

# **CSRDA** Discussion Paper

Present Status and Future Prospects for Management Capability Training for Senior University Management: From a Survey of Senior Managers

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# Present Status and Future Prospects for Management Capability Training for Senior University Management: From a Survey of Senior Managers<sup>i</sup>

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## 1 Introduction

The university environment is changing dramatically with the advance of globalization, a decline in the population within the 18-year-old bracket, and government fiscal constraints; therefore, internal university reforms such as strengthening excellence in education and research, creating innovation, and building a responsible management system are required. The role of university senior management and universities as a whole are responsible for driving this series of reforms. In today's world of intensifying competition among universities due to globalization, among other factors, university management requires management specialists (Japan Association of Corporate Executives, 2012). In terms of institutions, the School Education Act was revised in April 2015 to legally regulate the authority of faculty councils and to enhance presidents' advisory framework, in an attempt to strengthen presidents' leadership.

However, is this an issue that can be resolved by strengthening presidents' leadership unilaterally through legal reforms, subsidy policies, etc., without taking into account business management skills and human resource development? University management and administration systems are different from those of general businesses and pursue academic freedom and autonomy, requiring management control over both academic and management aspects to fulfill the mission and role of universities. Although the duties of the senior managers who play these roles are extremely important, research regarding the current status and the ideal state of academic managers with regard to academic aspects and business managers, which capabilities are actually needed, and how these capabilities were developed are not always clear. This study focuses on the development of management skills for both academic and business managers, and managers, examines the current status and future prospects of management skills development for senior managers using data from a questionnaire survey conducted with senior managers, and makes recommendations for human resources development within university management.

<sup>&</sup>lt;sup>i</sup> This paper is translated from a Japanese version published at the Journal of Management and Policy in Higher Education, Vol.6:17-32, (2016). Check the Japanese version from <u>here</u>.

## 2 Prior Research and Research Questions

#### 2.1 Previous research

To realize the diverse missions of universities, an emphasis is being placed on the nature of university business management and training university management staff. Following the incorporation of national universities in 2004, universities are expected to reform their governance under the leadership of their presidents; as such, the role of the university president has become of the utmost importance. To emphasize management skills, the image of the president has changed as well (Kawashima 2007). In a survey of presidents of national universities conducted by the National Center for University Finance and Management regarding institutional management, about 90% of presidents perceived their own influence as strongest, indicating that a president's influence on decision-making is becoming stronger (Mizuta 2015).

However, with attention focused on the development of staff responsible for the strategic management of universities, the main efforts have been directed at administrative staff, with few initiatives directed at top management or academic administrators; few opportunities have been provided to improve the management qualities of presidents, board members, and other management personnel (Nakajima 2011). An analysis of faculty surveys indicates that faculty members are not always satisfied with senior management (Morozumi 2014) and that, as indicated, simply strengthening the managerial authority of the top management level, such as the president, will not necessarily make university management more successful. Rather, based on the understanding of the current situation of senior university administrators and capability training, it has become an important issue to examine the state of capability development.

However, while there is growing interest in senior management positions (Homma 2015) and fact-finding surveys of senior managers have been conducted (Center for National University Finance and Management 2015; Institute for Private Higher Education 2007; Focus on Vice Presidents by Natsume 2013), few studies have focused on capability development for senior managers, for example, decision-making, sources of authority, and management issues. Moreover, when considering human resource development for senior managers in Japan, many examples from the U.S. and other foreign countries have been introduced (Natsume 2013; Takano 2012). However, the external labor market for university administrators is still underdeveloped in Japan, and such models cannot be applied. In the governance system and organizational culture unique to Japanese universities, it is not always clear from previous research how the managerial capabilities of senior management can be enhanced and how training should be conducted.

2.2 Research Questions

Although historically and ideologically the faculty-based collegiality of universities is important, with the diversification and increasing complexity of university activities and the diversification of financial resources, the role of non-teaching administrative staff is becoming increasingly important (Yamamoto et al. 2005). In 1997, a university administration and management society was created against this background. Academic administrators, such as university presidents, were selected from among their colleagues based on their experience and accomplishments to serve for a period of time, but in recent years, the expected role is rapidly changing to become more significant and important.

