

## Effects of Allowing Food and Drinks in Japanese Libraries

Marika Kawamoto

Graduate School of Library, Information and Media  
Studies, University of Tsukuba  
1-2 Kasuga, Tsukuba-city, Ibaraki-ken, JAPAN  
marika@slis.tsukuba.ac.jp

Keita Tsuji

Faculty of Library, Information and Media Science,  
University of Tsukuba  
1-2 Kasuga, Tsukuba-city, Ibaraki-ken, JAPAN  
keita@slis.tsukuba.ac.jp

**Abstract**—We investigated the effects of the current practice of allowing food and drinks in Japanese libraries. A questionnaire was sent to 1000 libraries, of which 356 public and 329 university libraries responded. Over half the respondent libraries allow food and drinks in the library. They also report an increase in library use based on measurements such as the number of gate counts after they changed the policy regarding food and drinks in the library. Furthermore, most of the responding librarians did not report a noticeable increase in related stains after relaxing the policy and many users gave favorable evaluations for allowing food and drinks in libraries.

**Keywords**—food and drinks; Japanese libraries; public libraries; university libraries

### I. INTRODUCTION

Nearly from the beginning, food and drinks have not been allowed in most Japanese libraries to protect the integrity of the books and other materials entrusted to these institutions. Some guidelines for library users still prohibit food and drinks in libraries [1] [2]. However, as the discussions of “Library as Place” have increased in recent years, the numbers of public and university libraries that have relaxed their policies to allow food and drinks on the premises have been increasing. There has not been much quantitative research based on large numbers of samples to clarify (a) the current status of allowing food and drinks in Japanese libraries or (b) the effects of relaxing this previously inflexible policy. Using the data collected in this study will further the on-going discussions on the topic with more informed information and allow determinations of whether allowing food and drinks to be consumed on the premises is one way to increase library usage.

In this survey on food and drinks allowed in libraries, respondents who said yes were asked the year the policy was changed, the style of allowing them, whether any adverse effects on library materials were noticed after allowing on-premises consumption, users’ reactions, librarians’ opinions, and so on. In addition, we obtained (1) the number of gate counts (i.e., how many users entered the libraries in one year), (2) number of loans (i.e., how many books were borrowed), and (3) number of reference transactions (i.e., how many times the reference services were used) of each library from the annual *Statistics on Libraries in Japan (1952-2014)* and examined whether the usage statistics showed a correlation of increase after the libraries began allowing food and drinks on the premises.

### II. RELATED STUDIES

Nakano [3], Miyake [4], and Shimamura [5] discussed the appropriateness of allowing food and drinks in libraries. The 2008 Editorial Board of the *Pharmaceutical Library Bulletin* conducted its own questionnaire survey on this topic as well. Mayuzumi [6] studied water intake manners in pharmaceutical libraries and Tando et al. [7] studied public libraries that had set aside specific areas where food and drinks were allowed. However, such investigations have not dealt with food and drinks as they are or are not allowed in all Japanese libraries [8].

Soete [9] published a report on food and drink management in libraries. Gerding [10] and LaPointe [11] mentioned the effectiveness of installing cafés in libraries to cover their budget. However, the U.S. also had few in-depth investigations regarding library policies to allow food and drinks in libraries.

### III. METHOD

Data results from the questionnaires regarding the current status of allowing food and drinks in Japanese public and university libraries are presented; this is followed by the examination of changes in annual library use-levels as provided in *Statistics on Libraries in Japan (1952-2014)* to show significant increases in use where libraries allow food and drinks.

#### A. Sample Libraries

We randomly selected 500 public libraries and 500 university libraries from the list of libraries in Japan published on the Library Association’s Website (as of March 2016, the list contains 1361 public and 1125 university libraries) [12]. The questionnaires were sent to these libraries from May to July in 2015.

