



3-31-2023

## Job Perspectives of University Students Aspiring to Become Civil servants using Q sort: Based on the 2020 Toyo University Student Survey

Masatoshi Minowa

*Toyo University*, [minowa@toyo.jp](mailto:minowa@toyo.jp)

Follow this and additional works at: <https://gensoken.toyo.ac.jp/japanese-society-and-culture>



Part of the [Public Administration Commons](#)

---

### Recommended Citation

Minowa, Masatoshi (2023) "Job Perspectives of University Students Aspiring to Become Civil servants using Q sort: Based on the 2020 Toyo University Student Survey," *Japanese Society and Culture: Vol. 5*, Article 5.

Available at: <https://gensoken.toyo.ac.jp/japanese-society-and-culture/vol5/iss1/5>

This Article is brought to you for free and open access by Institute of Social Sciences. It has been accepted for inclusion in Japanese Society and Culture by an authorized editor of Institute of Social Sciences.

[Received 6 September 2022 / Revised 25 October 2022 / Accepted 9 November 2022]

## **Job Perspectives of University Students Aspiring to Become Civil Servants using Q sort: Based on the 2020 Toyo University Student Survey<sup>1</sup>**

Masatoshi Minowa<sup>\*</sup>

### Abstract

This study questioned what kind of gap in perceptions of work perspectives exists between current and aspiring civil servants in the first place, and whether there are differences in perceptions of work perspectives between students who aspire to become civil servants and those who aspire to work in the private sector. This was examined in an exploratory approach by using data from Q sort, a Q methodology study, to capture the value perceptions surrounding work perspectives, particularly among students who aspire to become civil servants. The data compared were students aspiring to become civil servants, students aspiring to work in the private sector, and current civil servants.

As a result of the comparison, several characteristics of students who aspire to become civil servants were found. For example, there was a significant difference in the averages of social contribution attitudes, rule-abiding consciousness, and the tendency to think carefully before taking action compared not only with students who aspire to work in the private sector but also with those who are currently in the civil servants' profession. In addition, compared to students who wanted to work in the private sector, students who wanted to work in public service had a larger mean difference and a significant difference in their awareness of reaching out to and involving others and creating a network beyond the organization. Compared to current civil servants, the mean differences were significantly lower for being proactive in one's work and being interested in various things. It can be pointed out that while students wishing to become civil servants have a strong sense of social contribution and compliance with rules, they may also have a rather passive attitude.

On the other hand, it is interesting to observe that there was almost no difference in the average difference between those who aspired to the private sector and those who aspired to the civil servants regarding their stability consciousness. This overturns the common stereotype that stability-minded people aspire to become civil servants. These characteristics may indicate implications that could contribute to recruitment and training in HR management in public administration.

*Keywords: Q Methodology, Q sort, Perception of University Students, Civil Servant, Public Administration*

---

<sup>1</sup> This article was originally published in TOYO HOGAKU 64(3) 75-98 2021, with full reference and has been revised and translated into English

<sup>\*</sup> Associate Professor of Faculty of Law, Toyo University

## 1. Introduction (Problem setting)

### 1.1 Gaps in work perspectives

In recent years, it has not been infrequent to see and hear about the problem of young public officials leaving their jobs at the national and local levels. For example, at the national level, on 19 November 2020, Kyodo News reported that according to a summary by the Cabinet Bureau of Personnel Affairs, the number of career bureaucrats in their 20s at central ministries and agencies who retired for personal reasons increased by more than four times in 2019 compared to 2013 for career-track employees.<sup>2</sup> As for local areas, the Ministry of Internal Affairs and Communications' Survey on the Resignation Status of Local Public Officials confirms that the number of normal resignations under 30 years of age for prefectures, government-designated cities, cities, Tokyo metropolitan special cities, towns, and villages, and partial administrative associations increased significantly from 1,564 in 2013 to 2,517 in 2018. This demonstrates a significant increase in the number of normal resignations for those under 30 years of age. The Nihon Keizai Shimbun also reports that the number of national and local public officials registered on major recruiting agent websites increased by 22% year-on-year to 12,379 from October to December 2019.<sup>3</sup>

There are indications that these are due to problems arising from the gap between the ideals of student life and the reality after employment, such as the need for long hours of restrained labor work, human relationships in the workplace, and evaluations in the workplace, the so-called "reality shock."

This study addresses the following research question: what kind of gap in perceptions of the view of work arises between current and aspiring civil servants in the first place and between aspiring civil servants and aspiring private sector workers? By examining this via an exploratory approach, we first capture the structure of students' value perceptions of their view of work and determine, among other things, what kind of differences in perceptions can cause problems such as "reality shock."<sup>4</sup>

### 1.2. Previous research on university students' views and perceptions of work and the significance of this study

Psychology and career development researchers have investigated university students' views of work. For example, psychologist Hiroshi Matsui (2016) conducted a four- and six-question survey with 114 items on "work attitudes," "values," and "life perspectives." A factor analysis revealed that "stability orientation," "independence orientation," "reward orientation," "part-time jobber orientation," "work dislikes," and "maker orientation." Other studies include Hitomi Ozaki (2016), who explored female university students' views on work. Kazumasa Hara (2019) investigated the differences between university students and workers' perceptions of work. Moroi and Hiroe Sakamoto (2014) measured what

---

<sup>2</sup> Kyodo News, "Retirement of bureaucrats in their 20s more than quadruples," [20dai kanryo no taisyoku, 4bai chouni] (in Japanese) 19 Nov 2020, 19:55update (<https://this.kiji.is/702106240962610273?c=39546741839462401>), last accessed 4 Dec 2020.