The purpose of this research is to clarify how academic administrators and business administrators are involved in university business management, what capabilities are considered necessary, and what human resource development is desired. The following three specific aims are set forth. The first aim is to determine the actual duties assigned to senior management and the capabilities involved in performing those duties. What is the impact that senior management has on decisions about various matters related to the management and administration of a university? Additionally, what is perceived to be the fundamental competencies for the fulfillment of their duties? With these considerations as a starting point, the current state of business management capabilities affecting the work performance of senior managers will be determined. The second aim is to examine the experience and the actual nature of education and training received by individuals before assuming their current positions, the type of experience they have gained in their current position, and the actual level of education and training they received related to developing their ability to perform their duties. Through the above considerations, we will clarify the current state of business management capability training for senior managers. The third aim is to offer future prospects of management human resource development and to examine the differences in the desired training of management personnel by understanding how senior managers perceive the ideal state of human resource development and by understanding the differences in job descriptions and previous experience.

#### 2.3 Data

The data used for the analysis were obtained from the Survey on the Present Situation and Future Prospects of Senior University Managers conducted by the Center for University Management and Policy Research at the University of Tokyo in February 2015. The questionnaire was distributed to presidents, chancellors, vice presidents, directors and administrative directors of universities across the country depending on their size. It was distributed to 4,082 senior administrators, of whom 976 responded. The response rate was 24.0%. The respondent demographics are shown in Table 1. Sixty percent of the survey respondents were from private universities, over 70% were in their 60s or older, and over 90% were male.

According to the 2015 Basic School Survey, national universities account for 11.0%, public universities for 11.4%, and private universities for 77.5% of all universities in Japan.

this survey is Notably, biased; the percentages of national and public slightly universities are higher than the distribution of universities throughout Japan. Additionally, the survey data used in this study based on is

Table 1	<b>Respondent Attributes</b>
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Founders	Age	Gender
National (21.1 %)	Under 40 years (0.2%)	Male (93.4%)
Public (17.0%)	40s (1.7%)	Female (5.8%)
Private (61.9%)	50s (21.2%)	
	60s (55.3%)	
	70s (20.9%)	

respondents' self-reported information, and the survey was not conducted with objective evaluations by others; therefore, it is considered an awareness survey.

# 3 Actual duties assigned and basic capabilities to perform duties

# 3.1 Attributes of senior managers

To address the research problem, we divided the senior managers into "academic managers" and "business managers" and then further divided those groups into top management and other levels.

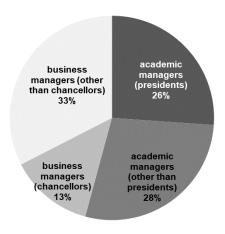


Figure 1 Classification of senior managers

As seen in Figure 1, we classified the senior managers into "academic managers (presidents)," "academic managers (other than presidents)" (vice presidents, directors with master's or doctoral degrees, deans of faculties and graduate schools), "business managers

(chancellors)," and "business managers (other than chancellors)" (chancellors, permanent and part-time directors, directors who do not hold an academic degree, and administrative directors). This subdivision of the classification into duties assigned (horizontal) and organizational hierarchy (vertical) provides a comprehensive understanding of the current status of senior managers.

Table 2 shows the attributes of senior managers by type of university establishment and management category. First, regarding the age distribution, 79.2% of the presidents at national universities are in their 60s, and 20.8% are in their 70s or older; 76.2% of academic managers other than presidents are in their 60s or older, and 20.5% are in their 50s or older; and 80.0% of the business managers other than chancellors are in their 50s, and 14.3% are in their 60s. The percentage of chancellors at public and private universities in their 70s or older is high (42.1% of public and 50.9% of private) and biased toward older age groups. That is, the ages of senior manages decreases in the following order: chancellors, presidents, academic managers other than presidents, and business managers other than chancellors. Chancellors and presidents are mostly in their 60s or older, and business managers other than chancellors are mostly in their 50s or younger. National, public, and private universities show a similar trend.

