

## EFFECT OF LIBRARIAN CERTIFICATION ON KNOWLEDGE AND MOTIVATION OF JAPANESE LIBRARIANS

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**Introduction.** There are not many kinds of librarian certification in Japan. Among them, *Shisho* (SC) is almost the only certification for public librarians, but few libraries and parent organizations (e.g., local public entities) take this certification seriously. About half of full-time-employee (FTE) public librarians do not have an SC. However, from this background, can we conclude that SC is useless? To see what the effect of SC certification really is, we conducted a survey.

**Method.** We asked questions about (1) the knowledge and skills of librarians and (2) their motivation to (a) librarians with an SC certification, (b) librarians without SC, (c) non-librarians with SC, and (d) non-librarians without SC. The total number of respondents was 700 (numbers of types (a), (b), (c) and (d) were 137, 124, 114 and 325, respectively). We used an Internet survey service provided by Yahoo! Japan. The survey was conducted from January 18 to 29, 2008.

**Results.** The librarians with SC knew the meanings of library-related terms and were confident in using database search techniques. On the other hand, the librarians without SC did not know basic terms such as "reference service", "OPAC" or "ILL" and their knowledge and skills seemed to be no more than would be expected of ordinary library users. As for job motivation, our results showed that many librarians with SC wanted to continue their jobs and wished to improve their skills and knowledge, while not a few FTE librarians without SC replied that they did not want that. As for their reasons for becoming librarians, "Because the parent organization ordered me to work at the library" was the most chosen among FTE librarians without SC.

**Conclusion.** If all the other conditions are the same, libraries and their parent organization should preferably place people with SC certifications in libraries.

### 1. Introduction

There are not many kinds of librarian certification in Japan. Among them, *Shisho* is almost the only certification for public librarians.<sup>1</sup> However, few libraries and parent organizations value *Shisho* librarian certification (henceforth SC) and about half of public librarians do not have one.<sup>2</sup> Is SC useless for librarians? The present study is intended to assess the effect of having an SC on the competences of librarians. Although our primary goal is to reveal its effect on librarians, we will investigate its effect on non-librarians too. More than 12,000 students acquire SC in more than 250 colleges and universities in Japan every year (Miwa et al. (2006)). 99% of them do not become librarians. In the sense that a large number of non-librarians with SC are being produced through LIS education, SC's effect on their abilities is an important issue.

Acquiring any kind of certification is thought to have the following effects on the acquirer: (1) acquisition of knowledge, (2) strengthening of motivation toward subsequent learning, (3) increase in self-confidence and (4) favorable treatment when looking for jobs because of the skill certification. Of course, these effects are not independent and in many cases one will kindle another. This study particu-

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<sup>1</sup> It is stipulated in Article 5 of the Library Law in Japan.

<sup>2</sup> As of April 1<sup>st</sup> 2007, the number of FTE public librarians is 13,573. Among them, librarians with SC number 6,914 (J.L.A. Editorial Board of Library Year Book (2008)).

larly spotlights items (1) and (2) above. In other words, we would like to answer the following questions: Does SC result in acquisition of knowledge and skills? Are librarians with SC still interested in improving themselves? It goes without saying that any attempt to prove a cause and effect relationship with the acquisition of certification is difficult. However, through a comparison of the four groups mentioned below, we hope to clarify the covariant relationship between certification acquisition and each attribute and paint a fairly realistic picture of the effects of acquiring certification.

We surveyed the following individuals who graduated from university on their knowledge and skills obtained through acquiring SC and motivation in regard to the jobs and services they are engaged in:

- (a) Individuals who have SC and are currently working at a library,
- (b) Individuals who have SC and have never worked in a library,
- (c) Individuals who do not have SC and are currently working at a library, and
- (d) Individuals who do not have SC and have never worked in a library.

Here, the term "university" refers to both junior colleges and four-year universities. The term "library" refers to the National Diet Library, prefecture, municipal, and ward libraries, and elementary, junior high school, high school, and university libraries.<sup>3</sup> The positions included in "work" include regular staff members, non full-time staff members, and part-time workers.

