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The Impact of Introducing University Research Administrators (URAs) into Japanese National Universities - Strengthening Research Capabilities and Improving Reputation Management -

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Abstract

Japanese national universities have traditionally operated with a government-allocated management expense grant (hereinafter, the grant). However, due to several factors weakening their financial bases, including reductions in the total size of the grant and general price increases, national universities now face the need to improve financial health by diversifying income sources. Consequently, academic staff striving to obtain funding find themselves with less time for research. In this context, university research administrators (URAs) have attracted significant attention as a means of revitalizing research capabilities by relieving academic staff of many administrative tasks. However, research on URAs remains underdeveloped. This study aims at clarifying the status of URAs in Japanese national universities by conducting a correlation analysis using various evaluation indicators to determine how URAs, directly and indirectly, contribute to strengthening research capabilities and improving reputation management. The results show that the number of URAs in national universities positively impacts the amount of academic research funding acquired and the volume of research outputs. URAs also contribute to a university's reputation. Therefore, the position of URAs in national universities is expected to become increasingly important.
Keywords: Japanese national universities, University research administrator, University research management, University reputation management

1 Introduction: URAs in Japanese National Universities

Universities in Japan's higher education system are divided into three categories: national, public, and private. As of May 1, 2024, there are 813 universities in Japan, of which 86 are national universities, representing approximately 11% of the total [1]. National universities have achieved notable research outcomes based on their mission to conduct research from fundamental to world-leading levels across several research areas. In 2004, national universities were incorporated and required to operate autonomously, using not only the government-allocated management expense grant (hereinafter, the grant) but also additional

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funding acquired from external sources. The government budget for the grant has decreased over the years, with the budget for 2024 only approximately 87% of that in 2004 [2]. Thus, external funding has become an increasingly important factor in supplementing the grant to secure sufficient operating funds and pursue excellence in multiple research areas.

Recently, academic staff have faced increasing pressure with regard to how much time they can commit to academic research, leading to concerns that the research capabilities of Japanese universities have declined. One reason is the amount of time spent on research administration tasks, including gathering information and completing paperwork to acquire external funds in the form of research grants. Thus, university research administrators (hereinafter, URAs) have attracted significant attention as a potential means of revitalizing research capabilities by freeing academic staff from administrative tasks.

The full-scale introduction of URAs to higher education institutions in Japan commenced in 2011, led by the Ministry of Education, Culture, Sports, Science and Technology (hereinafter, MEXT). As of 2023, over 1,800 URAs are employed, including industry-academia-government collaboration coordinators, although some universities have not yet introduced URAs at all or have employed only a small number. National universities account for a large proportion of the institutions supported by URA-related MEXT projects, and as of 2023, URAs had been introduced in 71 of the 86 national universities.

Strategically situated throughout the country, national universities promote the production of research outcomes by leveraging university-based support and collaborating with local governments and communities. As shown in Table 1, URAs have thus become an indispensable aspect of research strategy at national universities.

Table 1: Case studies of URA initiatives in national universities

URAs contribute to production of interdisciplinary research on regional characteristics by promoting collaboration among researchers from different fields together with local governments and residents
URAs conduct integrated research support, from acquisition of research funds to outreach toward development of university spin-off startups in Japan and overseas
URAs introduce advanced administration procedures to university management
URAs conduct events to match regional collaboration activities with industry - academia - government collaborations
The Corporate Planning Office links information gathered by URAs with IR data on research papers, external funding, and other sources, to support the strengthening of research capabilities

Source: Processed by the authors using content from [3]

The rest of this paper is structured as follows: section 2 summarizes previous research on URAs; section 3 proposes the research questions and hypotheses; section 4 explains the methodology used to measure the impact of URAs; section 5 reports the analysis results; section 6 discusses the findings; and section 7 outlines the conclusions and a future research agenda.

2 Previous Research on URAs

Research on URAs has not yet matured to any significant degree. Previous research in Japan has focused largely on comparisons and functional analyses of the roles played by URAs in

Japan and other countries. Studies have also examined how URAs contribute to acquiring external funds and increasing the volume of research output. As shown in Table 2, Igami *et al.* analyzed funding sources for specific research papers at Japanese universities [4]. They found that national universities have a greater tendency than private or public universities to conduct research utilizing external funds, either in full or in part, including subsidies, grants-in-aid, and other publicly funded means. Therefore, academic research in national universities is highly dependent on external funding.

Table 2: Sources of funds used in research

Category / Source of funds	Only Internal funds	Combined Internal and External funds	Only External funds
National University, etc.	21%	55%	24%
Public University	32%	53%	15%
Private University	40%	50%	10%

Source: Processed by the authors using content from [4]

Furusawa *et al.* [5] demonstrate the pivotal role of URAs in securing collaborative and contracted research funds. However, when the objective is limited only to acquiring external research funding, they note that there is an ideal scale for assigning the number of research support staff, including URAs.