			Age(%)		Academic Qualifications (%)		Gender(%)		Years of service at the	Years of service at				
			(Total 950)	less than 40s	40s	50s	60s	70s or older	academic	non- academic	male	femal	current university	their current position
	Academic Managers	presidents	48		0.0	0.0	79.2	20.8	100.0	0.0	97.9	2.1	31.0	4.5
	Academic Managers	other than presidents	122		0.0	20.5	76.2	3.3	95.1	4.9	96.7	3.3	25.6	3.7
National Universities	Business Managers	chancellors												
Universides	Business Managers	other than chancellors	36		5.7	80.0	14.3	0.0	5.6	94.4	100.0	0.0	4.1	3.1
			(Total 206)			***			*	**			***	**
	Academic Managers	presidents	39			5.3	65.8	28.9	92.3	7.7	92.1	7.9	13.4	4.8
Public	Academic Managers	other than presidents	43			34.9	55.8	9.3	95.3	4.7	95.3	4.7	17.8	3.7
Universities	Business Managers	chancellors	20			5.3	52.6	42.1	70.0	30.0	84.2	15.8	9.0	4.5
Onversides	Busilless Mailagers	other than chancellors	58			43.6	50.9	5.5	8.6	91.4	100.0	0.0	3.3	3.3
			(Total 160)			***			*	**		*	***	**
	Academic Managers	presidents	161	0.0	0.0	9.9	55.9	34.2	88.2	11.8	88.8	11.2	18.4	5.3
	Academic Managers	other than presidents	ner than presidents 102 1.0 4.9 24.5 49.0 20.6 8	89.2	10.8	88.1	11.9	18.0	5.5					
Private Universities	Business Managers	chancellors	106	0.0	1.9	8.5	38.7	50.9	42.5	57.5	94.3	5.7	19.8	9.0
Graverslues	Business Managers	other than chancellors	215	0.5	2.8	25.6	59.1	12.1	19.1	80.9	97.2	2.8	19.9	5.5
			(Total 584)			***			*	**		**		***

Table 2 Attributes of senior managers

Note: \*\*\*P<.001 \*\*P<.01 \*P<.05 +P<.1 Figure2, Figure3, Figure6, Figure7 and Table7 are the same.

Next, in terms of academic qualifications, we divided senior managers who hold an academic degree, such as a master's or doctoral degree (hereafter abbreviated as "academic") and senior managers who do not hold an academic degree (hereafter abbreviated as "non-academic"). At national universities, more than 90% of academic managers have a master's or higher academic degree, and most of the business managers do not have a master's or higher academic degree. Public and private universities show almost the same trend as national universities, except that many chancellors have a master's or higher academic degree.

Regarding gender, the overwhelming majority of senior managers at national, private, and public universities are male. There are very few women senior managers at

national universities. The percentage of women at public universities varies by management category. For example, 7.9% of presidents and 15.8% of chancellors are women. At private universities, only about 10% of academic managers are women, with a lower percentage for women business managers.

Regarding number of years of service at the current university, presidents at national universities have been working at the same university for an average of 31.0 years, and academic managers other than presidents have been working at the same university for an average of 25.6 years, indicating long years of service at the same institution. For private universities, the average number of years of service is approximately 20 years for all management categories. The average number of years of service for academic managers at public universities is less than 20 years, and that for business managers is less than 10 years.

Most senior administrators have been in their current positions for approximately five years, except for chancellors at private universities, who have been in that position for slightly longer (9.0 years). No significant differences were found among national, public, and private universities.

#### 3.2 Influence on decision-making

We conducted a factor analysis of the various duties for which senior managers are responsible (Table 3), yielding three factors. The first factor, "Various activities related to education and research", contains numerous duties related to educational and research

	Factor 1	Factor 2	Factor 3
	activities related to education and research	financial and human resources	formulation of university vision and strategy
evaluation of educational activities	0.88	0.04	0.12
evaluation of research activities	0.83	0.09	0.15
decisions regarding new educational programs	0.83	0.02	0.24
decisions regarding priority areas and themes within the university	0.81	0.14	0.22
decisions regarding hiring, promotion, and tenure of faculty members	0.66	0.30	0.12
various internationalization activities	0.63	0.30	0.34
internationalization activities	0.62	0.23	0.33
personnel cost policy and budget	-0.03	0.88	0.09
other budget policy and allocation, excluding personnel costs	0.07	0.77	0.09
formulation of organizational human resource strategy	0.26	0.69	0.25
negotiations with relevant ministries and external parties	0.16	0.57	0.21
personnel matters for key management positions in the entire university	0.35	0.55	0.34
formulation of overall university strategy	0.34	0.35	0.85
formulation or revision of the vision and philosophy	0.39	0.32	0.68

#### Table 3 Factor analysis of duties

aspects such as "evaluation of educational activities", "evaluation of research activities",

"decisions regarding new educational programs", "decisions regarding priority areas and themes within the university", "decisions regarding hiring, promotion, and tenure of faculty members", and "various internationalization activities". The second factor, "financial and human resources", mostly contains duties related to financial and human resource aspects such as "personnel cost policy and budget", "other budget policy and allocation, excluding personnel costs", "formulation of organizational human resource strategy", "negotiations with relevant ministries and external parties" and "personnel matters for key management positions in the entire university". The third factor, "formulation of the university vision and strategy", mostly contains duties related to the overall administration of the university such as "formulation of overall university strategy" and "formulation or revision of the vision and philosophy".