Though there have been various discussions of the state of library and information science education in colleges and universities (Shibata (1994); Maekawa (1995); Asahina (2001); Ooshiro (2001); Sakata (2002)), of which LIPER is a good example (Nemoto (2004); Miwa et al. (2006); Ueda et al. (2005); Ueda et al. (2006)), empirical survey research focused on individuals with SC are not common. This is probably because it has been difficult to implement follow-up surveys focusing on individuals who acquired SC but chose not to work as a librarian (group (b) above). Because individual privacy is protected, most universities would not reveal contact information about such individuals. This study took that problem into account and employed a new method, i.e., an Internet survey. In an Internet survey, we can ask questions such as, "Do you have an SC?" and, "Are you currently a librarian?" to some hundreds of thousands of monitors nationwide in a preliminary stage. We can then choose only the individuals who fit the conditions (i.e., the four types of people mentioned earlier) and ask them detailed questions.

## **2. Related Studies**

Despite their importance, empirical surveys on people with and without SC are not common. Maeda (1985) reported the basic attributes, such as age, sex, and working years, of public librarians in Osaka Prefecture. But librarians with SC were not distinguished from those without SC. The Practical Social Education Research Center in National Institute for Educational Policy Research (2007) conducted a large survey on the current status of public librarians in Japan. But the target was limited to librarians with SC, and a comparison with librarians without SC was not made.

## **3. Method**

The present study used the Yahoo! Research<sup>4</sup> Internet survey. We conducted a preliminary survey to find individuals for the four groups described in Section 1 and asked selected persons to respond to the main survey.

### **3.1 Preliminary Survey**

The preliminary survey requested respondents to select the qualifications that they currently had, and those who selected SC from 23 choices (such as certified public accountant and teaching license) were assumed to have SC. To see whether the respondent had worked at a library, the preliminary survey included the question, "After graduation from university or junior college, have you ever worked at a library (including part time, temporary staff, etc., but not including volunteer activities)?" We selected the final subjects from these candidates by using the sample adjustment described in Section 3.2.

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<sup>3</sup> We should have asked only public librarians because SC is a certification intended for them. But we asked other types of librarians because (1) it was difficult to obtain enough public librarians and (2) there is no certification for university and national librarians in Japan, and we expect that SC is also effective for such librarians.

<sup>4</sup> <http://research.yahoo.co.jp/>

### 3.2 Sample Adjustment

Four attributes that were considered to contribute to the differences between groups were controlled in advance. They were (1) sex, (2) age, (3) junior college or university graduate, and (4) liberal arts major or science major.<sup>5</sup> For instance, the proportion of women with liberal arts majors is relatively higher for people with SC than those without SC. Thus, even if some differences between groups (a) and (c) were observed, the inference that these differences are simply related to there being more women in group (a) rather than having SC might be sustainable. Here, in order to avoid such an argument, respondents for (d) were selected to have the same composition ratio with (b) for the above four attributes. For instance, the proportion of women and junior college graduates in group (d) would have the same values as that for group (b). Thus, the effects of the four attributes would be equal for (b) and (d), and the effect of the attribute of SC should be easier to observe. We wanted to use this policy for group (a) and (c) too, but the group (c) candidates obtained from the preliminary survey were not sufficiently numerous for this type of composition ratio adjustment. Thus, group (c) was not adjusted. As discussed later, the ratios of the four attributes of group (a) and (c) were found to be quite similar.

## 4. Results

The preliminary survey was conducted from January 18 to 20, 2008, and main survey from January 24 to 29. After the preliminary survey, a total of 851 individuals who belonged to any of the four groups were selected and requested to respond to the main survey. A total of 708 individuals responded, and there were 700 valid responses. The number of responses for groups (a)-(d) were (a) 137, (b) 114, (c) 124, and (d) 325.

### 4.1 Basic Attributes

Table 1 shows the results for sex, age, junior college or universities graduated, and liberal arts or science major.<sup>6</sup> With regards to sex, there was a high proportion of women (86.8%) among non-librarians with SC. This value was used to adjust the sex ratio for the non-librarians without SC sample. The proportion of women among non-librarians without SC (88.0%) is the result of such an adjustment.

The composition ratio of the age structure peaked in the 30s for all 4 groups. As this differs from the age composition ratio of the general population, this indicates a bias in this survey method and can be said to show the limits of the Internet survey.