#### B. Questionnaire Survey

This questionnaire was created by modifying the *Questionnaire on Food and Drinks Manners in Libraries* as published in the *Pharmaceutical Library Bulletin* by the Editorial Board in 2008. Survey items include:

- (1) Whether food and drinks are allowed in libraries
- (2) Area where food and drinks are allowed
- (3) Types of drinks allowed
- (4) Types of food allowed

- (5) The first year food and drinks were allowed
- (6) Stains on library materials after allowing food and drinks
- (7) Reasons for allowing food and drinks
- (8) Reactions from users after allowing food and drinks
- (9) Details of user reactions
- (10) The impression of changes in the amount of library usage after allowing food and drinks
- (11) User conditions for eating or drinking in the library (for instance, studying or taking a rest)
- (12) Popular food and drinks among users
- (13) Opinions of respondents (librarians) on allowing food and drinks in libraries

Each question allows a single answer, multiple answers or free description. Some questions appear only when certain answers were selected.

### C. Analysis of Library Usage

Based on the year libraries began allowing food and/or drinks, we examined whether library usage (numbers of (1) gate counts, (2) loans, and (3) reference transactions) increased significantly according to three statistics obtained from the annual publication *Statistics on Libraries in Japan* by the Japan Library Association.

The increase rate (IR) of (1), (2), and (3) is defined as

$$IR = \frac{A_2 - B_2}{B_2} \times 100(\%)$$

where  $A_2$  and  $B_2$  are averages of (1), (2), or (3) during the two years after and before allowing food and drinks, respectively. For instance, if library X made its changes in 2010 and its numbers of reference transactions for 2008, 2009, 2011, and 2012 are 310, 330, 380, and 420, respectively, the IR of the reference transactions is 25% as shown below.

$$\frac{\frac{380 + 420}{2} - \frac{310 + 330}{2}}{\frac{310 + 330}{2}} \times 100 = \frac{80}{320} \times 100 = 25(\%)$$

## IV. RESULTS

### A. Survey Results

Of the 500 public and 500 university libraries, respondents were 356 public (71%) and 329 university libraries (66%). Of the 356 respondent public libraries, 17 were prefectural, 212 municipal, 5 ward, and 122 were town/village libraries. Of the 329 university libraries, there were 101 national, 22 public, and 206 private university libraries. There were 287 four-year-old, 24 two-year-old, and 18 technical university libraries.

Due to space limitations, only a small set of the results are presented here, such as Table I for survey item “(1) Whether food and drinks are allowed in libraries.” It shows that more than half the public 56.2% (=36.8 + 19.4 + 0.0) and 62.3% university (=14.0 + 47.7 + 0.6) libraries allow food or drinks on the premises, and exactly what combinations they allow differ from each other. Allowing both food and drinks is most common in public libraries (36.8%), whereas university libraries (47.7%) most commonly only allow drinks.

TABLE I. WHETHER FOOD AND DRINKS ARE ALLOWED IN LIBRARIES

	Allowing foods and drinks	Allowing only drinks	Allowing only foods	Prohibiting foods and drinks
<b>Public library</b>	<b>36.8%</b>	<b>19.4%</b>	<b>0.0%</b>	<b>43.8%</b>
Prefectural	82.4%	5.9%	0.0%	11.8%
Municipal	38.2%	22.2%	0.0%	39.6%
Ward	60.0%	40.0%	0.0%	0.0%
Town and village	27.0%	15.6%	0.0%	57.4%
<b>University library</b>	<b>14.0%</b>	<b>47.7%</b>	<b>0.6%</b>	<b>37.7%</b>
National	22.8%	37.6%	0.0%	39.6%
Public	4.5%	40.9%	0.0%	54.5%
Private	10.7%	53.4%	1.0%	35.0%
Four-year	15.3%	50.9%	0.3%	33.4%
Two-year	4.2%	33.3%	4.2%	58.3%
Technical	5.6%	16.7%	0.0%	77.8%