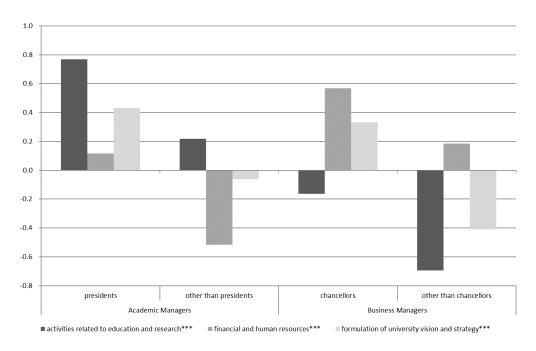


Figure 2 Duties by management category

Figure 2 shows the scores for the three factors by management category. Statistically significant differences were observed for each duty. First, academic managers influence various activities related to education and research. Of these, the influence of the presidents is most significant. Next, business managers and presidents influence financial and human resource activities. The influence of business managers on managerial-related aspects at a university is greater than that of academic managers. Particularly, the influence of chancellors is highest. Presidents also influence financial and human resource activities but to a slightly less degree than the influence of chancellors. Presidents and chancellors influence the development of a university's vision and strategy. The survey confirms that the top management levels of academic and business managers have the greatest influence on

overall university strategy and business management. When divided by divided by management category, managers with academic backgrounds are engaged in work related to education and research, and managers with non-academic backgrounds are engaged in work related to managerial aspects. Each senior manager is engaged in his or her duties while utilizing his or her respective expertise.

#### 3.3 Capabilities required for decision making

We conducted factor analysis of the capabilities required for decision making, yielding three factors (Table 4).

	Factor 1	Factor 2	Factor 3
	leadership skills	personal qualifications and capabilities	communication skills
the ability to carry out projects and affairs	0.77	0.16	0.19
the ability to lead an organization or team	0.76	0.24	0.21
the ability to coordinate among stakeholders	0.67	0.15	0.29
the ability to negotiate externally	0.66	0.25	0.13
the ability to create a vision and strategy	0.59	0.36	0.14
the ability to motivate people	0.53	0.41	0.32
the ability to build a human network	0.49	0.42	0.36
outstanding academic research ability	0.11	0.77	0.19
outstanding ability to contribute to society	0.26	0.73	0.18
ability to work in an international, multicultural environment	0.23	0.72	0.16
ability to serve as the face of the university	0.40	0.61	0.21
being worthy	0.37	0.46	0.28
the ability to obtain the opinions of faculty, staff, students	0.28	0.30	0.82
the ability to communicate university policies to faculty, staff, and students	0.45	0.33	0.56

# Table 4 Factor analysis of capabilities required for the job

The first factor, "leadership skills", requires a high level of leadership skills in all aspects, for example "the ability to carry out projects and affairs", "the ability to lead an organization or team", "the ability to coordinate among stakeholders", "the ability to negotiate externally", "the ability to create a vision and strategy", "the ability to motivate people", and "the ability to build a human network". The second factor, "personal qualifications and capabilities" is related to the capabilities and personal qualifications of the senior managers themselves, for example, "outstanding academic research ability", "outstanding ability to contribute to society", "ability to work in an international, multicultural environment", "ability to serve as the face of the university" and "being worthy". The third factor, "communication skills", is related to communication, for example, "the ability to obtain the opinions of faculty, staff, students" and "the ability to communicate university policies to faculty, staff, and students".