We can see from Table 1 that the proportions of sex, ages, and college or university graduates do not differ significantly between librarians with and without SC. In addition, the proportions of science graduates among librarians with and without SC were 8.0% (=2.2+3.6+1.5+0.7%) and 5.6%, respectively, and they were not significantly different. Therefore, the observed difference between librarians with and without SC, which we will describe in the next section, is likely to have been derived from attributes other than the above. We will relate the differences to SC.

### 4.2 Affiliation and Responsibilities

The results for non-librarians will be shown first and then the ones for librarians.

We asked non-librarians what kind of work they were engaged in. The results are shown in Table 2.<sup>7</sup> For instance, we can see that 6.3% of non-librarians without SC are engaged in the construction industry while only 1.3% of non-librarians with SC are engaged in it. Although most ratios do not significantly differ between those with and without SC, the ratios concerning bookstore and information technology are significantly different (at the 0.01 level and 0.05 level, respectively). It can be said that relatively more non-librarians with SC than those without SC have jobs in these industries.

We asked the librarians the type of library that they worked in and whether they were full time (FTE) or part-time workers. The results are shown in Table 3. We can see that the ratio of university librarian among FTE librarians with SC is 30.0% while the ratio among FTE librarians without SC is 12.5%. Generally, the ratio of school librarians among FTE librarians without SC is higher than that among FTE librarians with SC. The reverse can be said about university librarians. As for the other librarian types, there seems to be little difference.

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<sup>5</sup> The definition of science included the four fields of science, engineering, agriculture, and medicine/pharmacology; other fields were considered to be liberal arts.

<sup>6</sup> "N" represents the sample size.

<sup>7</sup> Table 2 does not include respondents who are not working. Therefore, the total number of respondents (N) is different from N in Table 1.

		Librarians with SC	Non-Librarians with SC	Librarians without SC	Non-Librarians without SC
Male		22.6	13.2	25.0	12.0
Female		77.4	86.8	75.0	88.0
20s		35.8	23.7	35.5	24.9
30s		49.6	47.4	46.8	47.4
40s		14.6	28.9	17.7	27.7
Junior college		21.2	29.8	24.2	32.3
University	Keio University	4.4	0.0	2.4	1.2
	University of LIS	2.9	1.8	0.0	0.0
	Other	66.4	66.7	66.9	63.4
Graduate school		5.1	1.8	6.5	3.1
Science	Science	2.2	0.0	0.8	0.3
	Engineering	3.6	0.9	3.2	1.5
	Agriculture	1.5	0.0	0.0	0.3
	Medicine	0.7	0.9	1.6	0.3
Liberal arts	Law	5.1	3.5	7.3	4.9
	Politics	1.5	0.0	1.6	1.2
	Economics	4.4	1.8	8.1	8.0
	Business	2.9	0.9	7.3	9.8
	Sociology	2.9	7.9	4.0	7.1
	Education	8.8	3.5	16.9	9.8
	Literature	54.0	62.3	29.8	29.8
	Home economics	1.5	3.5	4.8	10.2
	Arts	1.5	0.9	2.4	3.1
	LIS	7.3	7.0	0.8	0.3
Other	2.2	7.0	11.3	13.2	
N		137	114	124	325

Table 1. Sex, age and academic career of the respondents.

	Non-Librarians with SC	Non-Librarians without SC
Agriculture, forestry and fisheries	0.0	1.0
Construction	1.3	6.3
Electricity	0.0	1.6
Machine	2.6	2.6
Automobile	2.6	2.1
Energy	0.0	1.0
Transport	2.6	3.6
Health care	6.4	6.3
Mass media	0.0	1.6
Publication	5.1	3.1
Bookstore	2.6	0.0
Education	14.1	8.3
Information technology	16.7	8.9
Finance	7.7	8.9
Insurance	2.6	4.7
Real estate	2.6	1.0
Restaurants	1.3	2.6
Other manufacturing	6.4	10.9
Other wholesale	7.7	11.5
Other	17.9	14.1
N	78	192

Table 2. Occupations of people with and without SC.