<sup>3</sup> "Public servants' desire to change jobs surges, registration at major sites highest; in their 20s, to foreign firms and IT; long working hours to be reviewed. "[komuin no tensyoku kibou ga kyuuzou, oote site tourou saiko, 20dai, gaishi ya IT he, choujikannrourou no minaoshi kadai.]15 March 2020, morning edition, page 2.15 March 2020, morning edition, page 2, *Nihon Keizai Shimbun*. (in Japanese)

<sup>4</sup> Honjo, Mamiko (2018), "Diversity of reality shocks in the early careers of university graduates: a comparison between early job leaving behaviour, establishment size and industry" [Daisotu syoki career ni okeru realty shock no tayousei: souki risyokukoudou no umu, jigyoukibo / sangyoukann no hikaku] (in Japanese), *Economic Theory*, Vol. 394, pp. 1-15, Wakayama University

matters female university students consider important when working in the future and explored the basic structure of job values and the relationship between personality and job values.

The originality of this paper compared to these previous studies is first in the problem setting, which attempts to capture the work perspectives of students who aspire to become civil servants in terms of the differences between those who aspire to be in the private sector and those who are current civil servants. However, to the best of our knowledge, no studies have compared civil servants with those aspiring to become civil servants in the future.

This paper seeks to provide implications that contribute to recruitment and training development for newly recruited officials in civil service personnel management. In addition, useful implications can be provided for career education at universities by understanding and comparing the work perspectives of students who aspire to the private sector and those who aspire to the civil service.

In addition, previous studies have used Likert scales questionnaires, which attempt to determine perceptions using scales using the four- or five-item method. On the contrary, this study uses a form of data acquisition known as Q sort, which is explained in detail in section 2.1. This is also originality as a method for understanding university students' perspectives on work.

In addition, the survey utilized the same items in the Q sort survey conducted in 2018 by the Tokyo Special Cities Institutions Study Group (2020), in which the author participated as one of its members. The survey obtained data on the work perspectives of current civil servants, and comparisons with this data can be made to highlight those of students who aspire to become civil servants.

## 2. Research Methods

### 2.1 Q sort

In this study, Q sort refers to the data acquisition method<sup>5</sup> and the data obtained in Q methodology research as a research method. As it has already been introduced in Japan by Okamoto (2011), Nomura (2017), and Hayashi et al. (2020a, 2020b), we provide only a brief explanation here.

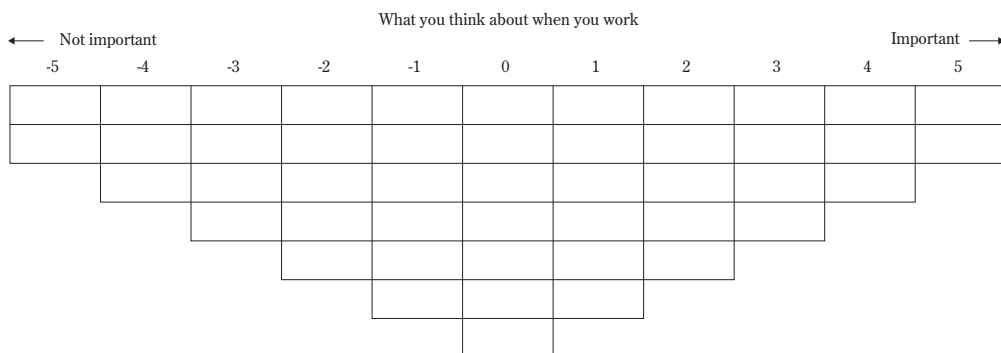
In questionnaire surveys aimed at understanding people's perceptions in general, Likert scales are often used to measure each question item on a scale ranging from "strongly agree" to "completely disagree." Representative examples include the extent to which people agree with a certain issue or consider it important, using a four- or five-question scale.

In Q sort, a set of items called a Q set is first created to grasp individual perceptions, attitudes, and preferences in a more holistic and systematic approach. The content is then described in the Q set; in some cases, the items are made into pictures or photographs. A scale of importance, interest, and so on, for example, is set by the survey designer, depending on the number of items. The survey designer sets the range and number of items on each scale, for example, from +5 to -5, depending on the number of items. The scale should be designed to be normally distributed around the median, such as from +4 to -4 or from +7 to -7, depending on the number of items created earlier, so that the number of items placed at both ends of the scale is minimized. The survey participants, referred to as P-sets or P-samples, then prioritize each scale according to their perceptions of value and place a set number of items on each scale. The placement matrix used in the research for this paper is shown in Figure 1.

---

<sup>5</sup> Brown (1996), McKeown and Thomas (2013), and Watts and Stenner (2012) are frequently referenced as sources for guidance on Q-methodology.

Figure 1 Blank placement matrix for distribution



In Q methodological research, Principal Component Analyses (PCA) or Factor Analyses such as centroid maximum likelihood or principal factor method are used to interpret the results of surveys that have been Q sorted by P-sets. Explaining factors that have commonalities provides an interpretation of the respective groups (factors) with some common orientation in attitudes, views, and behaviors, as well as differences between groups.

Based on the accumulation of scientific methodological studies conducted to date, this method can obtain useful exploratory findings even with a small number of samples. While it has the advantage of understanding the structure of human value consciousness, its generalization and analysis of relationships with other variables have been highlighted as *lim*. To enrich the interpretation and validation of the analysis results, some studies<sup>6</sup> have adopted mixed methods combined with interview surveys and Likert questionnaires.

## 2.2 Q sets

The Q set, a series of items used to determine and place priorities, was developed by the Tokyo Special Cities Institutions Study Group (2020), as indicated earlier. The items in the Q set are presented in Table 1.

Table 1 Q set

No.	Q set	No.	Q set
i1	Being flexible and adaptable in various situations	i25	Praising others' good performance
i2	Improving your work with your own new ideas	i26	Being responsible for your actions at work
i3	Being quick to take advantage of opportunities	i27	Improving skills
i4	Learning through trial and error	i28	Directly confronting conflicts of opinions and interests.