Edamura *et al.* [6] show that universities that employ URAs are more successful at acquiring external funds than those that do not. They also suggest that there is an inverted U-shaped relationship between the number of URAs and both the number and the amount of private research funds, as well as the number and amount of government research funds. Furthermore, they imply that increasing the number of URAs specializing in research support has a positive effect on the number of papers, whereas increasing the number of URAs with multiple roles has a positive effect on the number of patent applications.

Kikuchi and Oe [7] indicate that URAs contribute to the establishment of university spin-off startups.

Regarding previous research in other countries, Acker *et al.* [8] indicate that as individual academics are encouraged and often compelled to obtain external funds due to declining government funding for universities, the role of Research Administrators is expanding.

Tauginienė [9] points out that since the conditions for undertaking research are constantly changing with new challenges and opportunities, the capabilities of Research Administrators also need to be adjusted in response, including taking on various roles such as managers, lawyers, financiers, or quasi-researchers.

Drummond [10] highlights the importance of Research Administrators in securing university resources by aligning their activities with the broader mission of the university. Thus, URAs are increasingly recognized worldwide and are expected to support both the university's mission and research strategy, as well as the production of academic staff outputs.

3 Research Questions and Hypotheses

3.1 Research Questions

Considering previous research, we investigated whether it is possible to improve a university's reputation and increase university operating funds through university strategies that utilize URAs.

3.2 Hypotheses

Using several evaluation indicators, such as the size of the grant or monetary gifts and the volume of research output, we conducted an analysis focused on the number of URAs to clarify the impact of introducing URAs in national universities. Thus, we proposed the following hypotheses:

H1: As URAs are expected to conduct research administration tasks on behalf of academic staff, it is assumed that the more URAs a university has, the better its research management. Therefore, as a result of effective research management, national universities with a higher number of URAs acquire a larger grant, larger monetary gifts, and more external funding.

H2: The volume of research output is higher in national universities that receive a larger grant, larger monetary gifts, and more external funding.

4 Methodology

A correlation analysis was conducted to examine the various relationships between the size of the grant, the number of URAs, the amount of acquired external funding, the volume of research output, and the amount of monetary gifts. This research principally utilizes data from MEXT's "Status of Industry-Academic Collaboration at Universities, etc. 2023" report [11] (hereinafter, the 2023 report), which is the most recent data available as of March 2025. The scope of the analysis included all national universities listed in the 2023 report. The number of URAs at each national university refers to the total number of URAs listed in each employment category in the 2023 report. As evaluation indicators, each national university's data was extracted from the 2023 report, including the respective amounts of monetary gifts, contract research funds, competitive research funds, collaborative research funds, and numbers of invention notifications, intellectual property applications, and currently existing spin-off startups founded by universities, etc. (hereinafter, university spin-off startups). The number of intellectual property applications for each national university was set as the sum of the number of domestic and international patents, utility models, and other intellectual property rights applications. The amount of acquired external funds for each national university was set as the sum of contract, collaborative, and competitive research funds. The size of the grant for each national university is taken from MEXT's "Details of the General Account Expenditure Budget for Fiscal Year 2023" [12]. Regarding the grant, since the Japanese government has introduced a system to allocate part of the grant based on several indicators, including faculty research performance, the size of the grant is an effective indicator for analyzing the impact of the number of URAs. In the analysis of the size of the

grant, universities belonging to a national higher education and research system (systems of one corporation and multiple universities) were not included owing to factors such as university integration that might distort any interpretation of the data.

5 Results

In Table 3(a), the size of the grant is significantly positively correlated with the amount of acquired external funds (P<0.001). Table 3(b) shows that the number of URAs is significantly positively associated with the amount of acquired external funds, the size of the grant, and the amount of monetary gifts (all Ps<0.001). These findings support H1.

Table 3(a): Correlation analysis between size of the grant and amount of acquired external funds

	Amount of acquired external funds
Size of the grant (*n*=79)	0.944

Table 3(b): Correlation analysis between the number of URAs and the amount of acquired external funds, size of the grant, and amount of monetary gifts

	Amount of acquired external funds (*n*=86)	Size of the grant (*n*=79)	Amount of monetary gifts (*n*=86)
Number of URAs	0.876	0.849	0.824

Note: All correlation coefficients are reported to three decimal places and all are significant at P<0.001. Universities affiliated with the national higher education and research system (*n*=7) were excluded from the sample for the size of the grant.