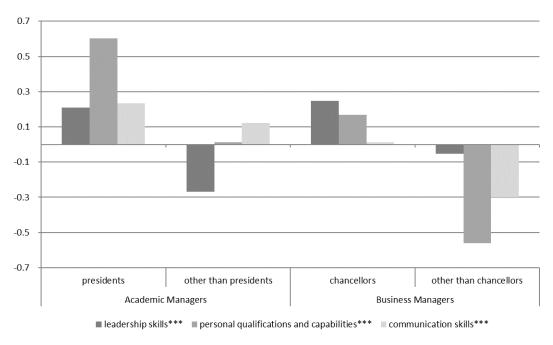


Figure 3 Capabilities by management category

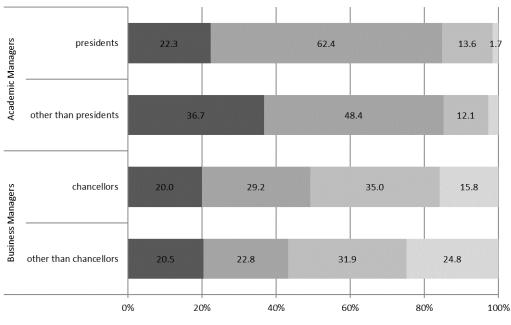
Figure 3 shows the scores for the three factors by management category. Statistically significant differences were observed for each duty. First, regarding leadership ability, the respondents indicated that presidents and chancellors have the greatest influence in actual decision making. Leadership ability is the most required ability to perform duties related to the overall business management of the university. Next, president and chancellor also scored well in terms of personal qualifications and capabilities. In particular, the personal qualifications and capabilities of presidents and chancellors are not only higher than those of other managers but also score highest among the three work capabilities. That is, the president is the chief executive officer of the university management, and in addition to the ability to lead the entire university, his/her own capabilities and prestige, or personal qualifications and capabilities such as personal charm, are also considered essential in performing his/her duties. The results indicate that upper management must have comprehensive capabilities to perform their duties. Academic managers responded that communication skills are effective in making actual decisions. The capabilities required for performing duties vary by managerial category.

# 4 Experience and training

In this section, we will discuss the experience and education/training that senior managers have received prior to their current position.

#### 4.1 Experience prior to current position

Regarding experience prior to the current position by management category, Figure 4 indicates that the experience of academic managers and business managers varies. Among academic managers, 80% of presidents have experience only within the university, and the rest of the academic managers show the same trend. Academic managers have very little experience outside the university. In contrast, more than half of the business managers have some form of management experience outside the university. For example, 50.8% of chancellors (35.0% of managers have experience both inside and outside the university, and 15.8% of managers have management experience only outside the university) have management experience outside the university, and 56.7% of the business managers other than chancellors (31.9% of managers have experience both inside and outside the university, and 24.8% of managers have management experience only outside the university) have management experience outside the university.



experience only within the university:either university-level or department-level management

experience only within the university:both university-level and department-level management

experience both inside and outside the university

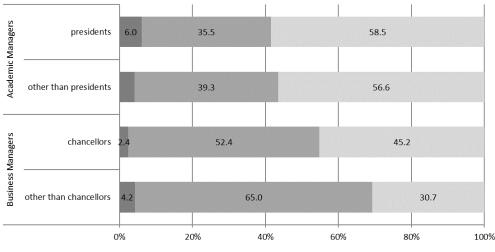
management experience only outside the university

Figure 4 Experience prior to current position by management category

#### 4.2 Actual status of education and training

Regarding the education and training status for management and administration personnel by management category, a high percentage of senior managers have no training experience

(Figure 5).



■ training experience at the graduate level ■ training experience outside the graduate level ■ no training experience

Figure 5 Education and research experience

Regarding training received, the training is usually received somewhere else other than a graduate school and not at professional organizations. Additionally, the percentage of academic managers who have not received training is higher than that of the business managers. Specifically, 58.5% of presidents have never received training, and moreover, the percentage of those who have not received training is higher at the top management level, i.e., presidents and chancellors. Despite the fact that top managers are expected to have comprehensive capabilities (Figure 3), they do not have training experience. Furthermore, despite the rapid increase in training opportunities in recent years, for example, top management/leadership seminars conducted by the Japan Association of National Universities and Promotion and Mutual Aid Corporation for Private Schools of Japan, the training experience is much less than expected. Business managers other than chancellors have less training experience at the graduate level (4.2%), but the percentage of those having training experience outside the graduate level is high (65.0%). A large number of business managers other than chancellors have experience in external management positions (Figure 4); therefore, they are likely to receive some form of training outside the university. Academic managers, on the other hand, tend to be the university graduates (Figure 4) and may have few training opportunities and may not feel the need for such training.

4.3 Current status of management human resource development

Figure 6 summarizes the evaluation of the current status of management human resource development at the universities represented by the academic and business managers.