	Librarians with Shisho Certificate		Librarians without Shisho Certificate	
	FTE	Part-time	FTE	Part-time
Public library	34.0	46.0	34.4	56.5
University library	30.0	37.9	12.5	32.6
School library	24.0	14.9	50.0	8.7
National Diet Library	12.0	1.1	3.1	2.2
N	50	87	32	92

Table 3. Types of employment and libraries.

We asked the librarians what services they provide (allowing multiple answers). Table 4 lists the ratios of the respondents. For instance, 42.0% of FTE librarians with SC are engaged in children's services. This table shows that librarians with SC are engaged in specialized (such as reference services and classification) and more services than librarians without SC. Relatively more FTE librarians without SC are engaged in accounting and general affairs.

	Librarians with Shisho Certificate		Librarians without Shisho Certificate	
	FTE	Part-time	FTE	Part-time
Circulation transaction	78.0	83.9	40.6	53.3
Reference service	82.0	66.7	28.1	21.7
Children's service	42.0	32.2	25.0	12.0
Service for the handicapped	20.0	6.9	3.1	5.4
Service for the aged	14.0	5.7	0.0	3.3
Library cooperation (interlibrary loan, etc)	46.0	33.3	6.3	2.2
Shelf reading	66.0	75.9	40.6	30.4
Selection	58.0	36.8	37.5	13.0
Cataloging	46.0	37.9	25.0	14.1
Classification	52.0	43.7	21.9	18.5
Input of various data	62.0	60.9	50.0	47.8
Accession	62.0	51.7	37.5	21.7
Preparation	54.0	51.7	18.8	13.0
Accounting and general affairs	34.0	11.5	40.6	6.5
Planning and management	50.0	4.6	25.0	3.3
Others	14.0	11.5	0.0	2.2
N	50	87	32	92

Table 4. Services engaged in by librarians.

### 4.3 Knowledge of Library-related Terms and Concepts

#### 4.3.1 Knowledge of Library Terms

We asked respondents how well they knew 20 terms. The choices were "I know this term well," "I have heard of this term," and "I have not heard of this term". The ratios of respondents who chose the third choice are shown in Table 5. For instance, we can see that none of the FTE librarians with SC (i.e. 0.0%) answered "I have not heard of this term" in regard to "OPAC," whereas 56.3% of FTE librarians without SC answered that way.

Let us explain the characteristics of the terms. We regard terms (1)-(9) to be basic and an understanding of them ought to be necessary for any sort of library work.<sup>8</sup> Terms (10)-(13) are rather historically important.<sup>9</sup> Terms (14)-(15) are related to intellectual freedom, and (16)-(20) are terms that appeared or have become an issue recently.<sup>10 11</sup> The historical terms were not well known to even FTE librarians with SC. The basic terms were well known to FTE librarians with SC.

The FTE librarians with SC knew the terms the best, in the sense that the ratios in Table 5 are low. The part-time librarians with SC followed them. It is a serious problem that librarians without SC do not know much about even the basic terms. Half of them did not know "Reference service", "OPAC" or "SOGO-TAISHAKU (ILL)". About 80% of them did not know "Legal deposit" or "ILL". Interestingly, non-librarians with SC know better than librarians without SC.

<sup>8</sup> Terms (6) and (7) are synonyms for inter-library loan. "ILL" is written in the Roman alphabet and "SOGO-TAISHAKU" is written in Japanese Kanji characters.

<sup>9</sup> Except in a few cases, the "SDI service" has not been provided in Japan. The term is no longer used. In that sense, it can be regarded as a historical term.

<sup>10</sup> The library (18) is one of the first instances of system (17).

<sup>11</sup> (16), (17) and (18) are currently in effect. Some libraries provide (19), while others do not. (20) does not yet exist.