<sup>6</sup> Ramlo (2016) provides an overview of previous Q methodology studies. She recommends mixed methods. Grimsrud et al. (2020) also examine correlations between factors.

i5	Being open to challenges and risk taking	i29	Making friends at work
i6	Being careful	i30	Networking at work
i7	Taking action using your own independent judgment	i31	Working with enthusiasm
i8	Being rule oriented	i32	Acting according to the circumstances
i9	Being analytical in confronting situations and/or problems	i33	Placing emphasis on the quality of work
i10	Paying attention to detail	i34	Showing originality through your work
i11	Being precise	i35	Having a good reputation
i12	Working in collaboration with others	i36	Placing emphasis on the work process
i13	Being team oriented in the workplace	i37	Being action-oriented
i14	Sharing information adequately in the workplace	i38	Thinking from the other person's point of view
i15	Fairness	i39	Being honest, faithful and sincere with oneself and others
i16	Being tolerant of people around you	i40	Taking an interest in various issues and matters
i17	Being relaxed at work	i41	Networking beyond your organization
i18	Working calmly	i42	Being reliable
i19	Being supportive of people in need	i43	Having advantages because of your job
i20	Working actively	i44	Leading a stable life
i21	Decisiveness	i45	Encouraging those around you to get involved
i22	Taking initiative	i46	Contributing to society through your job
i23	Thinking before you act	i47	Proceeding with your work in an organized way
i24	Achieving high results through work		

### 2.3 P set

The target population of the survey is the students on the “Local Autonomy B,” “Public Administration B (Daytime course),” “Public Administration B (Evening course),” and “Special Seminars I B and II B” courses, which the author lectured in the Faculty of Law of Toyo University in the autumn/winter 2020 semester. There are a few students from other faculties of law, but most are from that Toyo University. The students were asked to respond to the survey, which was completely extra-curricular and voluntary. The survey period was from 12 to 22 November 2020. The number of P-sets is sufficient; based on the number of Q sets, the number of P-sets is sufficient (Watts & Stenner 2012). In addition, there were 21 civil servants with administrative aspirations and four with public security officials’ aspirations, which

is more than half of the Q set and, therefore, a sufficient number. Other attributes such as desired post-graduation career path, gender, and whether they work full time were also determined<sup>7</sup>. These attributes are presented in Table 2 below.

Table 2 P set attributes

Academic year		
2	3	4 or over
33	10	3

Aspiring to become			
Government officer	Public security officials (police or firefighter)	Private sector	Other/don't know
21	4	14	7

Gender	
Men	Women
28	18

Experience in a full-time job	
Yes	No
3	43

#### 2.4 Implementation of the Q sort

The distribution of the Q sort by P-sets was carried out using the Q method software online survey system.

The participants were asked to sign a consent form to participate in the study. "The target of this survey is university students, so please answer the questions on the assumption that you are a full-time employee of a private company or public institution that you want to work for and consider your thoughts on how you would like to proceed with your job." The survey was conducted under the condition that the respondents were "a regular employee of the private company or public officials as you wish to work for."

Q sort items i1 to i47 were initially presented at random, and participants were asked to classify them into three categories: those considered high, medium, and low importance. From each of these categories, the respondents were then asked to place each of the Q items -5 to 5 on the whiteboard shown in Figure 1 according to their level of importance. Responses took between 5 and 38 minutes, with a mean response time of 11 minutes.

<sup>7</sup> This is because the Evening Course classes often involve students from faculties different from the Faculty of Law.

### 3. Results and Comparison

#### 3.1 Means and standard deviations for all students and by aspiration

Table 3 shows the mean and standard deviation for all students surveyed and the mean and standard deviation for students by aspiration.

Table 3 Mean and standard deviation, overall and by aspiration.

Items		Students Average	Students' SD	Mean of Aspireing Government officer	SD of Aspireing Government officer	Mean of Aprireing Public Security officials	SD of Aprireing Public Security officials
i1	Being flexible and adaptive in various situations	0.91	2.33	1.30	2.17	2.50	2.28
i2	Improving your work with your own new ideas	-1.59	2.39	-1.65	2.22	-1.25	2.35
i3	Being quick to take advantage of opportunities	0.26	2.34	-0.65	1.77	-0.50	1.61
i4	Learning through trial and error	-0.50	2.14	-0.60	1.93	1.50	1.96
i5	Being open to challenges and risk taking	-2.61	2.54	-3.60	1.62	-3.25	1.62
i6	Being careful	0.24	1.89	0.60	1.69	1.00	1.82
i7	Taking action using your own independent judgment	0.30	2.32	0.25	2.07	-0.25	2.05
i8	Being rule oriented	1.28	2.58	2.20	2.50	2.25	2.43
i9	Being analytical in confronting situations and/or problems	0.22	2.24	0.50	2.77	1.00	2.87
i10	Paying attention to detail	-0.24	2.07	0.45	2.25	-0.25	2.27
i11	Being precise	1.02	2.32	1.15	2.63	1.25	2.54
i12	Working in collaboration with others	0.02	2.33	-0.20	2.18	-0.50	2.22
i13	Being team oriented in the workplace	-0.15	2.30	-0.75	1.79	-0.75	1.98
i14	Sharing information adequately in the workplace	1.22	2.51	1.75	2.30	1.75	2.36
i15	Fairness	1.70	2.34	2.15	2.22	3.25	2.39
i16	Being tolerant of people around you	-0.17	2.53	-0.20	2.68	-1.00	2.62
i17	Being relaxed at work	-0.30	2.79	0.00	2.53	-2.00	2.46
i18	Working calmly	-0.04	2.51	-0.35	2.54	-0.50	2.71
i19	Being supportive of people in need	0.76	2.49	1.30	2.19	1.25	2.13



