Leadership Qualities of Local Government Chi efs for Local Development: Application of Clus ter Analysis and Focus Group Interview

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Abstract - This paper attempts to categorize local government authorities in Korea according to the conditions they face, including social, geographical and financial conditions, and to suggest desirable forms of leadership that local government chiefs should undertake, given the assumption that they should make the most of local government's characteristics and also that such leadership is crucial to developing local government. The term 'leadership' here is broadly defined as possession of the competencies and capabilities a leader needs in order to develop an organization. The research methods employed in this study are cluster analysis and Focus Group Interview (FGI). The former is used to classify and categorize local authorities into certain categories, while the latter is used to suggest leadership types corresponding with various local government conditions. It is expected that the results of this research may be utilized in public nominations when selecting candidates for local government chief on a party-political basis, when discovering/selecting candidates possessing the competencies to develop their community in accordance with the electorate's wishes, and when setting the environment of a policy-oriented election or an electoral system geared toward policy competition.

Keywords- local government authorities, leadership, local government chief, electoral system

I. INTRODUCTION

On June 4, 2014, nineteen years after the first election of a local government chief by popular vote, the sixth such election took place. The appointment of a local-government head by direct election may imply that a system of local self-government is clearly being implemented. The local government chief who is elected by popular vote plays the most significant role in the decision-making of local government, and thus may be viewed as the most important player determining the quality of life of local residents and the overall success and failure of local authorities. In particular, assuming that decentralization will continue to happen, the local government chief who can command authority will play a larger role in determining the present and future of local government. The kind of leadership qualities he or she possesses will directly contribute to the development of the local authority. The term 'leadership,' as will be explained later, does not connote that in a given organization the

members passively obey the manager's intentions, but is here a broader term that includes the competencies and capabilities needed for a leader to develop an organization strongly. Although there have been previous studies examining leadership qualities and competencies in local government, most have been ignorant of the various economic and social conditions these bodies are facing, considering them as a single factor and grouping the required competencies together as one. However, even when they belong in the same category, local authorities face different conditions and are subject to different legal rules, and so the leadership competencies needed to enact such rules may also differ. Heads of local government were elected during the last six local elections, but it is not known whether they had or have the competencies needed for understanding the situation these bodies are facing. This research will begin with a recognition of these problematics, group Korean local authorities into certain types, and then for each type suggest the competencies required by their respective chiefs.

II. REVIEW OF PREVIOUS RESEARCH AND RESEARCH QUESTIONS

2.1 The concept of leadership

Definitions of leadership vary considerably. Byrt (1978: 3) defines leadership as 'a word that contains incorrect, general and emotional values such as justice, democracy, sin and virtue.' In addition, he states that leadership entails a grouping of these personal attributes, and can be seen variously both as a process and as a result. Scholars supporting this view also include initiative, motivation, sincerity and confidence as leadership attributes (Kirpatrick and Locke, 1991). Researchers who similarly assert the trait theory define leadership as the power a leader can exercise on members, or the ability to affect others and lead them to contribute to the organization (House, 1995), and they usually understand it in terms of a manager–subordinate relationship. Northhouse's research (1997: 2–4) also focuses on leadership characteristics in this light. By contrast, Sorensen and Epps (1996: 114)

understand a leader as one who successfully achieves a desirable goal for an organization, and leadership as the competencies a leader requires in implementing these tasks. This research also understands leadership not in a passive sense according to which a manager makes subordinates follow his or her intentions, but rather more broadly, in terms of the competencies required to successfully drive and support task-accomplishment in an organization. Seen in this perspective, leadership in the case of the local government chief can be broadly defined as the competency that he or she will need in order to guarantee that the local authority will perform its role successfully (Fisher, 2007: 30). Therefore, in this research the term 'leadership' will be used along with 'competencies.'

Table 1	Role of local	government chiefs
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Common authorities of first-tier and second-tier local governments	Authorities of first-tier local governments
1. Supervisory and executive rights regarding local government affairs.	1. Instruction and supervisory rights regarding local government affairs.
2. The right to delegate the jurisdiction of affairs within the range of regulations.	2. The right to cancel and stop an unreasonable order or disposal given by the local government chief relating to delegated national affairs.
3. The instruction, supervisory and appointing rights of managers of subsidiary organs and subordinate administrative organizations.	3. The right to give orders for fulfillment of duty by local government leaders who are clearly uncompliant with national delegated affairs or the management and execution of city/provincial delegated affairs.
4. The authority to make rules according to regulations.	4. The right to mediate conflicts between local authorities.
5. The establishment right of an affiliated administrative agency.	
6. The right to request a call for temporary local councils.	
7. The right to ask for reconsideration of local council decisions and appeal reconsidered issues in the Supreme Court.	
8. The right of prior consideration of issues requiring the decision of local councils that need to be covered immediately for the sake of the lives and property protection of residents.	
9. The right to appoint employees	

of the council affairs organization.

Source: Kyung-Hoon, In-Hwa (2010: 463).

2.2 Previous research

2.2.1 The role of local government chiefs

As mentioned above, when defining the term 'leadership' it is important first to understand what the role of a local government chief is, and then to determine what competencies are required of him or her. To understand this role correctly, an examination of the legal measures determined by the Local Government Act is required, including a broad examination of the role of the Act in ensuring the development of local government and the enhancement of residents' welfare.

According to the Local Government Act, a local government chief in Korea is the representative top manager who carries out the duties of the relevant body, having the status of chief of a frontline organization who is entrusted by the national government with discretion in carrying out general affairs (Lim, 2005: 99). Also, he or she has management and executive rights, and exercises supervisory and personnel rights over affiliated employees and directive and supervisory rights over subsidiary organs and subordinate administrative organizations. He or she is able to establish direct institutions, and has rule-making authority according to the appropriate legislation and regulations. In this view, local government chief can be seen not only as an executive but also partly as a decision-making office (Lee, 2008: 56). In other words, since the chief is the top manager in an organization that effectively enacts the role of the local authority, his or her talents and leadership attributes strongly affect not only the local authority but also the development of the local society (Kim, 2013). This accords with the role of chiefs of local government specified in the Local Government Act, and Choi's (2006) research distinguishes between the roles of chiefs of first-tier and second-tier governments.

Table 2	Comparison between admini	strative and	political roles
	Administrativa rola	Politi	cal role

	Administrative role	Political role				
Basic goal	growth	value distribution, conflict resolution				
Welfare	absolute welfare	relative welfare				
Ideology	efficiency	democracy, equity				
Form of policy decision	decision within an elite group	emphasis on participation of stakeholders				
Beneficiaries	the middle class	general public				
Primarily applied areas	central areas (commercial, factory areas)	all areas				
After-effect of failure	area decline, fiscal difficulties, population outflow	political instability, heightened conflicts, requests, complaints				
Knowledge of leader	administrative and managerial abilities	political capabilities				
Policy means	lures, support	restriction, mediation				
Source: Lee (1005)					

Source: Lee (1995).