	Librarians with Shisho Certificate		Non-Librarians with SC	Librarians without Shisho Certificate		Non-Librarians without SC
	FTE	Part-		FTE	Part-	
(1) Reference service	0.0	1.1	12.3	50.0	44.6	65.8
(2) OPAC	0.0	8.0	51.8	56.3	51.1	80.3
(3) ISBN	0.0	2.3	26.3	50.0	41.3	66.8
(4) Legal deposit	4.0	16.1	48.2	75.0	80.4	88.3
(5) Archive	2.0	6.9	10.5	25.0	22.8	27.4
(6) ILL	20.0	24.1	83.3	81.3	80.4	95.4
(7) SOGO-TAISHAKU (ILL)	0.0	2.3	34.2	56.3	55.4	74.5
(8) Bibliographic utility	10.0	21.8	59.6	75.0	79.3	88.9
(9) Acid paper	8.0	10.3	36.8	68.8	64.1	67.7
(10) Five laws of library science by Ranganathan	28.0	23.0	71.9	81.3	92.4	97.2
(11) Farmington Plan	58.0	75.9	86.8	87.5	91.3	96.3
(12) CHUSHO Report	26.0	31.0	74.6	87.5	81.5	84.9
(13) SDI service	38.0	60.9	78.1	81.3	81.5	93.2
(14) Library Bill of Rights	0.0	8.0	50.9	65.6	67.4	88.3
(15) Inappropriate discard by FUNABASHI-SHINISHI Public Library	14.0	29.9	75.4	75.0	84.8	90.2
(16) Law concerning promotion of the reading activity of children	10.0	12.6	57.0	56.3	70.7	81.5
(17) SHITEI-KANRISHA-SEIDO (Designated manager system)	8.0	24.1	66.7	71.9	71.7	84.0
(18) YAMANAKAKO-JOHO-SOZOKAN (public library)	32.0	75.9	90.4	90.6	90.2	95.7
(19) Document delivery service (DDS)	38.0	50.6	69.3	71.9	76.1	88.6
(20) JOKYU-SHISHO (senior librarian)	32.0	34.5	52.6	71.9	65.2	69.8
N	50	87	114	32	92	325

Table 5. Ratios of respondents who answered "I have not heard of this term."

We previously saw that about half of the librarians without SC answered "I have not heard of this term" in regard to "Reference service" and "ILL". We thought that they might know of the existence of these services but did not know the terms. Accordingly, we asked the following questions: (a) "Do you know that the libraries borrow books from other libraries if they do not have the books you asked?" and (b) "Did you know that librarians answer questions such as "Do you have books about PFI?" or "How do you pronounce "木天蓼"?" The ratios of respondents who answered "No, I did not know it" are shown in Table 6. For instance, we can see that 18.8% of FTE librarians without SC did not know the service of question (a), i.e. inter-library loan. Although the ratios are relatively lower than those in Table 5, they are still unfavorably high. Nearly 40% of librarians without SC did not know the service of question (b), i.e. reference service, and the ratio is higher than that of non-librarians with SC.

From these results, we can conclude that the librarians without SC do not know much about library-related terms and concepts (or services). They should learn more.<sup>12</sup>

	Librarians with Shisho Certificate		Non-Librarians with SC	Librarians without Shisho Certificate		Non-Librarians without SC
	FTE	Part-time		FTE	Part-time	
(a) Inter-library loan	2.0	0.0	10.5	18.8	18.5	28.6
(b) Reference	0.0	1.1	25.4	37.5	35.9	58.5
N	50	87	114	32	92	325

Table 6. Ratios of respondents who answered "No, I did not know it."

#### 4.3.2 Knowledge of Databases

We asked their familiarity with databases. Table 7 shows the ratios of respondents who answered "I know how to use this database well.". For instance, 24.0% of FTE librarians with SC answered "PubMed or MEDLINE" or the like, while only 3.1% of FTE librarians without SC answered so.

Comparing FTE librarians, we can see that there were significant differences (at the 0.01 level) between the ratios of with SC and without SC for 14 databases (all except COSMOS and TSR). Comparing part-time librarians, there were statistical differences for 6 databases (i.e. ZASSI-KIJI-SAKUIN,

<sup>12</sup> Incidentally, we can see in Table 5 and Table 6 that 60% of non-librarians without SC (i.e. ordinary people) do not know about the existence of the reference service. Libraries should make an effort to inform them about it.

CiNii, InternetArchive, "JDreamII or JOIS", "PubMed or MEDLINE", "Webcat or Webcat Plus"<sup>13 14</sup>). Therefore, it can be reasonably said that librarians with SC are more confident in using databases than librarians without SC.