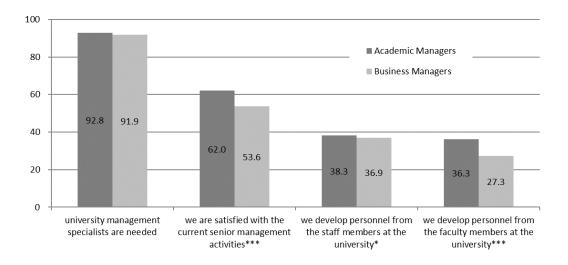


Figure 6 Evaluation of the current status of human resource development

Ninety percent of academic and business managers responded that "university management specialists are needed". Among senior managers, the need for human resource development and professional ability development specific to management is highest. In terms of evaluating their own activities, 62.0% of academic managers and 53.6% of business managers responded that "we are satisfied with the current senior management activities" at their own university. The satisfaction with university business management is relatively high. "We develop personnel from the staff members at the university" and "We develop personnel from the staff members at the university" and "We develop personnel from the faculty members at the university" were both answered by less than 40% of the respondents. Despite the high need for human resource development such as university management specialists, the score for human resource development within universities is low.

# 5 Future prospects of management human resource development

Figure 7 shows how senior managers view the ideal state of management human resource development and their answers to items related to the state of human resource development. The percentage of positive responses ("strongly agree" and "somewhat agree") for all three items is high, accounting for more than 50% of all responses. The percentage of respondents who answered "somewhat agree" is higher than that of those who answered "strongly agree". Only 11.4% of academic managers responded "strongly agree" to the item "professional organizations should train management capabilities", indicating that academic managers have higher expectations for training and education specific to business management. Only 15.3% of the business managers answered "strongly agree" to the item "management experience outside of an academic organization is necessary", indicating that business managers highly value the development of capabilities through experience outside of

university in addition to experience within university.

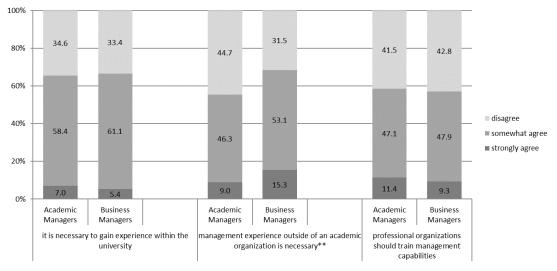


Figure 7 Future prospects of human resource development

What factors determine the future prospects for management human resource development, and do differences in job descriptions and previous experience make a difference in the desired management human resource development? To answer these

university characteristics	number of students	"Less than 1,000" = 1, "1,000 to 3,000" = 2, "3,000 to 5,000" = 3, "5,000 to 10,000" = 4, "10,000 or more" = 5				
	national university dummy	national universities = 1, public and private universities = 0				
	public university dummy	public university = 1, private and national university = 0				
	academic degree dummy	Master's or higher academic degree = 1; no master's or higher academic degree = 0				
individual	years of service	number of years of service at the university where they are currently working				
characteristics	university external management experience dummy	experience in management positions at non-university institutions = 1; experience in management positions within the university = 0				
	receiving training dummy	received education and training on administration, operation, and management = 1, Never received education and training or administration, operation, and management = 0.				
	activities related to education and research	Factor 1 scores established by factor analysis in Table 3				
job description	financial and human resources	Factor 2 scores established by factor analysis in Table 3				
	formulation of university vision and strategy	Factor 3 scores established by factor analysis in Table 3				
capabilities	leadership skills	Factor 1 scores established by factor analysis in Table 4				
required for	personal qualifications and capabilities	Factor 2 scores established by factor analysis in Table 4				
the job	communication skills	Factor 3 scores established by factor analysis in Table 4				
	We develop personnel from the staff members at the university					
university evaluation	I am currently satisfied with the activities of the senior managers	- "strongly disagree" = 1, "disagree" = 2, "neutral" = 3, "agree" = "strongly agree" = 5				
	University management specialization is required within senior managers	•				

