# User Survey on Food and Drinks in Japanese Public Libraries 

Marika Kawamoto, Keita Tsuji


#### Abstract

Several decades ago, food and drinks were disallowed in most Japanese libraries. However, as discussions of "Library as a Place" have increased in recent years, the number of public and university libraries that have relaxed their policies to allow food and drinks have been increasing. This study focused on the opinions of library users on allowing food and drinks in public libraries and conducted a questionnaire survey among users of nine Japanese libraries. The results indicated that many users favored allowing food and drinks in libraries. Furthermore, it was found that users tend to frequently visit and stay longer in libraries where food and drinks are allowed.


Keywords-Food and drinks, Japanese libraries, opinions of users, public libraries.

## I. Introduction

SEVERAL decades ago, food and drinks were not allowed in most Japanese libraries. Oldenburg [1], an American urban sociologist proposed the idea of "the Third Place" in 1989. As he mentioned a library as an example of "the Third Place," discussions of "Library as Place" have spread in recent years. Accordingly, the number of public or university libraries that allow food and drinks have been increasing.

We have already investigated (1) the percentage of Japanese libraries that allow food and drinks, (2) areas of the library where food and drinks are allowed, (3) the types of food and drinks that are allowed, and (4) the opinions of librarians on allowing food and drinks in libraries [2]. The results showed that the $56.2 \%$ and $62.3 \%$ of 356 public and 329 university libraries, respectively, allowed food and/or drinks. We also revealed that $66.0 \%$ of public librarians agreed that "Drinks should be allowed in the whole library" or "Drinks should be allowed in parts of the library." Similarly, $46.9 \%$ of public librarians agreed that "Food should be allowed in the whole library" or "Food should be allowed in parts of the library." However, there may be some differences between what libraries provide and what library users' demand.

This study attempts to clarify whether library users expect libraries to allow food and drinks and used a questionnaire survey to find out. Since opinions could differ between users of libraries where food and drinks are allowed and where they are not, we investigated users in both such libraries.

Marika Kawamoto is part of the Graduate School of Library, Information and Media Studies, University of Tsukuba (e-mail: marika@slis.tsukuba.ac.jp)

Keita Tsuji is part of the Faculty of Library, Information and Media Science, University of Tsukuba, Japan (e-mail: keita@slis.tsukuba.ac.jp).

## II. Related Studies

Davis and Boyer [3] showed that traditional bans on food and drink consumption in academic libraries were gradually giving way in some institutions to more tolerant policies and practices. Singh [4] conducted a questionnaire survey to determine how students used academic libraries and asked about their coffee drinking habits. After examining the findings, suggestions were made for libraries to consider providing coffee for their users. The Louisiana State University (LSU) planners forged a deal with Starbucks to have it set up shop on the first floor of the Middleton Library, as well as two other sites on campus. However, more than 100 students voiced their concerns about the addition to the library in response to an e-mail campaign [5].
In Japan, the 2008 Editorial Board of the Pharmaceutical Library Bulletin [6] and Terasawa [7] conducted questionnaire surveys on allowing food and drinks in libraries. While these surveys were conducted on librarians, Ueoka [8] conducted the survey on users. She reported the results of the focus group interviews conducted by the User Survey Group at Keio University Library. With regard to eating and drinking, she revealed that students preferred to study with access to food and drinks in libraries because "I am hungry while studying" and "I study at home with food and drinks." Do library users really need eating and drinking services? Very few studies have focused on the opinions of library users on policies of allowing food and drinks in libraries.

## III. METHOD

In this study, we focused on public library users across different age groups to investigate their opinions. Because most Japanese libraries disallowed food and drinks until a few years ago, the opinions of users might be significantly different depending on their age.

## A. Sample Library Users

We randomly selected six public libraries that allowed food and/or drinks and three public libraries that did not. These libraries formed the setting of the questionnaire survey that we had conducted in [2] (i.e. some of the respondent librarians in [2] belong to these libraries) and were located in Tokyo, Ibaraki, and Chiba prefectures. We randomly selected 20 library users per library.

## B. Survey Dates

This survey was conducted on weekdays between February and April, 2017, except during students' spring holidays.

We went to each library and asked users to respond to the
questionnaire.