i20	Working actively	0.24	2.21	0.05	1.66	0.25	1.73
i21	Decisiveness	0.74	2.47	0.10	2.36	0.75	2.28
i22	Taking initiative	-0.02	2.35	0.15	2.22	-0.50	2.26
i23	Thinking before you act	0.54	2.09	1.15	1.56	-0.25	1.72
i24	Achieving high results through work	-1.13	2.42	-1.65	1.98	-1.50	2.35
i25	Praising others' good performance	-1.28	2.46	-1.50	2.48	-0.75	2.33
i26	Being responsible for your action's at work	1.83	2.49	2.65	1.85	3.50	2.11
i27	Improving skills	-0.76	2.62	-1.30	2.15	-2.25	2.17
i28	Directly confronting conflicts of opinions and interests	1.33	1.97	1.45	1.94	2.25	1.70
i29	Making friends at work	1.33	2.34	1.10	2.00	-0.25	1.90
i30	Networking at work	0.57	2.70	0.10	2.61	-0.50	2.52
i31	Working with enthusiasm	0.15	2.59	0.60	2.31	0.50	2.35
i32	Acting according to the circumstances	0.91	2.69	1.90	2.05	3.00	2.20
i33	Placing emphasis on the quality of work	-1.02	2.29	-1.50	1.69	-1.00	1.75
i34	Showing originality through your work	-1.78	2.09	-2.00	1.82	-0.50	1.73
i35	Having a good reputation	-1.30	2.64	-2.50	2.20	-2.75	2.30
i36	Placing emphasis on the work process	-1.48	2.48	-1.20	1.99	-1.75	2.08
i37	Being action-oriented	-1.07	2.71	-1.80	2.68	-2.50	2.67
i38	Thinking from the other person's point of view.	1.11	2.36	1.80	1.91	1.75	2.07
i39	Being honest, faithful and sincere with oneself and others	0.67	2.26	0.60	2.37	0.00	2.37
i40	Taking an interest in various issues and matters	-1.09	2.31	-1.00	2.35	-2.25	2.27
i41	Networking beyond your organization	-0.78	2.71	-1.55	2.65	-1.00	2.76
i42	Being reliable	0.74	2.26	0.85	2.39	0.50	2.36
i43	Having advantages because of your job	-0.70	2.39	-0.80	1.81	-2.00	1.76
i44	Leading a stable life	0.04	2.70	0.20	2.71	0.25	2.55
i45	Encouraging those around you to get involved	-1.17	2.32	-2.05	2.33	-2.25	2.80
i46	Contributing to society through your job	0.20	2.64	1.15	2.13	2.50	2.27
i47	Proceeding with your work in an organized way	0.87	2.39	1.35	2.48	1.25	2.74

Items					
		Mean of Aprireing Private sector	SD of Aprireing Private sector	Mean of Other/ don't know	SD of Other/ don't know
i1	Being flexible and adaptive in various situations	0.60	2.50	0.80	2.64
i2	Improving your work with your own new ideas	-1.33	2.44	-3.80	0.40
i3	Being quick to take advantage of opportunities	0.93	2.05	2.00	3.16
i4	Learning through trial and error	-0.73	2.24	-1.20	1.72
i5	Being open to challenges and risk taking	-1.93	2.91	-1.00	2.83
i6	Being careful	-0.47	1.75	0.20	1.60
i7	Taking action using your own independent judgment	1.13	2.63	-0.20	2.14
i8	Being rule oriented	0.07	2.49	2.00	2.28
i9	Being analytical in confronting situations and/or problems	-0.47	1.67	1.00	0.89
i10	Paying attention to detail	-1.00	1.97	0.00	1.26
i11	Being precise	0.33	1.89	1.60	2.06
i12	Working in collaboration with others	-0.40	2.42	0.60	1.74
i13	Being team oriented in the workplace	0.60	2.50	0.40	1.62
i14	Sharing information adequately in the workplace	0.73	2.43	1.40	3.01
i15	Fairness	0.40	2.12	3.00	2.28
i16	Being tolerant of people around you	0.07	2.29	-1.00	2.61
i17	Being relaxed at work	0.20	3.41	-2.60	1.02
i18	Working calmly	0.33	2.67	1.80	0.75
i19	Being supportive of people in need	-0.20	2.61	0.20	2.32
i20	Working actively	1.27	2.59	-1.00	1.26
i21	Decisiveness	0.67	2.49	2.80	1.60
i22	Taking initiative	0.67	2.24	-1.40	2.24
i23	Thinking before you act	-0.40	1.93	1.00	2.61
i24	Achieving high results through work	-0.53	2.06	0.00	2.10
i25	Praising others' good performance	-1.73	1.81	0.60	3.14

i26	Being responsible for your action's at work	0.47	2.33	1.80	2.79
i27	Improving skills	0.40	2.85	-1.00	3.35
i28	Directly confronting conflicts of opinions and interests	1.47	2.09	0.40	1.85
i29	Making friends at work	2.07	2.62	-0.40	2.33
i30	Networking at work	1.07	3.09	-0.60	1.20
i31	Working with enthusiasm	-0.07	2.59	-1.80	2.32
i32	Acting according to the circumstances	0.87	2.90	-2.60	1.36
i33	Placing emphasis on the quality of work	-0.87	2.53	-1.00	2.53
i34	Showing originality through your work	-1.67	2.02	-1.20	3.31
i35	Having a good reputation	-0.40	2.55	0.20	1.47
i36	Placing emphasis on the work process	-1.93	2.86	-0.60	2.58
i37	Being action-oriented	-1.20	2.45	0.40	1.85
i38	Thinking from the other person's point of view	0.13	2.78	1.60	1.20
i39	Being honest, faithful and sincere with oneself and others	0.53	2.22	1.80	2.40
i40	Taking an interest in various issues and matters	-0.53	2.42	-2.20	1.94
i41	Networking beyond your organization	1.00	2.42	-1.20	2.04
i42	Being reliable	0.33	2.36	1.80	1.60
i43	Having advantages because of your job	-0.13	2.19	-1.40	3.26
i44	Leading a stable life	-0.07	2.72	0.40	2.06
i45	Encouraging those around you to get involved	-0.20	2.17	-1.00	1.79
i46	Contributing to society through your job	-1.07	2.89	-0.20	2.23
i47	Proceeding with your work in an organized way	1.00	2.56	-0.40	1.36

### 3.2 Comparative discussion between students who aspire to the public service and those who aspire to the private sector

First, there are some difference in work perspectives between the students who aspire to the public service and those who aspire to the private sector; that is, those who aspire to the role of a public government officer and those who aspire to the public security sector and will henceforth generally be considered as students who aspire to be public officials.