Table 4 presents the correlation analysis between the volume of research output (the numbers of intellectual property applications, invention notifications, and university spin-off startups) and the number of URAs, the size of the grant, the amount of acquired external funds, and the amount of monetary gifts. The results indicate that the volume of research output tends to be higher at universities with a higher number of URAs, a larger grant allocation, more external funding, and a larger amount of monetary gifts. These findings support H2.

Table 4: Correlation analysis between the volume of research output and evaluation indicators

	Number of invention notifications	Number of intellectual property applications	Number of university spin-off startups
Number of URAs (*n*=86)	0.908	0.919	0.865
Amount of acquired external funds (*n*=86)	0.963	0.977	0.951
Size of the grant (*n*=79)	0.915	0.924	0.923
Amount of monetary gifts (*n*=86)	0.894	0.909	0.907

Note: All correlation coefficients are reported to three decimal places and all are

significant at P<0.001. Universities affiliated with the national higher education and research system (n=7) were excluded from the sample for the size of the grant.

6 Discussion

Two key academic points emerge from this analysis. First, the number of URAs contributes to the acquisition of academic research funds, including the grant allocation, monetary gifts, and funding from external sources. While previous studies suggest that the relationship between the number of URAs and external research funding follows an inverted U-shape—implying limits to their impact—this study, based on correlation analysis, shows that the number of URAs in national universities positively affects the amount of academic research funding acquired.

In 2019, to promote management reform at national universities and improve the quality of education and research, the Japanese government introduced a system to allocate part of the grant based on performance. In 2023, the total budget for the performance-based grant was 100 billion yen and was allocated according to performance and growth, including research output indicators. These indicators included the number of research achievements per full-time faculty member, the amount and number of grants-in-aid for scientific research received, and the amount of acquired contracts and collaborative research funds [13]. As shown in Tables 3(b), the correlation analysis between the number of URAs and the size of the grant, amount of acquired external funds, and amount of monetary gifts showed a significantly positive trend at a 0.1% significance level. Since national universities are responsible for conducting world-leading research and education and advancing key academic fields, this study suggests that they are increasingly pursuing initiatives aligned with these research output indicators. Further, as shown in Table 4, national universities acquiring a larger grant allocation, more external funding, and larger monetary gifts tend to generate higher volumes of research output. Thus, the significant impact of introducing URAs can be clearly observed.

Second, URAs contribute to a university's reputation. Research reputation is extremely important for educational and research institutions. As globalization progresses, competition between universities has intensified both domestically and globally, and each university must prioritize reputation management to strengthen its international presence and competitiveness. Takata *et al.* [14] highlighted the importance of reputation management at national universities through a questionnaire survey. The results showed that, from among high schools, parents/guardians, and companies, national universities tend to focus most on high schools in terms of their reputation management. However, since national universities increasingly rely on acquiring education and research funds (including the grant, external funds, and monetary gifts) to produce research outputs and conduct collaborative and contract research, we assume that there is growing recognition of the importance of also enhancing reputation among graduates, private corporations, and the public sector in order to secure future funding. This analysis supports the idea that the number of URAs is closely linked to improved research reputation management in national universities.

Overall, the analysis shows that URAs play a key role in enhancing research capabilities and improving reputation management. Increasing the number of URAs contributes to higher volumes of research output, a larger grant, and greater amounts of external funds and monetary gifts. Therefore, this study clarifies that introducing URAs strengthens research capabilities and improves reputation management at national universities.

However, as noted in previous research, there are limitations in analyzing the significance of a specific number of URAs. Furthermore, various research outputs beyond intellectual property, invention notifications, and university spin-off startups could be considered when evaluating the impact of URAs. Therefore, this analysis cannot be said to show a causal relationship, but only a trend. Moreover, as academic research at national universities ranges from global-level cutting-edge research to basic fundamentals, we need to recognize that the effects of introducing URAs will not necessarily be reflected immediately in research outputs.

7 Conclusion and Future Research Agenda

We conducted a correlation analysis using various evaluation indicators to clarify the impact of introducing URAs at Japanese national universities and their contribution to improving research reputation management. In terms of academic originality, this study shows that (1) the number of URAs contributes to the increased acquisition of research funds, including the grant and monetary gifts; (2) significant positive correlation trends were observed between research funds and research output volume; and (3) universities with more URAs are better able to produce higher research output, thus supporting improved research reputation management. However, as the correlation analysis was based solely on 2023 data, these results should be viewed primarily as trend observations. A more comprehensive evaluation would require not only statistical analysis using multi-year data but also assessments of URA performance at individual national universities. In the future, national universities must fulfill their role and mission in line with the government's vision of higher education for 2040. Given the purpose and scope of URA work, their role in national universities is expected to become increasingly important. As the introduction of URAs is still relatively recent and research on them remains underdeveloped, we intend to continue exploring their contributions not only at national but also at private and public universities.

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