TABLE I
Whether Users Have Used Food and/or Drinking Areas in the Libraries

|  | n | Frequently use | Occasionally use | Do not use | Did not know | Other responses | No response |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Libraries that allow food/drink | 120 | $9.2 \%$ | $16.7 \%$ | $34.2 \%$ | $38.3 \%$ | $0.0 \%$ | $1.7 \%$ |

## C. Questionnaire Survey

The questionnaire was created by combining and modifying our 2015 questionnaire [2], Ueoka's survey [8], etc. Survey items differed depending on whether or not libraries allowed food and drinks. Each question allowed a single answer, multiple answers, or a free description. The survey items were:

For all users:
(1) Users' gender
(2) Users' age
(3) Users' occupation
(4) The time it takes to get from home to the library
(5) Frequency of library visits
(6) Duration of library visits
(7) Number of visitors when coming to the libraries
(8) Purpose of visiting the libraries
(9) Number of books they borrow per month
(10) Frequency with which they read, study, and work while drinking or eating every day, irrespective of whether they are at home or in libraries
(11) Whether users want to allow food and drinks in libraries
(12) Types of food and drinks that users want
(13) Types of food and drinks that make users feel uncomfortable
(14) Opinions of users on library policies allowing food and drinks
(15) Things users want in the eating and drinking areas of the libraries
(16) Comfort of the libraries
(17) Whether users have spilled food or drinks on library materials outside the libraries in the past
(18) Whether to eat or drink when using library materials outside the libraries
For users in libraries that allowed food and/or drinks:
(19) Whether users have used food and/or drinking areas in the libraries
For users in libraries that disallowed food and drinks:
(20) What they do when they feel thirsty or hungry in libraries
(21) Expected change in the frequency of visits after libraries begin allowing food and drinks
(22) Expected change in the duration of visits after libraries begin allowing food and drinks

## IV. Results

One hundred and twenty users of libraries that allowed food and/or drinks and 60 users of libraries that disallowed food and drinks responded to the survey.

First, we reveal the responses to survey item (19) "Whether users have used food and/or drinking area in the libraries" in Table I. It is the survey item for users in libraries that allowed food and/or drinks. Before investigation, we assumed that users
of such libraries would have known about the food and/or drinking area. However, there were a large number of users (38.3\%) who did not know of such a facility. We eliminated these users' responses from our sample to accurately compare the opinions of users of libraries that allowed food and/or drinks with that of the users of libraries that did not.

## A. Basic Results

The characteristics of the users who responded to the questionnaire were shown in Tables II-VI.

1) Users' Gender

TABLE II
Users' Gender

| USERS' GENDER |  |  |  |
| :--- | :---: | :---: | :---: |
|  | n | Male | Female |
| Libraries that allowed food and/or drinks | 74 | $55.4 \%$ | $44.6 \%$ |
| Libraries that disallowed food and drinks | 60 | $45.0 \%$ | $55.0 \%$ |

2) Users' Age

TABLE III
Users' Age (Libraries that Allowed Food and/or Drinks)

| 10 to 19 years | $13.5 \%$ |
| :---: | :---: |
| 20 to 29 years | $12.2 \%$ |
| 30 to 39 years | $14.9 \%$ |
| 40 to 49 years | $9.5 \%$ |
| 50 to 59 years | $9.5 \%$ |
| 60 to 69 years | $17.6 \%$ |
| $70+$ years | $23.0 \%$ |

TABLE IV
Users' Age (Libraries that Disallowed Food and Drinks)

| 10 to 19 years | $18.3 \%$ |
| :---: | :---: |
| 20 to 29 years | $15.0 \%$ |
| 30 to 39 years | $18.3 \%$ |
| 40 to 49 years | $15.0 \%$ |
| 50 to 59 years | $5.0 \%$ |
| 60 to 69 years | $20.0 \%$ |
| $70+$ years | $8.3 \%$ |

3) Users' Occupation

TABLE V
Users' Occupation (Libraries that Allowed Food and/or Drinks)

| Office worker | $9.5 \%$ |
| :---: | :---: |
| Self-employed | $10.8 \%$ |
| Part-time employee | $17.6 \%$ |
| Housewife | $12.2 \%$ |
| Student | $21.6 \%$ |
| Unemployed | $24.3 \%$ |
| Others | $2.7 \%$ |
| No response | $1.4 \%$ |

TABLE VI
Users' Occupation (Libraries that Disallowed Food and Drinks)

| Office worker | $15.0 \%$ |
| :---: | :---: |
| Self-employed | $6.7 \%$ |
| Part-time employee | $13.3 \%$ |
| Housewife | $13.3 \%$ |
| Student | $20.0 \%$ |
| Unemployed | $23.3 \%$ |
| Others | $3.3 \%$ |
| No response | $5.0 \%$ |

Next, we report the results from the perspective of (i) how users use libraries, (ii) using food and drinks in libraries and users' thoughts on it, and (iii) damaging or defiling library materials.

