguity. The situation theory argues that, as organizational goals become ambiguous, more flexible and localized organizational cultures appear (Matland, 1995). This study analyzed the relationship between the organizational goal ambiguity and 'centralization,' specifically within the bureaucratic culture. Moreover, ministry's heteronomy did not directly affect role stress. However, because of the mediated effect of centralization, it did influence role conflict. The result concurs with Waterman et al. (2004) and Rogers and Molnar (1976), which found officials recognized their organization's goal to be conflicting and ambiguous because public organizations established conflicting behavior directions owing to relations with stakeholders.

V. Conclusions

The result of this study indicated that, when a ministry had low autonomy because it was highly affected by political influence, the ministry's organizational goal ambiguity increased. Additionally, a ministry's political heteronomy did not directly influence bureaucrats' role stress. However, through its influence on goal ambiguity and centralization, it indirectly influenced role stress. It was found that the organizational goal ambiguity directly intensified role stress and, unlike previous studies, as argued by the situational theory. Moreover, as a tool for controlling constituents, this study showed that centralization had a negative effect on constituents' role stress.

Moreover, unlike the explanation of the public management theory based on the situation theory, an organization tended to be centralized when the goal of the organization was more ambiguous. The results of this study agreed with previous studies, which disputed this theory and supported the argument that an organization

tends to have more centralized characteristics when the goal of the organization is ambiguous in order to control the confusion due to the ambiguity. Furthermore, the results of this study indicated that the centralization, which was a means to control the members of an organization, rather negatively affected the role stress of the members.

There are several important findings in this study. First, public management theorists have argued that as the stronger the various and complicated political influence on public organizations becomes, the relevant organizational goal ambiguity is aggravated. This study demonstrated that actual administrative bureaucrats recognized the organizational goal ambiguously when the relevant ministry's political heteronomy increased. Moreover, this study showed empirically that if the organizational goal was ambiguous, the order-of-rank was strengthened and bureaucratic culture appeared (Rainy, 1993). Furthermore, most studies on administrative focused on the influence of political institutions on public organizations, especially the organizational characteristics including bureaucratic culture. On the other hand, only a very small number of studies evaluated the bureaucrats' behavior in relevant ministry's political influence or organizational goal ambiguity, which reflects public organizations' original characteristics. This study showed that it is needed to discuss public organizations' characteristics, differentiated from private organizations, together with constituents' role stress.

Moreover, the results of this study implied that the bureaucratic culture (a.k.a. centralization) directly influenced role stress and its mediated directly affected the public organization management. This result shows that centralization used for controlling the confusion and ambiguity problems can result in adverse effects. In other words, if a ministry's goal is ambiguous while the communication between superiors and subordinates is inactive and a small number of people control decision-making processes, bureaucrats will experience conflict and ambiguity related to work roles. Government officials' increased role stress can negatively influence the effectiveness of administration in the form of 'peace-at-any-price' and an apathetic attitude. Therefore, there must be institutional efforts to allow

government officials (e.g., deputy directors, secretaries, and action officers) to actively participate in the processes related to main policy decisions and execution.

The limitations of the data and methods of this study need to be supplemented in future studies. This study has the merit that this study confirmed the level of role conflict and the influencing factors, which are psychological attitudes, by conducting a cognitive survey on middle managers. However, the data used for this study had low accuracy because the organizational characteristics were only measured by the individual recognition. Future studies are required to secure enough observations and conduct a multi-level analysis by applying various indices to variables reflecting organizational characteristics. Another shortfall of this study was that it was conducted on outdated survey data. Since the administrative environment is changing rapidly, it is necessary to try to analyze with more updated data and to observe whether there is a change with time so that the contemporary public officials in the central government recognize the recognition and organization characteristics.

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〈Appendix〉 Methods of categorization and the selected departments by 15 ministries

Policy types and Function		Customer(Target of Policy)	
		Government	Citizen
Government Control	Maintenance of country/ Government management	Ministry of Foreign Affairs and Trade* Ministry of National Defense Ministry of Public Administration and Security*	Ministry of Unification* Ministry of Justice
Industry & Economics	Economic Plan and Control	Ministry of Strategy and Finance* Ministry of Knowledge Economy	
	Industrial Policy		Ministry for Food, Agriculture, Forestry and Fisheries Ministry of Land, Transport and Maritime Affairs*
Society and Welfare	Education/Culture		Ministry of Education, Science and Technology Ministry of Culture, Sports and Tourism*
	Labor/Welfare		Ministry for Health, Welfare and Family Affairs* Ministry of Employment and Labor* Ministry of Gender Equality
	Environment		Ministry of Environment*

* selected ministries