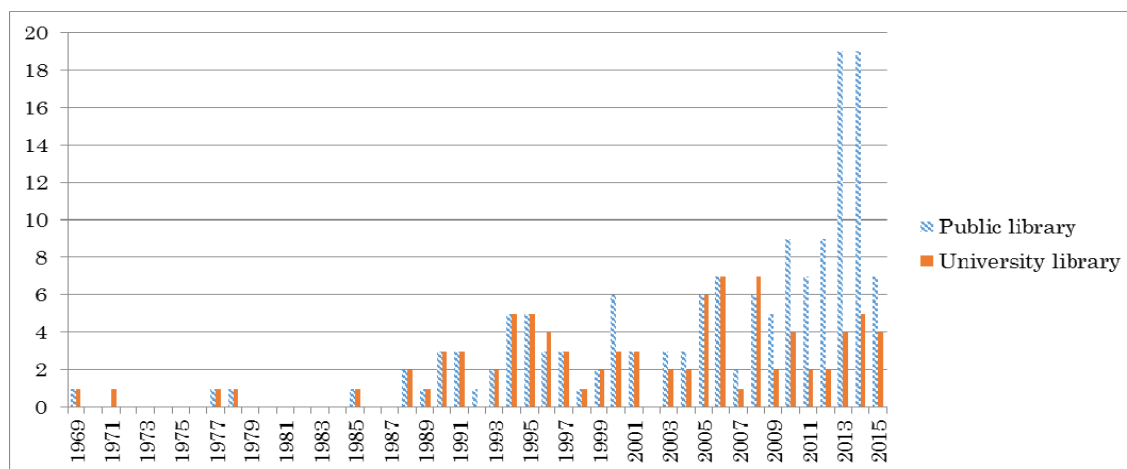


Fig. 1. The first years drinks were allowed

TABLE II. STAINS ON LIBRARY MATERIALS AFTER ALLOWING FOOD AND DRINKS

	Noticeable	Noticeable a little	No change	Little noticeable	Not noticeable	Not sure	Other responses
<b>Public library</b>	<b>0.0%</b>	<b>4.0%</b>	<b>63.5%</b>	<b>0.5%</b>	<b>0.0%</b>	<b>24.0%</b>	<b>8.0%</b>
Prefectural	0.0%	0.0%	46.7%	0.0%	0.0%	33.3%	20.0%
Municipal	0.0%	4.7%	64.8%	0.8%	0.0%	24.2%	5.5%
Ward	0.0%	0.0%	40.0%	0.0%	0.0%	60.0%	0.0%
Town and village	0.0%	3.8%	67.3%	0.0%	0.0%	17.3%	11.5%
<b>University library</b>	<b>3.4%</b>	<b>11.2%</b>	<b>63.9%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>15.6%</b>	<b>4.9%</b>
National	6.6%	8.2%	55.7%	0.0%	0.0%	24.6%	4.9%
Public	0.0%	20.0%	60.0%	0.0%	0.0%	20.0%	0.0%
Private	2.2%	11.9%	67.9%	0.7%	0.7%	11.2%	5.2%
Four-year	3.1%	11.5%	63.4%	0.5%	0.5%	15.7%	5.2%
Two-year	0.0%	10.0%	80.0%	0.0%	0.0%	10.0%	0.0%
Technical	25.0%	0.0%	50.0%	0.0%	0.0%	25.0%	0.0%

TABLE III. REACTIONS FROM USERS AFTER ALLOWING FOOD AND DRINKS

	Positive reactions	Negative reactions	Not reactions	Other reactions
<b>Public library</b>	<b>33.0%</b>	<b>7.0%</b>	<b>53.5%</b>	<b>14.0%</b>
Prefectural	40.0%	13.3%	20.0%	40.0%
Municipal	32.8%	7.0%	57.0%	10.9%
Ward	60.0%	20.0%	0.0%	40.0%
Town and village	28.8%	3.8%	59.6%	11.5%
<b>University library</b>	<b>37.6%</b>	<b>7.3%</b>	<b>53.2%</b>	<b>9.3%</b>
National	39.3%	13.1%	44.3%	16.4%
Public	30.0%	0.0%	70.0%	0.0%
Private	37.3%	5.2%	56.0%	6.7%
Four-year	38.7%	7.3%	51.3%	9.9%
Two-year	20.0%	0.0%	80.0%	0.0%
Technical	25.0%	25.0%	75.0%	0.0%