## (i)How Users Use Libraries

For survey items (4) to (9), we asked each user how he or she used libraries. Table VII shows the responses to survey item (5) "Frequency of library visits." Among users of libraries that disallowed food and drinks, $8.3 \%$ answered "Almost every day," whereas that percentage was $14.9 \%$ among users of libraries that allowed food and/or drinks. In addition, $25.0 \%$ of users of libraries that disallowed food and drinks answered "Two or three days a week," whereas that percentage was $31.1 \%$ among users of libraries that allowed food and/or drinks.

For survey item (6) "Duration of library visits" in Table VIII, $20.0 \%$ of users of libraries that disallowed food and drinks answered "Two hours or more," whereas that percentage was $35.1 \%$ among users of libraries that allowed food and/or drinks.

For survey item (8) "Purpose of visiting the libraries" in Table IX, $18.9 \%$ of users of libraries that allowed food and/or drinks and $10.0 \%$ of users of libraries that disallowed food and drinks answered "Research." On the other hand, $21.6 \%$ of users of libraries that allowed food and/or drinks and $31.7 \%$ of users of libraries that disallowed food and drinks answered "To study." Therefore, there are differences between libraries that allow food and/or drinks and those that do not.
(ii) Using Food and Drinks in Libraries and Users' Thoughts on It

Through survey items (10) to (16) and (19) to (22), we investigated the current status of eating and drinking in libraries and the opinions on allowing food and drinks in libraries. Table X shows the responses to survey item (11), "Whether users want to allow food and drinks in libraries." We found that $68.9 \%(21.6 \%+47.3 \%)$ of users of libraries that allowed food and/or drinks and $51.6 \%(18.3 \%+33.3 \%)$ of users of libraries that disallowed food and drinks answered "Please allow both" or "Please allow only drinks." The most popular reasons for this were "To appease my thirst." On the other hand, $29.7 \%$ of users
of libraries that allowed food and/or drinks and $36.7 \%$ of users of libraries that did not answer "Do not allow either." The most popular reason for this was "Because the books get dirty."

According to the responses to survey item (14) "Opinions of users on library policies allowing food and drinks," as seen in Table XI, $82.4 \%(29.7 \%+52.7 \%)$ of users of libraries that allowed food and/or drinks and $86.7 \%(11.7 \%+75.0 \%)$ of users of libraries that disallowed food and drinks answered "Drinks should be allowed in the whole library" or "Drinks should be allowed in parts of the library." With regard to food, as seen in Table XII, $56.8 \%(5.4 \%+51.4 \%)$ of users of libraries that allowed food and/or drinks and $60.0 \%(1.7 \%+58.3 \%)$ of users of libraries that disallowed food and drinks answered "Food should be allowed in the whole library" or "Food should be allowed in parts of the library."
The survey items (20) to (22) were asked only to users of libraries that disallowed food and drinks. Table XIII shows the responses for survey item (20) "What they do when they feel thirsty or hungry in libraries." A large number of users leave the library at least once (for instance, $33.3 \%$ "Go outside once to eat and drink" and $23.3 \%$ "Go home"). On the other hand, $23.3 \%$ of users responded with "Be patient," implying that they deal with their hunger or thirst by being patient and waiting.

Table XIV shows the responses for survey item (21) "Expected change in the frequency of visits after libraries begin allowing food and drinks." With regard to allowing drinks, $1.7 \%(1.7 \%+0.0 \%)$ of users answered "[I think visits will] decrease" or "[I think visits will very] greatly decrease," whereas, $21.6 \%(3.3 \%+18.3 \%)$ of users answered " $[I$ think visits will very] greatly increase" or "[I think visits will] increase." With regard to allowing foods, $6.7 \%(5.0 \%+1.7 \%)$ of users answered "[I think visits will] decrease" or "[I think visits will very] greatly decrease," whereas $16.7 \%$ ( $5.0 \%$ + $11.7 \%$ ) of users answered "[I think visits will very] greatly increase" or "[I think visits will] increase." Table XV shows the responses for survey item (22) "Expected change of duration of visits in libraries after libraries begin allowing food and drinks." With regard to allowing drinks, $1.7 \%(0.0 \%+1.7 \%)$ of users answered "[I think visits will] decrease" or " $[I$ think visits will very] greatly decrease," whereas, $40.0 \%(6.7 \%+33.3 \%)$ of users answered "[I think visits will very] greatly increase" or "[I think visits will] increase." With regard to allowing foods, $5.0 \%(3.3 \%+1.7 \%)$ of users answered "[I think visits will] decrease" or "[I think visits will very] greatly decrease," whereas $33.4 \%(6.7 \%+26.7 \%)$ of users answered " $[I$ think visits will very] greatly increase" or "[I think visits will] increase."