A Welch's t-test investigates the difference in means between the two groups when equal variances cannot be assumed, and the indicated p-values are filled in for public officials and private sector aspiring students, arranged in descending order, as reported in Table 4.

The only significant differences ( $p > 0.05$ ) found between the means of aspiring civil servants and private sector students were "i26 Being responsible for your action's at work" and "i46 Contributing to society", "15 Fairness", "i8 Being rule oriented", and "i23 Thinking before you act". In particular, "i26 Being responsible for your action's at work" had a low p-value, confirming a clear difference. The variance for "i19 Being supportive of people in need" and "i38 Thinking from the other person's viewpoint" was large and insignificant at  $p > 0.05$ . However, the p-value was low, which would have been significantly ineffective if the samples had been larger. The same applies to "i10 Paying attention to detail" and "i6 Being careful" From these results, aspiring civil servants tend to be more public-spirited and fair-minded than private sector aspiring students and are focused on taking care of their jobs.

Significant differences were observed between the means of students who aspire to be civil servants and those who aspire to the private sector. The most important differences were found in "i41 Networking beyond your organization", "i45 Encouraging those around you to get involved" and "i3 Being quick to take advantage of opportunities". The p-values for "i27 Improving skills" and "i35 Having a good reputation" are insignificant, with slight differences of 0.054 and 0.051, respectively; these may have been significant if more samples were in either group. There was no significant difference between "i5 Being open to challenges and risk talking" and "i20 Working actively"; again, these would have been significant if the sample size had been larger. In addition, "i5 Being open to challenges and risk talking" among students aspiring to become civil servants had a mean of -3.31 and a standard deviation of 1.94. This indicates that such students are highly risk averse and that their perception of the importance of networking beyond the organization, reaching out to others, and trying to avoid missing opportunities is relatively low compared to those aspiring to work in the private sector.

The items for which the difference between the means of students aspiring to become civil servants and those aspiring to the private sector was small, and the p-values were large could be interpreted as the high similarity between the two groups. These items were "i44 Leading a stable life", "i47 Proceeding with your work in an organized way", "i2 Improving your work with your own new ideas" and "i39 Being honest, faithful, and sincere with oneself and others", "i28 Directly confronting conflicts of opinions and interests", and "i37 Being action-oriented". One surprising finding is that "i44 Leading a stable life" is included here. The variance of this item is large in both groups, so it is expected that some factors to be large and others small when factor analysis is conducted. The comparison between the means of aspiring civil servants and the means of the aspiring private sector is quite similar. It seems common sense that students with a stable mindset aspire to become civil servants. However, results that seem quite different from such a common understanding could be observed here. From the data, it is not possible to speculate whether this is related to the timing of the survey, which was conducted when the social

impact of the COVID-19 disaster was significant, or whether this is the general perception of this group of students. Still, it does provide some interesting suggestions and insights for future research.

### 3.3 Comparison of current and aspiring civil servants Q sort

Next, to confirm the gap between current civil servants and students who wish to become civil servants, we compare the differences in work perspectives between current civil servants and the students mentioned above based on the Tokyo Special Cities Institutions Study Group survey. The mean differences between current and aspiring civil servants, sorted in descending order, are reported in Table 4. A Welch's t-test was conducted to test the difference in means between the two groups when equal variances cannot be assumed, and the p-values were entered.

Table 4 Comparison of current and aspiring civil servants.

Items	Mean of aspiring public servants	SD of aspiring public servants	Mean of current public servants	SD of current public servants	Mean of student survey	SD	Mean of aspiring public servants - Mean of current public servants	p-value
i46 Contributing to society through your job	1.00	2.24	-1.26	2.39	0.20	2.64	2.26 **	0.0004
i17 Being relaxed at work	-0.15	2.38	-1.64	2.79	-0.30	2.79	1.49	0.06
i30 Networking at work	0.50	2.59	-0.89	2.26	0.57	2.70	1.39	0.07
i8 Being rule oriented	1.85	2.44	0.66	2.50	1.28	2.58	1.19 *	0.04
i23 Thinking before you act	1.00	1.88	-0.16	1.71	0.54	2.09	1.16 *	0.02
i44 Leading a stable life	0.04	2.79	-1.03	3.08	0.04	2.70	1.07	0.10
i11 Being precise	2.19	2.13	1.15	2.30	1.70	2.34	1.04	0.21
i34 Showing originality through your work	-1.96	1.79	-2.92	1.87	-1.78	2.09	0.96 *	0.02
i19 Being supportive of people in need	1.42	2.22	0.53	1.93	0.76	2.49	0.89	0.10
i28 Directly confronting conflicts of opinions and interests	1.42	1.86	0.71	2.08	1.33	1.97	0.71	0.26
i31 Working with enthusiasm	0.65	2.43	-0.01	2.46	0.15	2.59	0.67	0.57
i42 Being reliable	0.77	2.24	0.15	1.96	0.74	2.26	0.62	0.10
i36 Placing emphasis on the work process	-1.38	2.15	-2.00	2.12	-1.48	2.48	0.62	0.31
i25 Praising others' good performance	-1.38	2.48	-1.78	2.19	-1.28	2.46	0.40	0.21
i37 Being action-oriented	-1.27	2.89	-1.60	1.94	-1.07	2.71	0.33	0.60
i3 Being quick to take advantage of opportunities	-0.46	1.99	-0.79	2.24	0.26	2.34	0.33	0.21
i35 Having a good reputation	-2.12	2.56	-2.42	2.56	-1.30	2.64	0.31	0.40
i10 Paying attention to detail	0.15	2.12	0.00	2.23	-0.24	2.07	0.15	0.79
i26 Being responsible for your action's at work	2.62	2.15	2.52	2.08	1.83	2.49	0.09	0.84