TABLE IV. THE IMPRESSION OF CHANGES IN THE AMOUNT OF LIBRARY USAGE AFTER ALLOWING FOOD AND DRINKS

	Much increased	Increased	No change	Decreased	Much decreased	Not sure	Other responses
<b>Public library</b>	<b>0.5%</b>	<b>7.5%</b>	<b>58.5%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>26.0%</b>	<b>7.5%</b>
Prefectural	6.7%	0.0%	26.7%	0.0%	0.0%	40.0%	26.7%
Municipal	0.0%	6.3%	61.7%	0.0%	0.0%	27.3%	4.7%
Ward	0.0%	20.0%	20.0%	0.0%	0.0%	40.0%	20.0%
Town and village	0.0%	11.5%	63.5%	0.0%	0.0%	17.3%	7.7%
<b>University library</b>	<b>1.5%</b>	<b>16.6%</b>	<b>59.5%</b>	<b>2.0%</b>	<b>0.0%</b>	<b>13.7%</b>	<b>6.8%</b>
National	3.3%	13.1%	57.4%	1.6%	0.0%	19.7%	4.9%
Public	0.0%	30.0%	60.0%	10.0%	0.0%	0.0%	0.0%
Private	0.7%	17.2%	60.4%	1.5%	0.0%	11.9%	8.2%
Four-year	1.6%	17.3%	59.7%	2.1%	0.0%	13.1%	6.3%
Two-year	0.0%	0.0%	70.0%	0.0%	0.0%	10.0%	20.0%
Technical	0.0%	25.0%	25.0%	0.0%	0.0%	50.0%	0.0%

Additional results for survey items (2), (3) and (4) included:

#### Public libraries which allow food and drinks

- Food and drinks are only allowed in exclusive areas such as rest rooms (about 77%)
- All kinds of (nonalcoholic) drinks are allowed (about 80%)
- All kinds of containers of drinks are allowed (about 54%)

#### University libraries which allow food and drinks

- Food and drinks are only allowed in a specific part of a library, such as rest rooms and reading rooms (about 63%)
- All kinds of (nonalcoholic) drinks are allowed (about 78%)
- Containers of drinks must have lids (about 86%)

Fig. 1 shows the first years drinks were allowed for survey item “(5) The first year food and drinks were allowed.” It is clear that the numbers of public libraries which allow drinks tend to increase in recent years. Table II shows results, e.g., for survey item “(6) Stains on library materials after allowing food and drinks,” only 4.0% (=0.0 + 4.0) public libraries and 14.6% (=3.4 + 11.2) university libraries answered that stains “(became) [more] noticeable” or “(became) noticeable a little.” On the other hand, 63.5% public libraries and 63.9% university libraries answered “(there was) no change.” For survey item “(7) Reasons for allowing food and drinks,” 60.0% public libraries and 76.1% university libraries answered “To protect users from heatstroke,” which was the most popular reason for allowing food and drinks. Table III shows results, e.g., for survey item “(8) Reactions from users after allowing food and drinks,” only 7.0% public libraries and 7.3% university libraries answered “[there were] negative reactions from users” and 33.0% public libraries and 37.6% university libraries answered “[there were] positive reactions from users.” In