Lee (1995) research objects to confining the basic role of chief to its legal aspect, and proposes determining this role by focusing on due expectations and on relationship standards vis-à-vis participants related to status. First, the relationship standards vis-à-vis participants are categorized according to type of organizational body: maintaining a balanced relationship between cooperation and checks with local councils; providing efficient management of and command over affiliated civil servants; balancing between creative regional development and the harmonious national development of relationships with residents; maintaining a relationship balanced between cooperation and competition with other local authorities; and securing competitiveness and setting a reciprocity relationship with the central and local governments of foreign nations. Also, Seung-Jong suggests distinguishing the characteristic standards for these roles according to political role, administrative role, and leading role. The comparison between political role and administrative role is presented in Table 2. (A similar classification is found in the role categorization of Wollmann (2004: 160–5).)

As illustrated above, the chief is responsible for not ignoring economic clients (administrative role), and for satisfying the interests of political clients (political role) when leading the local authority. This rather paradoxical relationship is therefore also described as one of a 'funambulist' (Judd, 1988: 408) and is difficult to enact at once. However, considering that the ultimate goal of a local government is residents' welfare, these two aspects should be complementary (Seung-Jong, 1995). Meanwhile, Seung-Jong additionally proposes a 'leading role' combining the two roles previously mentioned. This leading role signifies that the chief should possess an adventurous outlook and a creative mind while leading the region's development.

In order to establish the proper role for a local government chief, Jung Sung-Ho and Cho Im-Gon (2003) undertook survey analysis on the evaluation results for organization chiefs; surveys targeting civil servants and vice-chiefs; and data research on the political, financial and personal characteristics of local government chiefs. The results of the analysis were categorized according to residents', vice-chiefs' and civil servants' conceptions of the ideal local government chief. The ideal chief as conceived by residents was someone who would take an interest in welfare, put an effort into developing policies for residents in their twenties, and devise policies that took into consideration women and low-income groups. Conceptions by vice-chiefs and civil servants of the ideal local government chief were classified according to whether the views were those of administrators or politicians.

Kim (2009) attempted to categorize the status, authority, limitations, and role of local government heads. Status was classified as: status as local government representative, status as head of an executive organization, status as head of a national frontline local administrative organization, and status as a political leader. Authority was classified as: right to call an emergency meeting; right to interfere in the decision making of local councils; personnel rights vis-à-vis organization employees; rights relating to managing council affairs, such as rights to undertake action as prior consideration, rule-making authority and execution management rights; rights to appoint to positions of power; and administrative rights such as direction and supervision rights. Also included were legal restrictions, financial restrictions, and political restrictions. Byung-Joon defined the role of local government chief as an expected role, and categorized the specific roles as follows: role as detector and suggester of policy problems; role as policy promoter; role as diverter of the local council; role as manager and enforcer; role as autonomous manager; role as stakeholder; and role as rational decentralization activist.

Lim Seung-Bin (2010) tried to explain the role of local government chief by dividing it into status and authority. First, status was divided into: status as head of a local government, status as head of an executive organization, status as head of a national frontline organization, and status as a political leader.

Authority was divided into: assembly rights, such as the right to submit bills; the right to call an emergency meeting; rights regarding resolution of an assembly; personnel rights vis-à-vis organization employees through recommendation of the chairperson; rights to action as prior consideration; and administrative rights such as rule-making authority, appointment and dismissal rights, and direction and supervision rights. Meanwhile, Seung-Bin included administrative, financial and political restrictions.

2.2.2 Leadership attributes of the local government chief: competencies

What matters particularly here is what kinds of competencies the head of local government should possess to enact his or her role. Sorensen and Epps (1996: 118) suggest that the competencies that leaders of local governments should have include: the ability to form a vision of the local society; the ability to raise the capacity of the local society; the ability to motivate and systematically organize entrepreneurs, administrators and social businessmen; and the ability to lead the local society. Fernandez et al. (2010: 311-12) propose task-oriented leadership, relations-oriented leadership, change-oriented leadership, diversity-oriented leadership and integrity-oriented leadership as key attributes. The first-mentioned, task-oriented leadership, is related to organization management abilities, and stands for goal-setting and accomplishing abilities and task-managing abilities. Relationships-oriented leadership includes the ability to maintain good personal relationships, the ability to increase members' welfare, and the ability to enhance participation during decision-making processes. Change-oriented leadership includes the ability to enhance strategic decision making, the ability to react to environmental changes, and innovative abilities. Diversity-oriented leadership involves the ability to acknowledge racial and demographic diversities and to integrate them. Finally, integrity-oriented leadership includes managerial abilities which take into account legal suitability, impartiality, and equity towards service consumers and members. Similarly, Leslie and Canwell's research (2010: 304), which focuses on organization management within local government, proposes plan-making and organization composition as the competencies of a local government chief.

Meanwhile, from their research conducted on twenty cities in the USA, Kotter and Lawrence (1974) divided the role-performing behavior of local government chiefs into five categories (Hae-Yook and Jae-Bok, 2008: 26). These are: the caretaker, the executive, the ceremonial, the individual, and the entrepreneurial. One interesting aspect of their research is that the type of chief differs according to the type of local government. For example, the phenomenon of 'ceremonial' or 'individual' types is largely found in cities with a low population density, small scale and fast growth. An executive' type is usually to be found in cities that do not have major problems. This discovery is thought to have great significance. This is because, while some of the competencies of a self-governed body chief might be universal, there must be differential administrative responses toward residents, since cities usually are subject to different conditions such as size of population, financial state, population structure, etc. In the present paper too this point is noted, and so it too will try to categorize the competencies of chiefs according to the characteristics of self-governed bodies.

In Korea, Lim and Lee (2005) conducted relationship research on 44 cities possessing local authorities and 39 autonomous districts in order to discover the relationship between the competencies of local authorities and those of self-governed body chiefs. As regards the latter, their studies proceed on the basis of their understanding of the importance of ability capacities and determination capacities. Specifically, ability capability relates to the experience, foreign language fluency, information utilizability, morality and academic achievement of the head of an organization. Determination capability relates to the chief's ability in terms of vision sharing, facilitating the participation of citizens and NGOs, responsibility and will in innovation, and the acceptability of the administrative participation of citizens. The analysis results reveal that these competencies do not show a direct correlation with those of local authorities.