Comparing non-librarians, we see that there were significant differences (at the 0.01 level) between the ratios with SC and ones without SC for three databases: KIKUZO, ZASSI-KIJI-SAKUIN, and "Webcat or Webcat Plus". Because these are representative databases of newspaper articles, journal papers, and books in Japan, we can say that SC enables holders to search for such materials. It is interesting to note that in comparing non-librarians with SC and librarians without SC, significant differences at the 0.01 level were not observed in all the databases. In that sense, the search skills or competencies of librarians without SC do not differ from those of non-librarians with SC. As shown in Table 4, librarians without SC are not limited to working in a technical or back office capacity and they would be sometimes asked by library users for bibliographic information. They should know more about databases, at least ZASSI-KIJI-SAKUIN and Webcat Plus.

	Librarians with Shisho Certificate		Non-Librarians with SC	Librarians without Shisho Certificate		Non-Librarians without SC
	FTE	Part-time		FTE	Part-time	
NIKKEI TELECOM 21	44.0	20.7	7.0	6.3	13.0	7.1
KIKUZO (by Asahi Shimbun Company)	54.0	19.5	9.6	9.4	9.8	4.0
COSMOS (by TEIKOKU Databank)	22.0	3.4	4.4	6.3	6.5	4.9
TSR (by Tokyo Shoko Research)	14.0	3.4	1.8	3.1	4.3	0.9
DIALOG	22.0	5.7	2.6	0.0	2.2	1.5
JDreamII or JOIS	22.0	17.2	0.9	3.1	2.2	0.3
G-Search	18.0	6.9	3.5	3.1	3.3	4.0
@nifty	40.0	12.6	16.7	12.5	19.6	18.5
PATOLIS or WPI	12.0	1.1	0.9	0.0	1.1	0.6
PubMed or MEDLINE	24.0	17.2	0.9	3.1	2.2	0.3
CA/CAplus/CA-SEARCH	12.0	1.1	0.0	0.0	0.0	0.0
Webcat or WebcatPlus	70.0	51.7	10.5	6.3	5.4	3.1
ZASSI-KIJI-SAKUIN (by National Diet)	66.0	58.6	21.9	12.5	14.1	4.9
CiNii (by National Institute of Informatics)	38.0	36.8	3.5	6.3	9.8	2.5
InternetArchive	20.0	10.3	5.3	0.0	1.1	2.2
Google Book Search	56.0	19.5	21.1	15.6	23.9	20.9
Other than the above	6.0	17.2	53.5	59.4	39.1	60.3
N	50	87	114	32	92	325

Table 7. Ratios of respondents who answered "I know how to use this database well."

#### 4.4 Why did they become librarians?

We asked why they became librarians (multiple answers were allowed).

Table 8 shows the ratios of respondents who selected the choices we gave. For instance, we can see that 30.0% of FTE librarians with SC selected reason (2). We regard terms (1) and (2) to be ideal reasons in consideration of libraries' role in society. Reasons (3)-(7) indicated satisfaction of wants without a social viewpoint, but are somewhat neutral reasons. Reasons (8)-(12) are rather negative ones.

Although the most chosen reason was (3), reasons (1) and (2) are respectively second and third among librarians with SC. In particular, the ratios of (1) and (2) are significantly different between FTE librarians with and without SC (at the 0.01 level). FTE librarians without SC most often chose reason (11): "Because parent organization ordered me to work at the library". In Japan, it is often the case that the parent organization (i.e. local public entities or universities) orders its staff to work at a library irrespective of their background or career aspirations. As a result, some staff who do not want to have to work at libraries and others who want to cannot work at libraries. The above results seem to be related to this system. As for the negative reasons (8)-(12), librarians without SC choose them slightly more often than librarians with SC.

<sup>13</sup> COSMOS and TSR are business information databases. ZASSI-KIJI-SAKUIN and CiNii are Japanese journal databases. JDreamII and JOIS are scientific-paper databases maintained by JST. Webcat and Webcat Plus are databases of Japanese books and OPAC of Japanese university libraries and are maintained by the National Institute of Informatics.

<sup>14</sup> Among other databases in Table 7, NIKKEI TELECOM 21 is a database containing business information and newspaper articles. G-Search and @nifty are, in fact, vendors of various databases. PATOLIS is a Japanese database of patent information like WPI.