addition, for survey item “(9) Details of user reactions,” the numbers of negative reactions were only 11 in public libraries and 12 in university libraries. On the other hand, the numbers of positive reactions were 42 in public libraries and 40 in university libraries. Table IV shows results, e.g., for survey item “(10) The impression of changes in the amount of library usage after allowing food and drinks,” 58.5% public libraries and 59.5% university libraries answered “(there was) no change.” On the other hand, 8.0% (=0.5 + 7.5) public libraries and 18.1% (=1.5 + 16.6) university libraries answered “[the amount of library usage] much increased” or “[the amount of library usage] increased”. For survey item “(11) User conditions for eating or drinking in the library,” 67.5% public libraries answered “Taking a rest alone” and 85.9% university libraries answered “Studying or working.” For survey item “(12) Popular food and drinks among users,” 94.0% public libraries and 95.6% university libraries answered “Water or tea.” As for popular foods, 57.5% public libraries and 22.9% university libraries answered “Light meal,” which was the most popular. For survey item “(13) Opinions of respondents (librarians) on allowing food and drinks in libraries,” 59.8% public libraries and 58.7% university libraries answered “Drinking should be allowed only in exclusive areas.” As for foods, 46.6% public libraries answered “Eating should be allowed only in exclusive areas” and 47.7% university libraries answered “Eating should be prohibited in libraries,” which were the most popular opinions.

#### B. Results regarding Library Usage

Concerning the survey item “(6) the year of allowing foods and drinks,” the numbers of public and university libraries that answered the year when they allowed drinks were 146 and 172, respectively. Likewise, the numbers of public and university libraries that answered the year when they allowed foods were 90 and 36, respectively.

The means and medians for increases in the rates of the number of (a) gate counts, (b) loans, and (c) reference transactions are shown in Tables V–VII [13] for libraries

TABLE V. MEANS AND MEDIANS OF IRS OF ALLOWING FOOD AND DRINK LIBRARIES AND JAPANESE LIBRARIES (THE NUMBER OF GATE COUNTS)

	Allowing drink libraries			Allowing food libraries			Japanese libraries	
	n	Mean	Median	n	Mean	Median	Mean	Median
<b>Public library</b>	<b>25</b>	<b>+65.7% *</b>	<b>+3.0% *</b>	<b>15</b>	<b>+74.1%</b>	<b>+4.8%</b>	<b>+8.6%</b>	<b>-1.3%</b>
Prefectural	1	+87.2%	+87.2%	1	-20.4%	-20.4%	+6.9%	-2.8%
Municipal	16	+37.7%	+2.7%	9	+44.7%	+4.8%	+9.8%	-0.6%
Ward	2	+227.4% *	+227.4% *	1	+213.5%	+213.5%	+17.5%	+6.7%
Town and village	6	+82.8%	+1.0%	4	+128.8%	+31.0% *	+2.9%	-5.4%
<b>University library</b>	<b>78</b>	<b>+10.8%</b>	<b>+2.7% **</b>	<b>14</b>	<b>+24.6%</b>	<b>+2.7%</b>	<b>+7.3%</b>	<b>-5.2%</b>
National	26	+9.1%	+2.7%	11	+12.6%	+0.4%	+5.4%	-2.5%
Public	3	-2.9%	-6.1%	0			+2.2%	-3.7%
Private	49	+12.5%	+3.3% **	3	+68.6%	+52.4%	+9.4%	-5.9%
Four-year	77	+11.3%	+3.1% **	14	+24.6%	+2.7%	+5.5%	-6.1%
Two-year	1	-29.8%	-29.8%	0			+77.9%	-6.5%
Technical	0			0			+17.4%	-1.2%

TABLE VI. MEANS AND MEDIANS OF IRS OF ALLOWING FOOD AND DRINK LIBRARIES AND JAPANESE LIBRARIES (THE NUMBER OF LOANS)