Chang-Seok Song (1995: 69–72) discusses the skills required of local government chiefs as follows. First, he emphasizes the power to envision the future and suggests by way of a desirable leader one who has an ideal and a philosophy in terms of proposing a future image for the city. Possessing such a future image and vision of a city can encourage other local residents to gain hope and can help to revitalize the city.

Second, Song states that the ideal chief should be one who is capable of managing administrative and financial matters deftly and is a talented manager. One of the responsibilities of the local government chief is to break down any existing administrative customs and fulfill citizens' expectations of managing administrative and financial matters efficiently. Thus, diverting citizens' taxes back to them impartially without waste, and maximizing efficiency by reducing any kind of untoward extravagance, is one of the most fundamental tasks.

Third, the chief needs to be a person with outstanding knowledge and decision-making abilities. This is because he or she has to select policies and set priorities in a context where multiple demands and limited resources are givens, and also because it is the duty of a local government chief to allocate resources by taking a long-term view.

Fourth, the chief needs to promote reform in the areas of awareness, skills development, and revitalization of the organization. Promoting reform of the awareness and skills development of affiliated civil servants is one of the principal tasks of the chief, and here leadership is required that encourages employees to discard time-hallowed ways and escape from the tendency to blindly go by precedent so that they can increase their awareness and are encouraged to improve their performance, thus helping to create an autonomous administration where creative ideas are freely supported.

Fifth, he or she needs to have independent courage and be capable of independent-minded behavior. An elected self-governed body chief might have a submissive attitude toward citizens, but should instead display independent and courageous behavior that can help develop the administration of local government by standing up to central government's unjust order or dictation.

Sixth, he or she needs to be a regionalist who supports local decentralization. This is the era of the opening up of local government, and the courage and executive power to firmly

support decentralization from central government is one of the most basic attributes of the chief of a local organization.

Jung Sung-Ho and Cho Im-Gon (2003: 28-9) took the results of a previous piece of research and organized the attributes of a local government chief as follows. He or she must possess, first, a philosophical outlook that can suggest a clear vision for the future; second, an adeptness in conversation, debate, negotiations and lobbying as a political leader; third, administrative leadership as head of an organization; fourth, the ability of a policymaker to collect various demands, develop them into a policy and enforce that policy; fifth, an entrepreneurial capacity for enhancing the productivity of the organization, enhancing regional finances; sixth, the ability to overcome crises and make adequate responses; seventh, public relation skills; eighth, diplomacy skills, needed to guide toward globalization, and a sense people of internationalization; ninth, a decentralist viewpoint; and tenth, personal characteristics such as probity, sincerity, public interestedness, courage, a rational mind, responsibility, and health.

 Table 3
 The role of the chief of a self-governed body: overview and competencies

Role of a local government chief	Competencies of a local government chief
	-the ability to analyze surroundings and make decisions
	-the ability to set and propose a vision
	-political persuasion/negotiation skills
	-administrative leadership
	-the ability to develop policies
	-leadership abilities
	-policy support abilities
 -role as discoverer and proposer of policy problems -role as policy enforcer -role as restrainer of the local council -role as manager and enforcer -role as autonomy manager 	 -the ability to restrain local councils -the ability to drive innovation -the ability to integrate the local society -the ability to coordinate interest relationships -the ability to improve welfare
-role as interest coordinator -role as rational decentralization supporter	 -the ability to implement decentralization -lobbying skills -entrepreneurial skills -crisis management skills -public relations skills
	 –globalization and internationalization skills –the ability to manage internal organizations
	 -personal management skills (probity, sincerity, health, etc.) -others

Kim (2009) categorized the role of a self-governed body chief in terms of six attributes and discussed each of them in turn. First, as regards his role as discoverer and proposer of policy problems, the chief requires an accurate understanding and vision of the socioeconomic environment surrounding the local society as well as an understanding of the society itself, and also should have strategies for addressing the problems. Second, as regards the role of policy enforcer, the local government chief should be able to propose a clear and convincing vision, and have the ability to implement the policy by persuading not only the administrative organization but also the entire local society.

Third, in his or her role as restrainer of the local council, the chief should – since the local council's decision might be affected by the demands of an interest group and this might not always guarantee benefits for the local society – be able to keep the council in check and represent the entire local society. Fourth, in his role as manager and enforcer the chief is required to be responsive to the tide of the times such as in the areas of democratization, decentralization, informatization and globalization, and continuously bring about innovation in the current system. A driving force in implementing new managerial methods and reforming consciousness is also a required attribute.

Fifth, since local residents have a strong desire to revitalize the local economy, in his role as an autonomy manager the chief should be able to: regard change as an opportunity for a new challenge; utilize human, material, and socio-political resources efficiently so as to maximize their added-value; and continuously promote innovation. Sixth, in his/her role as an interest coordinator he or she should be able to mediate between and organize citizens who share various interests. Seventh, as a supporter of rational decentralization he or she should have a competency in decentralization.

Park and Kim (2009) added some further competencies to the above: first, the competency to effectively manage the external relationships of the local authority regarding environmental factors in the local administrative system; second, the competency to suggest the vision and the policies required for solving local problems and promoting regional development; and third, the managerial competency of autonomous administration – this, under the conditions of local government, arranges the various activities that motivate civil servants and provides a harmonious atmosphere for the organization.

2.2.3 The role of the chief of a self-governed body: overview and discussion of competencies

As discussed above, many views have been put forward regarding the role and competency attributes of a self-governed body chief. In many cases, these views present different terms that are actually identical in meaning. A summary of these is presented in Table 3.

The roles and competency factors shown in Table 3 are not independently divided, but rather in some respects conceptually overlap. Nevertheless, since the emphasis placed on each conceptual term by the different factors may vary, it was decided that they all should be included. The role part is set out in accordance with the Local Government Act, and describes rules that must be fulfilled by both first- and second-tier government chiefs. Yet, since there may be differences between first- and second-tier governments, it is necessary to separate the roles. The Local Government Act assigns the troubleshooter role only to first-tier governors, but since this role is also needed for second-tier governors, this research will not divide the roles of local government chiefs, but will consider all of them as necessary. However, as regards the competency aspect, the priority given to the required factors may differ according to the status of local authorities or economic and social conditions. Therefore the competencies required can change, depending on whether the status is metropolitan or base, and even if they appertain to the same status the required factors may differ.

2.3 The research question

In this research, the assumption that the competencies required of the local government chief differ according to the particular conditions leads to following research question:

What competencies on the part of the different types of local government chief are particularly needed given the conditional differences in local authorities?