	Librarians with Shisho Certificate		Librarians without Shisho Certificate	
	FTE	Part-time	FTE	Part-time
(1) Because libraries connect people and books in a fascinating way	60.0	40.2	25.0	28.3
(2) Because libraries hand down the intellectual heritage to our posterities	30.0	13.8	3.1	9.8
(3) Because I want to read various books	62.0	77.0	28.1	43.5
(4) Because I like children	12.0	13.8	12.5	13.0
(5) Because librarians are stable in employment	18.0	4.6	18.8	6.5
(6) Because I felt an affinity with librarians because my parents are librarians	8.0	4.6	6.3	1.1
(7) Because librarians are cool	8.0	8.0	3.1	9.8
(8) Because librarians can go home at the fixed time	6.0	8.0	12.5	17.4
(9) Because librarians do not have to work hard	2.0	1.1	6.3	4.3
(10) Because librarians do not have to talk to people	4.0	1.1	3.1	3.3
(11) Because parent organization ordered me to work at the library	14.0	2.3	31.3	2.2
(12) Because I failed to get the other job and had no choice	2.0	3.4	6.3	15.2
(13) Others	18.0	19.5	6.3	13.0
N	50	87	32	92

Table 8. Reason they became librarians.

#### 4.5 Job Motivation

We asked the working respondents how much they wanted to continue in their present jobs. The results are shown in Table 9.<sup>15</sup> We can see that 56.0% and 59.8% of FTE and part-time librarians with SC chose "I want to continue at my job as long as possible." These ratios are significantly higher (at the 0.01 level) than the other four groups. In that sense, the librarians with SC are happy with their jobs. On the other hand, 21.9% (i.e. 12.5% + 9.4%) of FTE librarians without SC wanted to quit their jobs. The ratio is significantly higher (at the 0.01 level) than the librarians with SC. Although it is not statistically significant, the ratio is higher than that of the non-librarians without SC (i.e. ordinary working people).<sup>16</sup> In that sense, FTE librarians without SC are relatively unhappy with their jobs.

The degree of "wishing to continue in this job" might depend on what services librarians are providing now. Based on that idea, we calculated the ratio of those who want to quit their jobs among FTE librarians without SC who are engaged in the services in Table 4. The services for which ratios were the highest were cataloging: 38% (i.e. three people wanted to quit jobs among eight people who were engaged in cataloging), accounting and general affairs: 31% (likewise, 4 out of 13), and reference service 22% (2 out of 9). Cataloging and reference services require skills and knowledge of librarianship. If FTE librarians without SC feel depressed in these jobs, FTE librarians with SC should do them instead (FTE librarians with SC who are engaged in these services did not feel like quitting). Accordingly, the number of FTE librarians with SC should be increased.

	Librarians with Shisho Certificate		Non-Librarians with SC	Librarians without Shisho Certificate		Non-Librarians without SC
	FTE	Part-time		FTE	Part-time	
I want to continue my job as long as possible	56.0	59.8	22.9	28.1	31.5	23.6
I want to continue my job	24.0	18.4	12.6	34.4	23.9	21.9
I have no idea	20.0	16.1	51.8	15.6	32.6	39.3
I want to quit my job	0.0	3.4	1.2	12.5	8.7	8.4
I want to quit my job as soon as possible	0.0	2.3	11.5	9.4	3.3	6.7
N	50	87	87	32	92	224

Table 9. Percentages of respondents who want to continue the present jobs

To ascertain the respondents' desire to improve themselves as librarians, we asked how much interest they had in competency tests and professional graduate schools for librarianship. We asked "Do you want to take a competency test of skills and knowledge for librarians if such a test comes into being?"

<sup>15</sup> Because people who are not working now were eliminated from the analysis, the number of respondents is different from the numbers in other tables.