	Allowing drink libraries			Allowing food libraries			Japanese libraries	
	n	Mean	Median	n	Mean	Median	Mean	Median
<b>Public library</b>	<b>63</b>	<b>+173.7% *</b>	<b>+13.5% **</b>	<b>47</b>	<b>+228.4% *</b>	<b>+56.5% **</b>	<b>+40.9%</b>	<b>+4.1%</b>
Prefectural	5	+425.1%	+168.5% **	5	+391.4%	+110.7% **	+15.0%	+3.2%
Municipal	41	+97.0%	+12.1% **	28	+143.0%	+25.2% **	+48.6%	+4.4%
Ward	2	+159.6%	+159.6% *	1	+261.0%	+261.0%	+10.3%	+4.8%
Town and village	15	+301.6%	+12.6% **	13	+347.2%	+73.9% **	+35.2%	+3.5%
<b>University library</b>	<b>86</b>	<b>+7.6%</b>	<b>+4.0%</b>	<b>15</b>	<b>+2.6%</b>	<b>+0.2%</b>	<b>+9.3%</b>	<b>-0.4%</b>
National	28	+4.3%	+2.0%	11	+3.8%	+0.2%	+3.9%	-0.2%
Public	3	-6.7% *	-5.3%	0			+13.4%	+2.3%
Private	55	+9.9%	+7.4%	4	-0.7%	+0.5%	+11.3%	-0.6%
Four-year	83	+8.1%	+5.2%	14	+4.0%	+2.8%	+12.5%	+0.2%
Two-year	3	-10.3%	-16.8%	1	-16.8%	-16.8%	+4.8%	-5.9%
Technical	0			0			-0.7%	-3.1%

TABLE VII. MEANS AND MEDIANS OF IRS OF ALLOWING FOOD AND DRINK LIBRARIES AND JAPANESE LIBRARIES (THE NUMBER OF REFERENCE TRANSACTIONS)

	Allowing drink libraries			Allowing food libraries			Japanese libraries	
	n	Mean	Median	n	Mean	Median	Mean	Median
<b>Public library</b>	<b>34</b>	<b>+182.5%</b>	<b>+3.7%</b>	<b>21</b>	<b>+26.9%</b>	<b>+9.2%</b>	<b>+169.8%</b>	<b>+4.8%</b>
Prefectural	3	+51.9%	+22.8%	3	+35.9%	+22.8%	+21.4%	+4.3%
Municipal	24	+151.7%	+3.7%	13	+10.0%	+9.2%	+195.8%	+5.3%
Ward	2	+1213.5%	+1213.5% *	1	+346.1%	+346.1%	+121.8%	+5.5%
Town and village	5	-4.0% **	-32.7%	4	-5.0% *	-40.8%	+140.5%	+3.4%
<b>University library</b>	<b>70</b>	<b>+234.9%</b>	<b>+1.2%</b>	<b>14</b>	<b>-10.7%</b>	<b>-28.8%</b>	<b>+76.3%</b>	<b>-0.8%</b>
National	27	-3.4%	-1.7%	11	-14.3% **	-26.1%	+30.1%	-2.7%
Public	2	+66.4%	+66.4%	0			+219.3%	+4.5%
Private	41	+400.0%	+3.5%	3	+2.8%	-32.8%	+88.9%	±0%
Four-year	70	+234.9%	+1.2%	14	-10.7% **	-28.8%	+53.4%	-3.5%
Two-year	0			0			+125.0%	-2.4%
Technical	0			0			+4.1%	-10.2%

allowing food and drinks as well as all Japanese libraries. The significant differences as determined using Welch's t-test between the means of increase rate of libraries allowing food or drinks and all Japanese libraries are represented by “\*\*0.01” and “\*0.05.” Table II shows that the average rate of increase in the gate counts in public libraries allowing refreshments (N = 25) is 65.7%, and this value is significantly higher at a 0.05 level compared to all Japanese public libraries (8.6%).

Any significant difference between the median rates of increase for libraries allowing food or drinks “\*\*” and all Japanese libraries “\*” was determined using the Wilcoxon rank sum test.

The results indicate that the IRs of the number of gate counts of public and university libraries where drinks are allowed are significantly higher than those for all Japanese libraries. For instance, the mean of IRs of the number of gate counts for all public libraries is 8.6%, whereas that for public libraries allowing drinks (N = 25) increases to 65.7%. A significant difference of 0.05 was observed. The median of IRs of the number of gate counts for all university libraries is -5.2% (note that it is decreasing), whereas that for university libraries allowing drinks (N = 78) is 2.7%. A significant difference of 0.01 was observed.