i5	Being open to challenges and risk taking	-3.31	1.94	-3.37	1.96	-2.61	2.54	0.06	0.37
i43	Having advantages because of your job	-0.88	2.22	-0.92	2.56	-0.70	2.39	0.03	0.48
i6	Being careful	0.65	1.90	0.63	2.29	0.24	1.89	0.02	0.86
i32	Acting according to the circumstances	1.62	2.17	1.66	1.85	0.91	2.69	-0.04	0.38
i16	Being tolerant of people around you	-0.15	2.61	-0.04	2.02	-0.17	2.53	-0.11	0.66
i38	Thinking from the other person's point of view.	1.58	2.08	1.70	2.00	1.11	2.36	-0.12	0.90
i21	Decisiveness	0.38	2.40	0.53	2.36	0.74	2.47	-0.15	0.55
i18	Working calmly	-0.62	2.42	-0.41	2.01	-0.04	2.51	-0.20	0.59
i27	Improving skills	-1.38	2.04	-1.18	2.34	-0.76	2.62	-0.21	0.66
i9	Being analytical in confronting situations and/or problems	0.46	2.59	0.70	2.22	0.22	2.24	-0.24	0.79
i4	Learning through trial and error	-0.23	2.12	0.08	2.25	-0.50	2.14	-0.31	0.38
i11	Being precise	1.31	2.49	1.66	2.18	1.02	2.32	-0.35	0.37
i2	Improving your work with your own new ideas	-1.31	2.37	-0.84	2.11	-1.59	2.39	-0.47	0.56
i29	Making friends at work	1.23	1.95	1.71	1.90	1.33	2.34	-0.48	0.07
i47	Proceeding with your work in an organized way	1.04	2.38	1.55	2.41	0.87	2.39	-0.51	0.18
i39	Being honest, faithful and sincere with oneself and others	0.54	2.19	1.18	2.34	0.67	2.26	-0.64	0.16
i41	Networking beyond your organization	-1.73	2.46	-1.04	2.19	-0.78	2.71	-0.69	0.61
i22	Taking initiative	-0.15	2.30	0.56	1.92	-0.02	2.35	-0.72	0.28
i7	Taking action using your own independent judgment	-0.08	2.02	0.66	2.46	0.30	2.32	-0.73	0.23
i33	Placing emphasis on the quality of work	-1.12	2.08	-0.32	2.12	-1.02	2.29	-0.80 *	0.048
i14	Sharing information adequately in the workplace	1.46	2.41	2.30	1.77	1.22	2.51	-0.84	0.23
i24	Achieving high results through work	-1.69	2.51	-0.81	2.56	-1.13	2.42	-0.88	0.63
i40	Taking an interest in various issues and matters	-1.19	2.22	-0.24	2.25	-1.09	2.31	-0.96 *	0.02
i20	Working actively	-0.12	1.85	1.03	1.87	0.24	2.21	-1.14 **	0.005
i45	Encouraging those around you to get involved	-1.77	2.29	-0.56	2.37	-1.17	2.32	-1.21	0.19
i13	Being team oriented in the workplace	-0.69	2.14	0.58	2.52	-0.15	2.30	-1.27	0.11
i1	Being flexible and adaptive in various situations	1.12	2.14	2.47	1.83	0.91	2.33	-1.35 *	0.03
i12	Working in collaboration with others	0.15	2.33	1.52	2.07	0.02	2.33	-1.37 *	0.03

The significant differences ( $p > 0.05$ ) in the mean of students aspiring to become civil servants over those of current civil servants were for “i46 Contributing to society through your job”, “i8 Being rule-oriented,” “i23 Thinking before you act”, and “i34 Showing originality through your work”. Although “i17 Being relaxed at work”, “i30 Networking at work”, “i44 Leading a stable life”, and “i19 Being supportive of people in need” were not significantly different at  $p > 0.05$ , a slight increase in the sample size could have resulted in a significant difference. The most important feature is that the difference in means was larger, and the p-value was much smaller than that of the comparison with private sector aspiring students, as previously described in “i46 Contributing to society through your job”. Although no significant differences were found, the difference between the means for “i19 Being supportive of people in need” was also somewhat large, and the p-value was relatively low. The students aspiring to become civil servants seem to show a comparatively high degree of sense of public-mindedness, including a high level of consciousness of following the rules. The mean difference between “i23 Thinking before you act” and “i34 Showing originality through your work” was high and significant. On the other hand, although not significantly different, the mean differences for “i17 Being relaxed at work”, “i30 Networking at work”, and “i44 Leading a stable life” were high, and the p-values were somewhat small. These suggest that aspiring students’ image of the workplace of current civil servants is not always well formed.

For aspiring civil servants, means were significantly ( $p > 0.05$ ) lower than those for current civil servants for “i12 Working in collaboration with others”, “i1 Being flexible and adaptable in various situations”, “i20 Working actively”, “i40 Taking an interest in various issues and matters”, and “i33 Placing emphasis on the quality of work”.

From this viewpoint, it is noticeable that “i20 Working actively” had a  $p > 0.01$ , indicating a tendency toward a passive attitude on the part of aspiring students. Additionally, the aspiring students’ image of working in the civil servants’ workplace does not seem to match that of the current civil servants.

As previously described, there were fewer items with smaller mean differences and larger p-values than the comparison between aspiring civil servants and aspiring students in the private sector. Nevertheless, The items “i6 Being careful”, “i38 Thinking from another person’s viewpoint”, and “i26 Being responsible for your action’s at work”. were small mean differences, and large p-values had a high degree of similarity between aspiring and current civil servants. Interestingly, the perceptions of responsibility, how to carry out work, and careful consideration before making a decision are very similar between aspiring and current civil servants.