#### Table 5 Description of variables

# Table 6 Descriptive quantities of variables

		Ν	Mean	S.E.	Min	Max
	number of students	850	2.566	1.337	1.000	5.000
university characteristics	national university dummy	850	0.211	0.408	0.000	1.000
Characteristics	public university dummy	850	0.170	0.376	0.000	1.000
	academic degree dummy	850	0.608	0.489	0.000	1.000
individual	years of service	850	18.565	14.020	1.000	56.000
characteristics	university external management experience dummy	850	0.323	0.468	0.000	1.000
	receiving training dummy	850	0.485	0.500	0.000	1.000
	activities related to education and research	850	0.008	0.953	-2.319	1.902
job description	financial and human resources	850	0.022	0.916	-3.067	1.598
	formulation of university vision and strategy	850	0.007	0.931	-4.141	2.654
	leadership skills	850	-0.007	0.912	-4.360	1.979
capabilities required for the job	personal qualifications and capabilities	850	0.002	0.893	-2.533	2.290
	communication skills	850	-0.003	0.883	-3.085	2.108
	We develop personnel from the staff members at the university	850	6.067	1.634	2.000	10.000
university evaluation	I am currently satisfied with the activities of the senior managers	850	3.492	0.876	1.000	5.000
	University management specialization is required within senior managers	850	3.987	0.830	1.000	5.000

#### Table 7 Multiple regression analysis of university management development

		Senior university managers acquire the necessary knowledge and skills by gaining experience within their own university	Senior university managers need management experience in non- academic organizations	Professional organizations trair the university seni managers on leadership and management capabilities	
		***	***	***	
university	number of students	-0.001	-0.008	-0.069 +	
characteristics	national university dummy	0.018	-0.112 **	0.034	
	public university dummy	-0.017	-0.066 +	0.019	
	academic degree dummy	0.081 +	-0.067	0.068 *	
individual	years of service	-0.020	-0.041	0.082 *	
characteristics	university external management experience dummy	-0.026	0.019	-0.023	
	receiving training dummy	0.032	0.055	0.055 +	
	activities related to education and research	-0.040	-0.058	-0.072	
job description	financial and human resources	0.115 **	0.096 *	0.018	
	formulation of university vision and strategy	-0.045	-0.015	-0.032	
	leadership skills	-0.075 +	0.058	0.014	
capabilities required for the job	personal qualifications and capabilities	0.001	0.053	0.001	
required for the job	communication skills	0.063 +	-0.060 +	-0.040	
	We develop personnel from the staff members at the university	0.164 ***	0.048	0.014	
university evaluation	I am currently satisfied with the activities of the senior managers	0.098 *	-0.107 **	-0.106 **	
	University management specialization is required within senior managers	-0.004	0.278 ***	0.348 ***	
	adjusted R-square	0.061 ***	0.147 ***	0.148 ***	
	F	4.445	10.166	10.199	
	Ν	850	850	850	

issues, we used multiple regression analysis. The main independent variables used are related to university characteristics (number of students and type of establishment), individual characteristics (academic qualifications, years of service, and work and training experience prior to the current position), job description, capabilities required for the job and university evaluation. Descriptions of the variable are shown in Table 5, and the descriptive quantities of variables are shown in Table 6. The three dependent variables are "Senior university

managers acquire the necessary knowledge and skills by gaining experience within their own university", "Senior university managers need management experience in non-academic organizations", and "Professional organizations train senior university managers on leadership and management skills".

When the dependent variable was "Senior university managers acquire the necessary knowledge and skills by gaining experience within their own university", academic managers (+), "financial and human resources" (+) among the job descriptions, "leadership skills" (-) and "communication skills" (+) among the capabilities required for performing duties, and "We develop personnel from the staff members at the university" (+) and "I am currently satisfied with the activities of the senior managers" (+) among the university evaluation factors were statistically significant. The more academic managers a university has, the more emphasis will be placed on developing their experience and skills within the university. The more the personnel are involved in finance and human resources, the greater is the need to accumulate knowledge and experience within the university. The results also indicate that managers who demonstrate leadership skills in making decisions are less concerned about experience within the university. This is due to the difficulty of using only the experience within the university to demonstrate leadership skills. Furthermore, the more communication skills are needed, the more importance placed on internal university experience, and the more satisfied the senior management is with the current state of human resource development and university management, the more importance placed on internal university experience. In other words, for leaders who are required to have comprehensive and diverse capabilities, while the development of skills through internal university experience is important to cultivate these leadership skills, the accumulation of experience and knowledge outside of the university is also important. Additionally, the communication skills necessary for capturing the opinions of faculty and staff and for communicating university policies and gaining experience within the university are considered important to interact and communicate within the university and dependent on its organizational environment and characteristics. If managers are satisfied with the current state of human resource development and university management, they would be encouraged to maintain the current status and gain experience within the university.