TABLE VII
FREQUENCY OF LIBRARY VISITS

| FREQUENCY OF LIBRARY VISITS |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n | $\begin{array}{c}\text { Almost } \\ \text { every day }\end{array}$ | $\begin{array}{c}\text { Two or three } \\ \text { days a week }\end{array}$ | $\begin{array}{c}\text { One day a } \\ \text { week }\end{array}$ | $\begin{array}{c}\text { Two or three } \\ \text { days a month }\end{array}$ | $\begin{array}{c}\text { One day a } \\ \text { month }\end{array}$ | $\begin{array}{c}\text { Several } \\ \text { times a year }\end{array}$ |  | \(\left.\begin{array}{c}First <br>

time\end{array}\right]\)

TABLE VIII
Duration of Library Visits

|  | n | Less than 30 minutes | $30 \sim 59$ minutes | One $\sim$ Two hours | Two hours or more |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Libraries that allow food/drink | 74 | $14.9 \%$ | $29.7 \%$ | $20.3 \%$ | $35.1 \%$ |
| Libraries that disallow food/drink | 60 | $6.7 \%$ | $45.0 \%$ | $28.3 \%$ | $20.0 \%$ |

TABLE IX
Purpose of Visiting the Libraries

|  | n | To rent books | To read books | Research | To receive reserved books | To return books | To study | To participate in events | To relax | To eat and drink | No purpose | Others |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Libraries that allow food/drink | 74 | 48.6\% | 28.4\% | 18.9\% | 4.1\% | 21.6\% | 21.6\% | 0.0\% | 5.4\% | 0.0\% | 0.0\% | 4.1\% |
| Libraries that disallow food/drink | 60 | 48.3\% | 36.7\% | 10.0\% | 3.3\% | 23.3\% | 31.7\% | 0.0\% | 5.0\% | 1.7\% | 1.7\% | 1.7\% |

TABLE X
Whether Users Want to Allow Food and Drinks in Libraries

|  | n | Please allow both | Please allow only <br> drinks | Please allow only <br> food | Do not allow either | Others | No response |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Libraries that allow food/drink | 74 | $21.6 \%$ | $47.3 \%$ | $0.0 \%$ | $29.7 \%$ | $0.0 \%$ | $1.4 \%$ |
| Libraries that disallow food/drink | 60 | $18.3 \%$ | $33.3 \%$ | $0.0 \%$ | $36.7 \%$ | $11.7 \%$ | $0.0 \%$ |

TABLE XI
Opinions of Users on Library Policies Allowing Drinks

| OpINIONS OF USERS ON LIBRARY PoLICIES ALLOWING DRINKS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n | Drinks should be allowed <br> in the whole library | Drinks should be allowed in <br> parts of the library | Drinks should be <br> prohibited in the library | Others | No <br> response |
| Libraries that allow food/drink | 74 | $29.7 \%$ | $52.7 \%$ | $13.5 \%$ | $2.7 \%$ | $1.4 \%$ |
| Libraries that disallow food/drink | 60 | $11.7 \%$ | $75.0 \%$ | $11.7 \%$ | $0.0 \%$ | $1.7 \%$ |

TABLE XII
Opinions of Users on Library Policies Allowing Food

|  | n | Food should be allowed in <br> the whole library | Food should be allowed <br> in parts of the library | Food should be <br> prohibited in the library | Others | No <br> response |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Libraries that allow food/drink | 74 | $5.4 \%$ | $51.4 \%$ | $35.1 \%$ | $4.1 \%$ | $4.1 \%$ |
| Libraries that disallow food/drink | 60 | $1.7 \%$ | $58.3 \%$ | $35.0 \%$ | $0.0 \%$ | $5.0 \%$ |