<sup>16</sup> More university librarians and public librarians wanted to quit their jobs. Two out of four FTE university librarians without SC wanted to quit their jobs and three out of 11 FTE public librarians without SC wanted to quit their jobs.



and "Do you want to enter professional graduate school for librarians if such a school comes into being?" The results are shown in Table 10 and 11. We can see in Table 10 that 36.0% and 35.6% of FTE and part-time librarians with SC chose "I want to take it very much," respectively. On the other hand, only 3.1% and 10.9% of FTE and part-time librarians without SC answered that way. Similar results were obtained for the questions about professional graduate school. We can see in Table 11 that while 56.0% of FTE librarians with SC chose "I want to enter if I can continue my job," only 15.6% of FTE librarians without SC chose it. While about 80% of librarians with SC answered "I want to enter," about 30% and 50% of FTE and part-time librarians without SC answered that way.

From these results, we can say that librarians with SC have a stronger desire to improve themselves than those without SC.

	Librarians with Shisho Certificate		Non-Librarians with SC	Librarians without Shisho Certificate		Non-Librarians without SC
	FTE	Part-time		FTE	Part-time	
I want to take it very much	36.0	35.6	13.2	3.1	10.9	6.2
I want to take it	50.0	52.9	52.6	40.6	43.5	45.5
I do not want to take it	10.0	10.3	25.4	40.6	29.3	26.5
I do not want to take it at	4.0	1.1	8.8	15.6	16.3	21.8
N	50	87	114	32	92	325

Table 10. Percentages of respondents who want to take a competency test for librarians

	Librarians with Shisho Certificate		Non-Librarians with SC	Librarians without Shisho Certificate		Non-Librarians without SC
	FTE	Part-time		FTE	Part-time	
I want to enter even if I quit my job	8.0	1.1	1.8	0.0	1.1	1.5
I want to enter if I can continue my job	56.0	48.3	26.3	15.6	25.0	16.3
I want to enter if anything	20.0	28.7	24.6	15.6	22.8	18.5
I do not want to enter if anything	10.0	6.9	22.8	18.8	21.7	27.1
I do not want to enter at all	4.0	6.9	16.7	43.8	26.1	31.4
Others	2.0	8.0	7.9	6.3	3.3	5.2
N	50	87	114	32	92	325

Table 11. Percentages of respondents who want to enter professional graduate school of librarians.

## 5. Discussion

As we have already seen, librarians without SC do not know much about library-related terms such as "reference service", "OPAC". For some terms, their knowledge seems to be no better than one would expect for an average citizen. Conversely, librarians with SC knew the terms much better, regardless of whether they were FTE or part-time librarians. In addition, they knew how to use the representative databases better than the librarians without SC. The knowledge and skills of librarians with SC thus seems to be superior to those of librarians without SC.

As for job motivation, our results showed that many librarians with SC wanted to continue their jobs and wished to improve their skills and knowledge. On the other hand, not a few FTE librarians without SC wanted to quit their jobs and were not interested in improving themselves.

As for the reason for becoming a librarian, "Because parent organization ordered me to work at the library" was the most chosen reason by FTE librarians without SC. As we mentioned earlier, it is often the case that the parent organization orders its staff to work of a library, irrespective of their background and career aspirations. Baba & Yokoyama (1976) conducted a survey and obtained answers from 227 Japanese university libraries. They found that 104 universities move librarians to departments other than libraries. Suzuki (1998) analyzed university libraries where the librarians are moved to other department regardless of whether they have SC or not. It was shown that 396 university libraries out of 734 (54.0%) admitted to such moves in 1989, and 546 out of 902 (60.5%) in 1995. People who want to continue their jobs and improve themselves will obtain knowledge and skills faster and deeper than those who do not. The previously mentioned results on librarians' knowledge and skills indicate that.

## 6. Conclusions

To see the effect of *Shisho* (SC) certification, we conducted a survey of people with and without SC. We found that librarians with SC knew library-related terms and were confident in making database searches. On the other hand, librarians without SC did not know very basic terms and their knowledge and skills seemed to be less than what one would expect. As for job motivation, our results showed that

many librarians with SC wanted to continue their jobs and wished to improve their skills and knowledge, while not a few FTE librarians without SC did not want that. From these results, we can conclude that libraries and their parent organizations should preferably place people with SC in libraries.

In the present study, the respondent librarians included various types such as public librarians and university librarians. Because they are likely to differ in nature, we will conduct further investigations by collecting more samples and categorizing them. Furthermore, we would like to conduct an interview or use another survey method to ascertain the effect of SC more clearly.

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