Next, when the dependent variable was "Senior university managers need management experience in non-academic organizations", "National" (-), "Public" (-), "financial and human resources" (+) among the job descriptions, "Communication skills" (-) among the capabilities required for performing duties, and "I am currently satisfied with the activities of the senior managers" (-) and "University management specialization is required within senior managers" (+) variables among the university evaluation factors were statistically significant. Public universities emphasize experience inside an academic organization and are more reluctant to consider external management experience. In

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contrast, private universities view experience outside of academic organizations positively. In addition, if the respondents are more involved in finance and human resources duties, emphasis is placed on experience outside the academic organization. Considering the results obtained from the analysis of the dependent variable "Senior university managers acquire the necessary knowledge and skills by gaining experience within their own university", both internal university experience and external university experience are important in performing specialized duties such as finance and human resources. Additionally, the more communication skills managers need, the more they value their experience inside the university and are reluctant about external experience. In addition, managers who are not satisfied with the activities of senior managers and who say they need a management specialist value the management experience outside the university rather than the experience within the university.

Finally, when the dependent variable was "Professional organizations train the university senior managers on leadership and management capabilities", "number of students" (-) and "academic" (+) among academic qualifications and "number of years of service at the university where they are currently working" (+), "Had training" (+), "I am currently satisfied with the activities of the senior managers" (-) and "University management specialization is required within the senior managers" (+) among the university evaluation factors were statistically significant. Large universities are more reluctant to train personnel in professional organizations. This is likely because large universities have more training opportunities and a variety of experiences within the university. The longer the years of service, the more academic managers are interested in training personnel through professional organizations. As managers receive training, their desire for management human resource development by a professional organization increases. Managers who responded that they are not satisfied with the activities of senior managers and a management specialist is needed are more likely to expect human resource development through a professional organization.

As can be seen from the above analysis, the emphasis is on experience and knowledge within the university in Japanese university organizations with a strong colleague system. Gaining knowledge specific to the university and interacting and collaborating within the university are important for the smooth operation of universities. Additionally, in a diverse and rapidly changing external environment, both business and academic managers are increasingly aware that they must focus not only inside the university, but also outside the university. Moreover, as the capabilities required for senior managers become more diverse, the training of human resources is not uniform, and the segmentation of capabilities changes based on the way human resources are trained. For example, in this study, while the accumulation of experience and necessary knowledge within the university is necessary for developing capabilities needed when interacting within the university, for example,

communication skills, the development of comprehensive abilities such as leadership requires the acquisition of abilities through a variety of experiences and training, not only within the university but also from outside the university. The more training respondents receive, the more human resource development at professional institutions dedicated to university management is desired. The current mainstream of training for senior university managers is limited to lectures. However, in the future, it will probably become necessary to develop human resources not only through short-term training, which is the current mainstream, but also through workshops and trainings at professional institutions dedicated to university management.

#### 6 Summary

This paper discusses the current status of and future prospects for the development of senior management capabilities. The main findings are provided below.

The duties of senior managers are broadly divided into two groups. Academic managers are engaged in duties related to education and research aspects, and business managers are engaged in duties related to management aspects. The top management level has a significant influence on the duties related to the university as a whole, for example, vision and strategy. In addition, comprehensive capabilities such as leadership skills, personal qualifications and communication skills are required to carry out these duties. The top management level in particular requires more comprehensive skills when making decisions. The personal qualifications of presidents are very important.

Today, the role of senior management and a president's leadership skills are increasingly expected to be demonstrated, but as established in this paper, what is required from the top management level is comprehensive ability. Policy attempts to strengthen leadership by amending laws and allocating discretionary funds to presidents, but this alone will not develop these capabilities. It is a very difficult task that requires understanding the situation outside universities, understanding the unique culture and governance characteristics of universities, presenting a vision and leading the university. The capabilities of senior managers thus far have been developed almost exclusively through on-campus experience. The higher the management level, the less training experience, and moreover, the training content is mostly limited to short-term training. However, the respondents are aware that the management personnel who will lead the future are not trained, and although on-campus experience is important, expectations for human resource development at professional institutions or through experience outside the university are high. Future studies should further examine the attributes of senior managers by type of university establishment and by university size. It is also necessary to identify what types of external experiences and human resource development through professional organizations are effective.

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