#### 4. Summary and perspective

The survey compared aspiring civil servants, aspiring private sector students, and current civil servants. This revealed an approximate overall picture of aspiring civil servants’ thinking and characteristics to be discovered.

In summary, the following results were derived regarding aspiring civil servants:

- There are significant differences between aspiring civil servants and aspiring and current civil servants regarding contributions to society, following the rules, and thinking carefully before acting, with the mean difference being significantly higher.
- Comparing students aspiring to be civil servants with those aspiring to work in the private sector, the average difference was significantly lower for the former regarding their attitudes toward reaching out to and involving others and seeking to build a network beyond the organization. This suggests

that such students may be more likely to tend to lack confidence in their ability to build relationships with the people around them.

-Comparing current and aspiring civil servants, a significant difference is observed, with the mean difference in being actively engaged in work and interested in various things significantly below the mean. It is suggested that aspiring civil servants may have a relatively passive mind.

-Compared to current civil servants, the mean difference was significantly below the mean for working in collaboration with others and emphasizing the quality of work, and significant differences were also observed. The mean difference is above the mean for showing originality through your work, and a significant difference was also established. There may be a gap in the image aspiring civil servants have of civil service workplaces; for example, students have an image of events, planning, and regional revitalization, such as tourism, whereas, in reality, there are many workplaces where they are in fact required to follow routines, manuals, and rules.

The p-value is also very high. Hence, from the data, it is difficult to argue that aspiring civil servants should not be regarded as suitable candidates because they are stability-oriented. It should be noted that these cannot be considered general trends among university students as most of the respondents were Department of Law students at Toyo University. This study explores the hypothesis of a possible overall picture of aspiring civil servants from the respondents' data. In this respect, the author believes this study has achieved this to some extent.

#### 4.1 Practical contribution and potential policy implications

From the results, a total of three implications in the field of the administration of local government, especially in the area of human resources (HR) management concerning recruitment and training, can be highlighted.

The first is providing information on recruitment strategies in the government sector. Given this information, specifically the issue of what kind of prospective students are to be recruited, it includes basic information when trying to target the students to be drafted in the recruitment strategy or to expand the diversity of aspiring civil servants' perspectives. This kind of information provides the basis for trying to narrow or broaden the target in the recruitment strategy, for example, what kind of students with what kind of thinking you want to recruit. If it expand thinking, it will probably not be easy with the existing approach. The system change is probably needed; for example, if the government wants to recruit new officials, whether this requires thinking like the current general civil servant applicants or if you need to broaden your thinking to include people who think like private sector applicants. This can be an opportunity to consider whether they need to change their approach and what kind of approach they should consider.

Second, this study has provided some hints as to how responses could be taken to mitigate the "reality shock" that may arise after entering the workforce. The information presented herein reveals some new findings. In particular, university students have a relatively high awareness of social contribution. However, in both private and public sectors, becoming aware of the large gap between ideals and reality in the workplace as a member of society can lead to maintaining morale and accumulating mental fatigue. It may also provide an opportunity to consider the content of "On the Job Training" at each departmental workplace that accepts newly recruited staff and how to deal with such staff.

Third, it also provides information for HR to consider what competencies they should develop and



cultivate when undertaking training and other development programs for recruits. Suppose there are challenges in the current organization. In such cases, this information can be used as a basis for considering how to develop newly recruited staff to prevent the reproduction of such challenges and how to pass on positive organizational characteristics if they currently exist.

Furthermore, if possible, a panel of data using this method before and after employment would provide a profile of the thinking of each newly recruited staff member, which could be used as reference information for initial assignments and immediate post-employment transfers.

#### 4.2 Contributions and implications for university education

The information obtained from this survey also represents a useful contribution and implication for university education. It provides an opportunity for students who took part in the Q sort survey and those who examine the results to consider how their perception of their own values differs from the average student's perspectives, as well as aspiring private sector students and current civil servants. In addition, it can help them to reflect on what they lack confidence in and need to improve upon and how they could develop their strengths.

On the other hand, teachers need to fully explain and introduce the fact that the averages and differences presented herein are not necessarily exemplary.

In addition, the content of this study could present useful information, especially for teachers who are on the side of supporting aspiring civil servants and staff in charge of providing career support. This does not mean that the average of current civil servants is the correct answer. Still, it gives aspiring civil servants basic information for guidance and advice on what gaps may exist in the future workplace as a new hire after an offer of employment or as a reference in their occupational choice before taking the qualification.

#### 4.3 Subjects and perspectives

First, the Q sort data can be subjected to factor or principal component analyses to typify the tendency of the P-set to view things differently. Although this is appropriate in an original Q methodology study, the interpretation herein was first based on the mean values, which can be intuitively grasped even if statistical knowledge is not necessarily sufficient. However, the approach to typification by Q methodology is an issue that needs to be addressed immediately. Further efforts should be made to obtain data on various attributes in the future. This will enable a deeper study based on the current data so that the survey can be expanded in the future. For example, for data on current civil servants, the existing data are on those belonging to the Partial Affairs Association of Metropolitan Area Cities for Personnel Affairs and Welfare Services. Many were engaged in so-called administrative work. Therefore, we would like to obtain data from a more diverse range of frontline workers, including those who have contact with residents at the counter and at events. Furthermore, data from other individual municipalities and specialized staff, including those in welfare, civil engineering, and architecture, should also be acquired. By obtaining and analyzing these data, it will be possible to highlight further characteristics.

The acquisition of data on private sector employees is also important. This will enable an understanding of the nature of civil servants' perspectives on work compared to those of private sector employees. By obtaining data for private sector employees in different industries and occupations, it is

possible to clarify the characteristics of each. For students, it would also be possible to conduct surveys at other universities and obtain data from various grades to enable hypothesis-forming research that better captures the characteristics of the students. The Q set can be developed for multiple subjects as a survey format.