III. RESEARCH DESIGN

3.1 Research framework

The model used in this research is presented in Figure 1. First, on the basis of previous research and reference checks an analysis will be conducted of the characteristics of local authorities and discussions of the leadership role of local government chiefs. Then, via reference to major legislation and statistical data, an examination of the actual present conditions of local government will be undertaken. Following this, a hierarchical cluster analysis will be performed to draw the number of clusters needed to categorize local authorities. On the basis of these results, k-means cluster research will be carried out to draw clusters of local authorities, which will synthesize the analysis results so as to permit analysis of the characteristics of local authorities and clusters. Following this, the Focus Group Interview (FGI) method will be used in respect of a seven-person group consisting of civil servants such as ex-organization leaders, vice-chiefs, directors and section chiefs, and the results will be used to draw implications relating to the leadership attributes of local government chiefs.

Table 4 Types of analysis variable

Area of variable	Content of variable									
Population	Population number, population growth rate									
Fiscal condition	Fiscal self-reliance ratio, own income per person									
Economic foundation	Unemployment rate, GRDP per person, business engagement change rate, business change rate, number of successful foreign investor attractions									
Social security foundation	Number of fire accidents per 10,000 residents, falsely reported alarm numbers, percentage of residents who have received fire prevention education									
Welfare foundation	Number of basic livelihood security recipients per household, social welfare budget ratio, ratio of citizens aged over 65									

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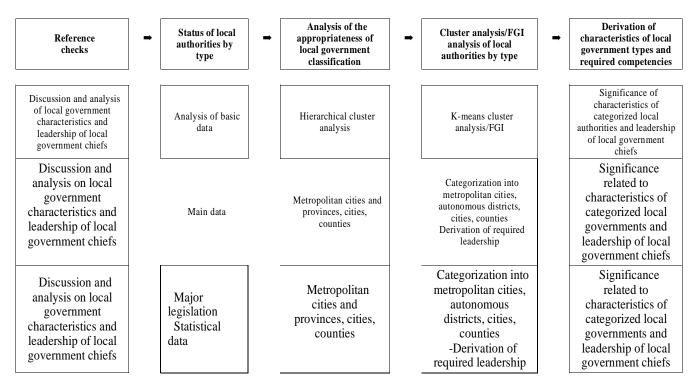


Figure 1 Research framework

3.2 Subjects of the analysis and analysis materials

3.2.1 Subjects of the analysis

The subjects of this research are 16 metropolitan cities and provinces, 69 autonomous districts, 74 cities, and 84 counties, according to the 2013 standards. In discussing the leadership of local government heads, it must be borne in mind that local authorities possess different characteristics and operate under different conditions. Thus, in this research a general division of local authorities will be applied – that is, local authorities will be divided into metropolitan cities and provinces, autonomous districts, cities, and counties. Following this, a classification of local authorities is put forward.

3.2.2 Analytical variables

This research applied the variables that most represent the characteristics of local governments and indicate the situations and areas in which the local government chief's leadership is most needed. That is, the research utilized not only the variables most frequently used when categorizing local government characteristics such as population and fiscal conditions, but also analytical variables that reflect the economic, social-security and welfare foundations of the region. Although population, fiscal and economic variables directly reflect the region's characteristics, when measuring social-security and welfare attributes it is difficult to use direct variables, and so the term 'proxy variables' was introduced.

Population variables include the population number and the population growth rate, and the fiscal condition variable includes the fiscal self-reliance ratio and own income per person. The variable which reflects the region's economic foundation was designed to reflect the developmental prospects of the area by including unemployment rate, GRDP per person, business engagement change ratio, and business change rate indicators. In order to measure the security level and social capital level of each region, variables such as the number of fires per 10,000 people, the ratio of falsely reported alarms, and the ratio of residents who received fire prevention education were included. The welfare-based variable includes the number of basic livelihood security recipients per household, the social welfare budget ratio, and the ratio of citizens aged over 65. These indicators, along with social security and economic indicators, have a proxy characteristic in reflecting the quality of regional life.

The analysis data used in this research are those which originated in 2013 and which provided a statistical database. The characteristics of the variables along with the basis for the calculations are shown in Table 5.

3.3 Analysis method

3.3.1 Cluster analysis

In this research, Excel 2010 and SPSS 20.0 were used to analyze the statistical data, and the main analysis method was cluster analysis. Since during a cluster analysis it is difficult to figure the number of clusters classified by local authorities, a clustering was arranged following hierarchical order, the appropriate number of clusters was decided according to the results, and then another analysis was done in a non-hierarchical manner. That is, first, a hierarchical cluster analysis is conducted, the Squared Euclidean Distance and Between-group Linkage are used, the number of clusters is derived using a dendrogram, and k-means cluster analysis is used to set the number of clusters.

3.3.2 Focus Group Interview (FGI)

In this research, following classification of local government authorities, the FGI method is used to select the competencies required for the local government chiefs of each type. The advantages of this method are that a large amount of data can be collected in a short time, and that a creative insight actualized through group interaction can be gained. (Yo-Sep, 2009: 45; Yeon-Kyu, 2011: 156). In obtaining sufficient data on the competencies of a local government chief, a method that proposes an in-depth and free debate between not only the organization leader but also between the vice-chiefs and senior staff who have a close business relationship may be profitable. In this study, an FGI was implemented with an interviewee group of seven people, including group members who had experience in the roles of chief and vice-chief of first-tier local authorities, cities and counties, and also former directors and section-chief civil servants. The main point of the discussion was to select the competencies specifically required of local government chiefs by type through case presentation and free discussion. First, during a free debate about the categorized local authorities, the interviewees were made to choose three preferred competency factors, reach a consensus by discussing these factors, and, finally, denote the three most-chosen factors.

IV. CATEGORIZATION OF LOCAL AUTHORITIES AND LEADERSHIP TYPES

4.1 Cluster analysis results

When conducting the hierarchical cluster analysis, use of a dendrogram which gave visual assistance in deciding the number of clusters made it possible to identify the arranged order of clusters. The dendrogram presented below displays the clustering order, grouped into metropolitan areas and provinces, autonomous districts, cities, and counties. Although in this research the initial number of clusters resulted from the dendrogram analysis was applied first, the second number of clusters was selected so that it would not be over-specified compared to the number of cases. Through this process, the number of clusters that was applied in this study was: 4 metropolitan cities and provinces, 6 autonomous districts (the initial number was 8), 7 cities, and 6 counties. A k-means cluster analysis was conducted.

4.2 Categorization of local authorities

4.2.1 Metropolitan cities and provinces

The 16 metropolitan cities and provinces were analyzed in four clusters, using 16 variables. So that we could observe the characteristics of each cluster, the local authority selected as belonging to cluster 1 was Seoul, which compared with other metropolitan cities and provinces had a higher population, fiscal self-reliance ratio, self-income per person, number of foreign investor attraction cases, and social welfare budget rate. On the other hand, the unemployment rate was high and the business engagement change rate, as well as the business change rate, was low. Seoul's exceptionally high population and fiscal foundation, and its significance as a capital, make it responsible for leading other local authorities.