In general, allowing food or drinks tends to increase library usage more remarkably in public rather than university libraries. Although the IRs of the numbers of loans in university libraries allowing food or drinks and all Japanese university libraries did not differ significantly, the median of IRs of the number of loans for all types of public libraries (prefectural, municipal, wards, and towns/villages) allowing drinks is significantly higher than that for all Japanese public libraries. The median of IRs of the number of loans in prefectural, municipal, and town/village libraries allowing foods is also significantly higher for all Japanese public libraries.

## V. CONCLUSIONS

After analyzing the survey results, we infer that the trend of allowing food and drinks to be consumed in Japanese libraries is having a positive effect on library usage, as indicated by gate counts, lack of concern regarding an increase in stains after allowing food and drinks, and positive responses of a good portion of library users.

However, the sample for library usage analysis was relatively small in this study because usage statistics were not provided for many libraries in the *Statistics on Libraries in*

*Japan (1952-2014)*, making it a point for future research. Moreover, survey respondents were limited to librarians even though the inquiry was about the consumption of food and drinks by library users, indicating a need to conduct a survey that asks about library users' opinions on consuming food and drinks in libraries.

## REFERENCES

- [1] The director of Nagoya University Library. “Request to comfortable and safe space,” Nagoya University Library [http://www.nul.nagoya-u.ac.jp/guide\\_c/guide/onegai.html](http://www.nul.nagoya-u.ac.jp/guide_c/guide/onegai.html) (accessed 2015-05-03) (in Japanese).
- [2] Hamura City Library. “Library instruction | Hamura city library” Hamura City Library. <http://www.hamura-library.tokyo.jp/riyou/manner.html> (accessed 2015-05-03) (in Japanese).
- [3] S. Nakano, The year of 2010 [Japan Association of Private University Libraries] Workshop of east area (Exchange meeting) “Whether university libraries change to McDonald's?” and the management of foods and drinks, Bulletin of Japan Association of Private University Libraries, vol. 136, pp. 79–85, 2011. (in Japanese).
- [4] T. Miyake, “Look-ahead of the trend / To make school libraries more user-friendly – School libraries make it possible to eat and drink, to use library 24 hours,” Nikkei Architecture, vol. 937, pp. 63–70, 2010. (in Japanese).
- [5] T. Shimamura, “CA1675 – Is it no good that you drink anything if you read books? – The problem of drinking in library” Current Awareness Portal. <http://current.ndl.go.jp/ca1675>, 2008. (accessed 2015-05-20). (in Japanese).
- [6] Editorial Board, “Totalling reports and analysis of questionnaire on foods and drinks manners in libraries,” Pharm. Libr. Bull., vol. 53, no. 2, pp. 148–165. (in Japanese).
- [7] T. Mayuzumi, “Water intakes in library: Manners of users,” Pharm. Libr. Bull., vol. 53, no. 2, pp. 144–147, 2008. (in Japanese).
- [8] T. Tando, T. Majikina, and T. Akutsu, “A study on the eating-and-drinking space in public libraries Part 1: The actual condition of installation from the construction scales,” Summaries of technical papers of annual meeting, 2014 (Architectural planning), pp. 413–414, 2014. (in Japanese).
- [9] G. J. Soete, “Managing food and drink in ARL libraries. SPEC Kit 237.” ERIC. <http://eric.ed.gov/?id=ED424871>, 1998 (accessed 2015-05-21).
- [10] S. Gerding, “Fund-raising perks of library cafes,” Public Libraries, vol. 45, no. 6, pp. 40–45, 2006.
- [11] L. M. LaPointe, “Coffee anyone? How marketing classes helped develop a business plan for a college library café,” College & Research Libraries News, vol. 67, no. 2, pp. 99, 2006.
- [12] According to Statistics on Libraries in Japan, there are 3246 public libraries in Japan as of April 2014. In addition, there are 1419 four-year-old university libraries, 194 two-year-old college libraries, and 61 technical university libraries as of May 2014.
- [13] There were some libraries whose (a), (b), or (c) were not shown in Statistics on Libraries in Japan. Such libraries were excluded from the samples. Because of this, the numbers of samples in tables are different each other.