#### Acknowledgments

This paper is supported by JSPS KAKENHI Grant Numbers JP 20K01485 and JP 17K03547. The Association of the Tokyo Metropolitan Area Cities is very grateful to the Tokyo Special Cities Institutions Study Group for providing us with the opportunity to continue discussing the future development of Q methodology research. I would also like to express my sincere thanks to the Tokyo Special Cities Institutions Study Group members, Reona Hayashi, Takeshi Fukaya, Shigeo Nakajima, and Shizuka Kajiwara, for their continuous suggestions and advice on our research.

Additionally, members of the Special Ward System Study Group, Reona Hayashi, Ken Fukaya, Shigeo Nakajima, and Shizuka Kajiwara, for their continuous suggestions and advice on our research. The secretariat staff of the Special District System Study Group also assisted in organizing discussions and making various adjustments. I would like to express my gratitude to them. The secretariat staff of the Tokyo Special Cities Institutions Study Group from the Association of Tokyo Metropolitan Area Cities also assisted in arranging discussions and making various adjustments. I would like to express my gratitude to them for their assistance.

#### References

- Brown, S. R. (1996). Q methodology and qualitative research. *Qualitative Health Research*, 6(4), 561–567
- Hara, K. (2019). Differences in work perspectives between Sapporo International University students and working people [Sapporo Kokusai daigaku no gakusei to hataraiteiru syakajin no shigotokan no chigai], *Bulletin of Sapporo International University*, 50, 163-191.
- Hayashi, R., Fukaya, T., Minowa, M., Nakajima, S., & Kajiwara, S. (2020a). The application of Q Methodology to public administration research' [Q houhouron no gyouseigaku heno ouyou] *Gyousei Syakai Ronsyu* (in Japanese), 32(3), 195-233.
- Hayashi, R., Fukaya, T., Minowa, M., Nakajima, S., & Kajiwara, S. (2020b). Review of trends in technical improvements to the Q methodology [Q houhouronn no gjutsutekina kaizen no doukou ni kannsuru review](in Japanese), *Gyousei Syakai Ronsyu*, 33(1), 1-36.
- Honjo, M. (2018). Varieties of reality shock in early careers of university graduates: Early turnover comparisons across behaviour, firm size, and industry [Daisotsu career niokeru reality shock no tayousei: souki risyokukoudou no umu, jigyouyokibo / sangyoukan no hikaku](in Japanese), *Economic theory*, 394, 1-15, Wakayama University.
- Kyodo News (2020). Twenty-something bureaucrats leave, more than four times as many as before. [20dai kanryo no taisyoku, 4 baicho ni](in Japanese), 19<sup>th</sup> November 2020 19:55 update (<https://this.kiji.is/702106240962610273?c=3954674183946240>) Last accessed: 4<sup>th</sup> December 2020.
- McKeown, B., & Thomas, D. B. (2013). *Q Methodology*. Sage Publications, Inc.
- Matsui, H. (2016). A study of university students' views on work. [Daidgakusei no shigotokan ni kansuru kenkyu](in Japanese). *The Journal of Kawamura Gakuen Woman's University* (2), 73-86, Kawamura

Gakuen Women's University Library Committee.

- Moroi, K., & Sakamoto, H. (2014). Occupational values among female university students: relationship with personality traits [josidaigakusei ni okeru syokugyouchikan: seikakutokusei tonon kankei] (in Japanese). *Doshisha josidaigaku seikatsu kagaku*, vol. 48, 25-32
- Ministry of Internal Affairs and Communications. (2019). *Survey on the retirement status of local public officials in 2018* [Heisei 30 nenndo chihoukoumuin no taisyokujoukyou tou chousa] (in Japanese).
- Ministry of Internal Affairs and Communications. (2014). *Survey on the retirement status of local public officials in 2014* [Heisei 25 nenndo chihoukoumuin no taisyokujoukyou tou chousa] (in Japanese).
- Nihon Keizai Shimbun. (2020). "Public servants' desire to change jobs surges, registration at major sites highest; in their 20s, to foreign firms and IT; long working hours to be reviewed. " [komuin no tensyoku kibou ga kyuzou, oote site touroku saiko, 20dai, gaishi ya IT he, chujikanrourou no minaoshi kadai.]15 March 2020, morning edition, page 2.
- Nomura, Y. (2017). *Social Science Ideas: One Epistemology, Research Design, and Methods*. [Shakaikagaku no kangaekata ninshikiron, research design syuhou] (in Japanese). Nagoya daigaku syuppankai.
- Okamoto, I. (2011). Measuring values using the Q sort method: How to capture what is hard to capture [Q bunruihou niyoru kachikannno sokutei-ikani toraeduraimonowo toraeruka] (in Japanese), *Akamon Management Review*, 10(12), 851-878
- Ozaki, H. (2016). Work and university perspectives among female university students in relation to their time horizons [Joshi daigakusei niokeru shigotokan to daigakukan, jikannteki tennbou tonon kanren] (in Japanese), *Psyche*, 15, 43-56, Kyoto Noredame University Department of psychology.
- Tokubetoku seidokenkyukai (2019) 6<sup>th</sup> term report of Tokyo Special Cities Institution Study Group [Tokubetoku Seido kenkyu kai dai rokki houkokusyo] (in Japanese). The Association of the Tokyo Metropolitan Area Cities. ([https://www.tokyo-23city.or.jp/chosa/seidokenkyu/documents/dai6ki\\_zinnzaiikuseinisisurukisokekyuu.pdf](https://www.tokyo-23city.or.jp/chosa/seidokenkyu/documents/dai6ki_zinnzaiikuseinisisurukisokekyuu.pdf)).
- Watts, S., & Stenner, P. (2012). *Doing Q methodology research: Theory, method, & interpretation*. Sage Publications, Inc.