The population, fiscal self-reliance ratio and number of foreign investor attraction cases of Gyeonggi-do province, belonging to cluster 2, are lower than those of Seoul, yet higher than those of other metropolitan cities and provinces. The business engagement change rate and business change rates are higher than Seoul's, but the social welfare budget rate, self-income per person and GRDP per person of Gyeonggi are not high compared with those of other cities and provinces. The percentage of citizens aged over 65 in this area was the smallest compared with those of other clusters. Gyeonggi had the least number of residents who had received fire safety education.

The metropolitan cities and provinces included in cluster 3 are Kwangju, Daejeon, Ulsan, Gangwon, Chungnam, Chungbuk, Jeonnam, Jeonbuk and Jeju, a total of nine districts. These areas are all characterized by their small population number and population increase compared to those of other clusters. Although the ratio of aged people over 65 and number of fire accidents per 10,000 people were high in these areas, the self-income per person, business increase rate, GRDP per person, and average number of those engaged to businesses were also relatively high.

Cluster 4 comprises Busan, Daegu, Incheon, Kyungbuk and Kyungnam. These areas have a high self-reliance ratio, and in particular their self-income per person is the highest after Seoul's. Although their business engagement change rate and business change rate are rather high, so is their unemployment rate, and their population growth is low. Their ratio of basic livelihood security recipients and citizens older than 65 is high, which leads to a high social welfare budget ratio. While there is the possibility of a continuous population inflow, the social welfare budget ratio might also increase.

4.2.2 Autonomous districts

The 69 autonomous districts were divided into six clusters focused on the nine characteristic variables. Cluster 1 was the only cluster that showed signs of population growth, and was relatively high on fiscal self-reliance ratio and social welfare budget ratio. These districts were also low in terms of false alarm numbers and fire accidents. Twelve districts, including Eungpyung-gu, Seoul, were included.

Cluster 2 had a small population and low population growth, and also a low fiscal self-reliance ratio. However, while these districts had a high ratio of citizens aged over 65, a high false alarm ratio and a high number of fire accidents, their social welfare budget ratio was not particularly high. Nine districts, including Jongro-gu, Seoul, belonged to this type.

Cluster 3 had the second-smallest population of the six clusters and the smallest population growth rate. Fifteen districts belonged to this cluster. The number of falsely reported alarms was the highest of all the clusters'. The areas belonging to this cluster are likely to suffer a stagnation in growth owing to population decline.

Cluster 4 was made up of districts which had the highest population, fiscal self-reliance ratio, and social welfare budget ratio. Other characteristics were low false alarm reports, fire accidents and ratio of citizens aged over 65. Four districts of Seoul, Gangnam-gu, Songpa-gu, Nowon-gu and Gangseo-gu, plus Dalseo-gu of Daegu, and Bupyeong-gu of Incheon, were the only districts that belonged to this category.

While Cluster 5 had the lowest population, and also a low population growth rate, its ratio of citizens aged over 65, number of basic livelihood security recipients per household, fire accidents and falsely reported alarms was high. The fiscal self-reliance ratio and own income per person were not low, but the social welfare budget ratio was. Ten districts, including Jung-gu, Seoul, belonged to this cluster. Since their social welare and safety foundations are low relative to their basic conditions, there is a strong possibility of a population decline.

Cluster 6 had the largest number of districts, a total of

seventeen. All indicators were located at the mid-point compared with other clusters'. These districts' population growth was low and so was their fiscal self-reliance ratio. On the other hand, ratio of citizens aged over 65 and social welfare budget were also high.

4.2.3 City areas

The 74 cities were categorized into a total of seven clusters. The characteristics of each cluster are as follows.

Cluster 1, which comprised only two areas, Suwon-si, Gyeonggi and Changwon-si, Gyungnam, had the largest population, and also a high population growth rate. The fiscal self-reliance ratio of these areas was also high, and since the ratios of basic livelihood security recipients per household and citizens aged over 65 were low, their social welfare budget ratio was rather low as well. These areas have one of the largest population inflows. The areas of this cluster already have a well-established fiscal and economic foundation.

Cluster 2 had the second-largest population, and its fiscal self-reliance ratio and social welfare budget ratios are also very high. Four cities of the Gyeonggi province belong in this category, and their number of fire accidents and ratio of citizens aged over 65 were all low.

Cluster 3 had the lowest population and population growth rate and a large number of basic livelihood security recipients. The numbers of fire accidents and the ratio of aged citizens also constituted the highest of those of the categorized clusters. The fiscal self-reliance ratio of this cluster is low, and the social welfare budget ratio is also the lowest. Thirty of the 74 cities belong in this cluster, making it the cluster with the highest percentage.

Cluster 4 had a low population, and also a low fiscal self-reliance ratio, but had a rather high population growth rate. The number of fire accidents and the ratio of aged citizens were high, but the social welfare budget ratio was relatively low. A total of 21 cities belonged to this category.

Cluster 5 had the highest population growth rate, and fiscal self-reliance ratio and own income per person were also relatively high. Other indicators, such as ratio of aged citizens and social welfare budget ratio, remained at a medium level. Six cities that have recently been experiencing a continuous population inflow, Anyang-si, Hwasung-si, Namyangju-si of the Gyeonggi-do province, Cheonan-si of Chungnam, Pohang-si of the Gyungbuk province and Gimhae of Gyungnam, belong to this category.

Cluster 6 currently has a high population but a low population growth rate and fiscal self-reliance ratio. Own income per person is the lowest and the ratio of falsely reported alarms is the highest of all. Compared with other clusters, this area has a high social welfare budget relative to its number of citizens aged over 65. Ansan-si of Gyeonggi-do, Cheongju-si of Chungbuk and Jeonju-si of Jeonbuk belong in this category. The vulnerability of the regional economic foundation and of the social security and welfare foundation will probably lead to a population decline.

Cluster 7 is characterized by having a high fiscal self-reliance ratio and social welfare budget ratio given its population. Eight city areas, that had a high number of fire accidents and a high ratio of citizens aged over 65, belonged in this category.

4.2.4 *County areas*

The 84 counties were grouped into six clusters. Cluster 1 has

a high population and a relatively high population growth rate. Four county areas, including Gijang-gun, Busan, belong to this cluster, which is located in the middle in most indicators, including fiscal self-reliance ratio and social welfare budget ratio. They have the highest falsely reported alarm numbers. It may be stated that these areas have a stable population and fiscal condition.

Cluster 2 comprises counties with a high population and the highest population growth rate. Although their fiscal self-reliance ratio and social welfare budget rate are high, their ratio of citizens aged over 65 is low. Dalseo-gun, Daegu was the only county that belonged in this category. This area is a county which is inside a metropolitan city, and this accords it numerous benefits.

Cluster 3 has a low population and population growth, and also a very low fiscal self-reliance ratio. Of the 84 county areas, 35 (41.7%) belong to this category. These areas are characterized by having the highest ratio of citizens aged over 65. While there are many basic livelihood security recipients, the social welfare budget ratio is low. These areas also have a high false alarm report ratio and a large number of fire accidents. Their characteristics as county areas put them in a situation where they have a very vulnerable fiscal and economic foundation, but considering the population these areas require more resources for establishing a social welfare foundation.

Cluster 4 has the second-smallest population, and a total of 33 counties or 40 percent of the total number of counties, belong to this category. Their population growth rate is also declining and they have the highest number of basic livelihood security recipients. While their fiscal self-reliance ratio is the lowest, own income per person is the highest. These areas also had the highest ratios of aged citizens and false alarm reports. On the other hand, the social welfare budget ratio is the lowest. Areas belonging to this cluster are currently in a weak fiscal condition, but there is a strong possibility of development since they also have a high own income. Also, these areas have a low social capital level.

Cluster 5 had the largest population of all clusters, and also was the highest in terms of population growth, fiscal self-reliance ratio and social welfare budget ratio. Woolju-gun, Ulsan-si was the only county that belonged to this category. This area also had the lowest numbers of basic livelihood security recipients, falsely reported alarms, and citizens aged over 65. On the other hand, it had the highest number of fire accidents per 10,000 residents. This area has good fiscal and welfare conditions, but also has a low interest in creating a social security foundation.

Cluster 6 had the lowest population and fiscal self-reliance ratio. Ten county areas including Yangpyeong-gun, Gyeonggi-do belonged to this cluster. This cluster has a high ratio of basic livelihood security recipients and citizens aged over 65, but a relatively low social welfare budget ratio. These areas are subject to the large possibility of a delay in local development owing to their fiscal and population characteristics.

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	L ocal govern	mont		naracteristic	es of analysis variables
	Local govern Metropolita n cities and provinces	autonomou s districts/ cities/ counties	base year	unit	basis of calculation (source)
population	0	0	2013	people	the resident registration population counted every December, foreigners excluded (MOSPA resident registration administration system)
population growth		0	2012~201 3	%	(current year population – previous year population)/current year population
unemployment rate	0		2012	%	Total economically active population (employed and unemployed population over 15)/unemployed population *100 (NSO)
number of basic livelihood security recipients per house	0	0	2012	people	[basic livelihood security recipients: recipients of the National Basic Living Security Act]/ [household numbers: data of number of households according to MOSPA resident registration statistics] (Ministry of Health and Welfare)
social welfare budget ratio	0	0	2013	%	Out of the total budget [8 categories of social welfare (basic livelihood guarantee, support vulnerable social groups, fostering families, women elders, teenagers, labor, veterans, housing, general social welfare)] budget ratio
fiscal self-reliance ratio	0	0	2013	%	(MOSPA finance branch) (local taxes + non-tax revenues)/local government budget size – [local taxes] general tax + object tax (excluding local education tax) + previous year's revenue – [non-tax revenues] current non-tax revenues + temporary non-tax revenues – [local government budget size]
own income per person	0	0	2013	1,000 won	 budgets calculated in organizations are included in total budget local taxes (except local education taxes) + non-tax revenues + local gran taxes + adjustment grants and fiscal compensation + subsidies + local bonds and balance collection (MOSPA fiscal policy department) [population/ general accounts own income] general accounts own income] local taxes, non-tax revenues [population] based on previous year 12/31 measurements
ratio of citizens aged over 65	0	0	2013	people	(MOSPA fiscal policy department) [population over 65] population of those over 65 in the Population Index [total population] total population of Population Index (MOSPA residen
number of fire accidents per 10,000	0	0	2012	cases	registration population statistics) The number of fire accidents relative to the number of residents registered as living in that area (National Emergency Management Agency)
citizens ratio of falsely reported alarms	0	0	2012	%	[total report calls] 119-only phones, normal telephones and visi registrations all included (National Emergency Management Agency)
ratio of residents who received fire prevention education	0		2012	%	[number of residents who received fire prevention education] number or residents who received fire prevention education according to fire officer and instructors (including field trips, education visits) [resident population] number of residents registered as living in that area (National Emergency Management Agency)
GRDP per person	0		2012	%	[GRDP] sum of newly added values of a specific area during a specific period / resident population (National Statistical Office regional income statistics)
business engagement change ratio	0		2012	%	[number of people engaged in business] the monthly change rate of worker categorized into self-management owners, unpaid family workers, regula workers, part-time workers, unpaid workers, and dispatched worker (National Statistical Office)
business change ratio	0		2012	%	(current year business number – previous year business number) [business] Businesses that exist within Korea's administrative powe (12/31). Self-managed agriculture, forestry, fishery businesses, nationa defense and domestic services, international bodies and other foreign organizations, businesses with no fixed installation and mobile sales stand are excluded (National Statistical Office)
number of foreign investor attractions	0		2012	cases	foreign investment enterprises: enterprises invested in by a foreign investo in accordance with the Foreign Investment Promotion Act (Ministry of Trade Industry and Energy)

Source: www.laiis.go.kr

Table 6 Results of cluster analysis of metropolitan cities and provinces										
	Cluste		Cluster 2		Clust	er 3	Cluster 4			
구분	Mean	Standar d deviation (S.D.)	Mean	S. D.	Mean	S.D.	Mean	S.D.		
Population	10,143,645.0 0	•	11,937,415.0 0		1,525,262.4 4	453,591.7 9	2,983,393.0 0	425,941.9 2		
Unemployme nt rate	4.22		3.31		2.35	.66	3.21	1.05		
Number of basic livelihood security recipients per househol	.05		.04		.10	.03	.09	.02		
Social welfare budget ratio	27.99		27.83	·	25.40	5.44	27.43	2.19		
Fiscal self-reliance ratio	87.68		60.09		33.22	15.62	43.89	16.30		
Own income per person	1,356.47		672.20	•	759.95	326.64	799.55	237.60		
Population growth rate	82	•	1.16	•	.01	1.42	.24	.68		
Ratio of citizens aged over 65	11.45		9.77		13.74	3.78	12.87	2.57		
Number of fire accidents per 10,000 residents	5.61		8.40	·	10.86	3.11	8.41	2.83		
Ratio of falsely reported alarms	.04		.04	·	.17	.17	.07	.06		
Number of residents who received fire prevention education	11.86		2.10		25.99	35.47	16.03	10.16		
GRDP per person	28,932.00		21,015.00		29,661.89	15,102.69	22,897.40	6,434.23		
Business engagement change ratio	1.03		3.18		2.39	2.02	3.11	.71		
Business change ratio	3.80		4.20	•	3.28	1.52	3.50	1.19		
Number of successful foreign investment attractions	1,210.00		453.00		27.78	16.32	93.80	70.37		
N (16 = 100%)	1		$\frac{1}{(6.3\%)}$		9		5			
(16 = 100%) Name of local authority	ne of local Seoul			(6.3%) Gyeonggi		3%) Daejeon, .n, Chungbuk, nam, onnam, Jrju	(31.3%) Busan, Daegu, Incheon, Kyungbuk, Kyungnam			

International Journal of Applied Engineering Research, ISSN 0973-4562 Vol. 10 No.90 (2015) © Research India Publications; http/www.ripublication.com/ijaer.htm Table 6 Results of cluster analysis of metropolitan cities and provinces

Table 7 Results of cluster analysis of autonomous districts

	© Research India Publications; http/www.ripublication.com/ijaer.htm												
	Clus	ter 1	Clus	ter 2	Clus	ter 3	Clus	ter 4	Clus	ster 5	Cluster 6		
	Mean	Standa rd deviatio n (S.D.)	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	
Populati on	480,231 .00	26,385 .57	190,077 .33	21,665 .25	276,828 .67	30,848 .46	593,151 .00	41,782 .97	96,042 .20	28,591 .57	379,804 .76	30,364 .07	
Populati on growth rate	0.41	2.41	(0.19)	1.28	(0.08)	1.55	(0.67)	0.56	(0.66)	2.25	(0.42)	1.18	
Number of basic livelihood security recipients	0.06	0.03	0.07	0.03	0.07	0.03	0.07	0.03	0.11	0.04	0.05	0.03	
Fiscal self-relian ce ratio	34.88	14.44	29.36	14.33	30.96	12.01	39.94	21.01	32.84	19.23	32.13	9.19	
Own income per person	261.07	103.01	311.68	226.02	278.97	132.87	306.59	190.48	608.14	438.14	260.55	72.99	
Social welfare budget ratio	50.68	8.18	47.35	8.49	49.05	8.18	52.04	9.46	41.33	10.85	50.28	7.01	
Ratio of falsely reported alarms	0.05	0.07	0.12	0.14	0.21	0.17	0.03	0.02	0.14	0.15	0.11	0.14	
Number of fire accidents per 10,000 residents	5.79	1.49	7.92	3.22	6.56	1.69	4.77	1.08	12.68	9.69	5.90	1.64	
Ratio of citizens over 65	10.20	1.62	12.05	3.77	11.45	2.33	9.75	0.72	16.84	2.27	11.47	2.26	
Ν	1	2	ç)	1.	5	(5	1	.0	1	7	
(69 = 100%)	(17.	4%)	(13.	0%)	(21.)	7%)	(8.7	7%)	(14	.5%)	(24.	6%)	
Name of local authority	Seongbuk-gu and other 11 authorities		Jongro-gu 8 autho		Yongsan other 14 au		Nowon-gu and other 5 authorities		Jung-gu and other 9 authorities		Kwangjin-gu and other 16 authorities		

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Table 8 Results of cluster analysis of city areas														
	Clus	ter 1	Clus	ter 2	Clus	ster 3	Clus	ter 4	Clus	ster 5	Clus	ter 6	Clus	ter 7
	Mean	Stan dard deviat ion (S.D.)	Mean	S.D.										
Popul ation	1,105, 864.50	20,3 55.48	933,6 08.50	50,6 90.21	110,9 32.47	32,7 97.06	248,7 23.29	38,5 78.20	558,4 33.67	44,1 33.86	676,9 41.00	34,2 55.52	386,3 55.75	42,3 52.53
Popul ation growth rate	1.03	2.31	0.55	1.12	(0.64)	1.58	1.11	2.62	1.19	1.47	0.12	0.81	0.92	1.36
Numb er of basic liveliho od security recipien ts	0.04	0.01	0.04	0.01	0.10	0.05	0.07	0.03	0.05	0.02	0.07	0.03	0.05	0.02
Fiscal self-reli ance ratio	51.65	13.9 8	57.46	5.35	23.17	10.9 0	35.87	12.2 3	47.70	8.68	39.84	8.32	43.65	11.2 8
Own income per person	692.08	42.6 0	676.6 2	184. 80	715.2 0	225. 83	662.1 0	169. 91	669.1 3	162. 60	487.3 9	54.2 7	638.9 0	149. 84
Social welfare budget radio	26.89	2.02	28.45	4.90	21.48	3.35	26.57	4.35	28.55	3.02	37.31	0.47	28.57	4.82
Ratio of falsely reporte d alarms	0.16	0.17	0.02	0.02	0.16	0.26	0.13	0.30	0.13	0.15	0.57	0.88	0.10	0.12
Numb er of fire acciden ts per 10,000 resident s	5.63	1.66	5.59	0.85	13.84	4.69	10.29	3.64	8.23	1.93	5.42	2.45	9.81	3.99
Ratio of citizens aged over 65	8.17	0.91	9.21	0.71	17.12	4.93	11.60	2.66	8.87	1.19	8.70	1.81	9.88	2.31
Ν	2	2	2	1	3	0	2	1		5	3	3	8	3
(69 = 100%)	(2.7		(5.4			.5%)	(28.			1%)		1%)	(10.	

International Journal of Applied Engineering Research, ISSN 0973-4562 Vol. 10 No.90 (2015) © Research India Publications; http/www.ripublication.com/ijaer.htm Table 8 Results of cluster analysis of city areas

		Table 9	Results of clus	ster ana	lysis of count	y areas						
	Clus	ster 1	Cluster 2 Cluster 3				Clus	Cluster	Cluster 5 Clu			
	Average	Standar d deviation (S.D.)	Average	S. D.	Average	S.D.	Average	S.D.	Average	S. D.	Average	S.D.
Population	140,948. 75	16,929. 78	184,358. 00	•	53,699. 43	7,878. 95	30,522. 30	6,970. 05	208,646 .0		82,987. 90	10,840. 78
Population growth rate	1.81	3.71	2.19		(0.00)	0.64	(0.20)	1.42	1.59		0.24	1.25
Number of basic livelihood security recipients per household	0.07	0.02	0.10		0.11	0.02	0.11	0.03	0.04		0.10	0.02
Fiscal self-relianc e ratio	30.69	4.50	35.85		15.09	5.25	12.63	3.19	46.29		16.77	6.84
Own income per person	795.58	138.23	676.73		772.43	217.71	920.30	276.98	910.34		689.88	298.62
Social welfare budget ratio	22.97	6.02	28.94		16.81	2.40	13.89	2.37	24.02		18.57	2.92
Ratio of falsely reported alarms	0.40	0.62	0.00		0.18	0.32	0.22	0.45	0.00		0.21	0.40
Number of fire accidents per 10,000 residents	13.96	3.23	14.19		19.19	5.88	18.21	7.32	22.08		16.40	4.86
Ratio of citizens over 65	13.70	1.73	10.79		25.75	4.31	26.58	5.27	10.81		22.92	5.32
N (84 = 100%)	4 (4.8%)					35 (41.6%)		33 (41.0%))	10 (11.9%)	

International Journal of Applied Engineering Research, ISSN 0973-4562 Vol. 10 No.90 (2015) © Research India Publications; http/www.ripublication.com/ijaer.htm Table 9 Results of cluster analysis of county areas

V. Competencies According to Local Government Type

By combining the research results presented so far, an arrangement of characteristics according to local government type and cluster type was made. Next, using the FGI method, the three competencies of a local government chief that were thought to be the most necessary were selected and proposed.

First, in the case of first-tier governments, Seoul and Gyeonggi belong to only one category. In Seoul's case, it is stated that leading abilities, decentralizing abilities and political persuasion/negotiation skills are required. This is because of Seoul's significance and vast size as capital, which puts the city in a position where it must lead all local governments. It is clear that leadership is required for this reason. Also, it may be observed that during the process of decentralization between central and local government, Seoul must play a key role in the center and make an effort toward decentralization. Relevant competencies are political persuasion and negotiation, and these are needed because of local government's relationship with central Seoul government and its characteristics that distinguish it from other local authorities. In the case of Gyeonggi-do, the province is in many respects one step ahead of other first-tier local authorities in terms of economic aspects such an increasing population, a high fiscal self-reliance ratio, and foreign investment attraction cases. In light of these conditions, entrepreneurial abilities that can help to further develop the economy, policy-decision-making skills, and support for decentralization are required.

In the case of the metropolitan-3 type, the population growth is only slight, the business growth rate is relatively high, and the ratio of citizens aged above 65 is high. Also the number of fire accidents per population is relatively high. Local authorities of this type require vision setting and presenting abilities, entrepreneurship, and innovation propulsion. The metropolitan-4 type has high fiscal self-reliance, but also a high unemployment rate, low population growth, and a large number of basic livelihood security recipients. The competencies required of governors of first-tier local authorities in this case are crisis management abilities, entrepreneurship, and innovation propulsion. The autonomous districts of metropolitan cities and provinces are divided into six categories, those of cities into seven, and those of counties into six. The competencies specifically required for local government chiefs in each category are presented as mentioned in the case of metropolitan cities. One characteristic of the FGI analysis results presented is that when the fiscal self-reliance ratio or economic situation was relatively very good, policymaking and supporting abilities were required, so that the local government chief could demonstrate his or her policy abilities with the support of a good fiscal and economic background. For areas suffering from poor fiscal conditions, crisis management skills, and vision setting and presenting skills, were required. Also, in areas where a low level of trust exists within the local community (areas with a high false alarm report rate, etc.), competencies such as local society integrating abilities and interest coordinating abilities are particularly required. Meanwhile, areas with a relatively stable fiscal condition and

a decent local government performance require from their leaders the ability to effectively manage and stably maintain administrative internal organizations.

VI. CONCLUSION

6.1 Policy implications

The analysis results of this research, though normative, are significant, in that they present the competencies of local government chiefs which differ according to the local authority's legal status and the fiscal, economic and social conditions it faces. Studies conducted to date on the competencies of local government leaders have not considered these factors, and have presented only uniformly required competencies. This research, applying as it has done standards wherewith to categorize local authorities, is significant in that it has examined the competency qualifications of local government leaders while considering the individual characteristics of and conditions applying to different local authorities. The following sections offer suggestions for how the research results may be utilized.

6.1.1 Application to public nominations

During the public nomination process, when selecting candidates a political party will apply many standards, such as the possibility of the candidate being elected. A uniform selection of candidates, without consideration of the individual conditions local authorities are facing, will make it difficult to accomplish the goal of improving the quality of life of local residents. There is a need to first consider the economic, demographic, and social conditions of the specific local authority and then select candidates who can meet its needs. In this regard, this research may offer significance to a public nomination process which considers the competency qualifications of candidates in relation to the prevailing conditions of individual local authorities.

6.1.2 Utilization in voters' selection of candidates

The electorate can be provided with information required for discovering and selecting the candidate equipped with the competencies to develop their local community, considering the current conditions prevailing in it. If candidates analyze the conditions prevailing in their local authorities and design pledges on the basis of these results, this will help voters receive the information needed to select the candidate who will meet their needs.

6.1.3 Utilization in policy-oriented elections

Whether in respect of political parties selecting candidates for public nomination or an electorate voting in local elections, taking into account the competencies of local government chiefs, considering the conditions applying in individual local authorities so as to develop any advantages and overcome any disadvantages in the specific area, is in many ways beneficial. This may also contribute to setting the environment of a policy-oriented election or a policy-competition-oriented election. Also, candidates preparing for local elections will have to analyze the situation their local authority is facing objectively, and will think more about how to develop the region on the basis of these conditions. The implementation of this process can serve as the grounds for an orientation towards a policy election in Korea.

6.2 Limitations of the research

The limitations of this research are as follows. First, there is doubt as to how to quantitatively measure the competencies of the candidates for the post of local government chief. Of course, examining their past and present careers or qualifications, and then organizing and grading them, is possible. Yet the validity of the outcomes of this process is open to dispute. Nevertheless, this research has organized individual competency factors and formed measurable indicators, as well as having examined the grading process. However, this would make it possible to individually grade the candidates currently preparing for office, and would create controversy, in that it could be used politically. Thus, in this research that process was excluded. Second, in the case of choosing the leadership required of a local government chief by considering individual regional conditions, there is the problem of policy judgment and value judgment. For example, if the local authority is subject to very poor fiscal conditions and is continuously suffering population loss, in such a case the responsive methods and competencies required of the local government chief may be on both sides of extremes. Since, especially, this research was conducted only on civil servants such as former organization leaders and vice-chiefs and employed the FGI method, it is only natural that it will have limitations as regards presenting the required competencies for local government leaders. Third, even when selection has been made according to the competencies of the local government chief suited to local government conditions prevailing at the particular moment, it is doubtful whether there is positive evidence suggesting that the respective local authority can truly fulfill its role of enhancing the quality of life of residents and developing the local area. Research on these questions is to be regarded as a follow-up task.

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