TABLE XIII
What They Do When They Feel Thirsty or Hungry in Libraries

|  | n | Go outside once to <br> eat and drink | Go to a <br> restaurant | Go home | Skip lunch/dinner <br> time | Be <br> patient | Secretly eat and drink <br> in the library | Others |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Libraries that disallow food/drink | 60 | $33.3 \%$ | $21.7 \%$ | $23.3 \%$ | $15.0 \%$ | $23.3 \%$ | $6.7 \%$ | $6.7 \%$ |

TABLE XIV
Expected Change in the Frequency of Visits after Libraries Begin allowing Food and Drinks

|  | n | Greatly increase | Increase | No change | Decrease | Greatly decrease | Not sure | Others | No response |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Libraries that allow drinks | 60 | $3.3 \%$ | $18.3 \%$ | $66.7 \%$ | $1.7 \%$ | $0.0 \%$ | $6.7 \%$ | $0.0 \%$ | $3.3 \%$ |
| Libraries that allow food | 60 | $5.0 \%$ | $11.7 \%$ | $65.0 \%$ | $5.0 \%$ | $1.7 \%$ | $8.3 \%$ | $0.0 \%$ | $3.3 \%$ |

## TABLE XV

Expected Change in the Duration of Visits after Libraries Begin Allowing Food and Drinks

|  | n | Greatly increase | Increase | No change | Decrease | Greatly decrease | Not sure | Others | No response |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Libraries that allow drinks | 60 | $6.7 \%$ | $33.3 \%$ | $50.0 \%$ | $0.0 \%$ | $1.7 \%$ | $5.0 \%$ | $0.0 \%$ | $3.3 \%$ |
| Libraries that allow food | 60 | $6.7 \%$ | $26.7 \%$ | $53.3 \%$ | $3.3 \%$ | $1.7 \%$ | $5.0 \%$ | $0.0 \%$ | $3.3 \%$ |

TABLE XVI
Whether Users Have Spilled Food or Drinks on Library Materials Outside the Libraries in the Past

| n | I have defiled a <br> book very much | I have defiled a <br> book a little | I have not <br> defiled a <br> book | I have not used <br> materials outside the <br> library | Not <br> sure | Others | No <br> response |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Libraries that allow food/drink | 74 | $1.4 \%$ | $12.2 \%$ | $62.2 \%$ | $18.9 \%$ | $1.4 \%$ | $1.4 \%$ |
| Libraries that disallow food/drink | 60 | $0.0 \%$ | $15.0 \%$ | $51.7 \%$ | $23.3 \%$ | $5.0 \%$ | $0.0 \%$ |

ISSN: 2517-9411
Vol:11, No:7, 2017

TABLE XVII
Causes of Damage to Library Materials

|  |  | Damaged <br> n <br> while eating <br> or drinking | Getting <br> wet in the <br> rain | Damaged by <br> food and <br> drinks in the <br> same bag | Damaged <br> by <br> someone | Accidentally knocked <br> down food or drinks <br> that I had places nearby | Accidentally <br> writing with a <br> pen | On <br> purpose | Others | No <br> response |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Libraries that allow <br> food/drink | 10 | $0.0 \%$ | $50.0 \%$ | $10.0 \%$ | $20.0 \%$ | $10.0 \%$ | $10.0 \%$ | $0.0 \%$ | $0.0 \%$ | $10.0 \%$ | $11.1 \%$ |

(iii) Damaging or Defiling Library Materials

With regard to survey items (17) and (18), we investigated damage and defilement of library materials. Table XVI shows the responses to survey item (17) "Whether users have spilled food or drinks on library materials outside the libraries in the past." It revealed that $13.6 \%(1.4 \%+12.2 \%)$ of users of libraries that allowed food and/or drinks and $15.0 \%(0.0 \%+$ $15.0 \%$ ) of users of libraries that disallowed food and drinks answered "I have defiled a book very much" or "I have defiled a book a little." As shown in Table XVII, the most common causes were "Getting wet in the rain" by users of libraries that
allowed food and/or drinks (50.0\%) and "[It was] damaged by someone (e.g., children and pets)" by users of libraries that disallowed food and drinks (44.4\%). The results also showed that users of libraries that allowed food and/or drinks have never damaged library materials while eating and drinking outside libraries, whereas, $11.1 \%$ of users of libraries that disallowed food and drinks answered "Damaged while eating and drinking." Meanwhile, $10.0 \%$ of users of libraries that allowed food and/or drinks and $11.1 \%$ of users of libraries that disallowed food and drinks answered "[I] accidentally knocked down food or drinks that I had placed nearby."

TABLE XVIII
Users’ Age $\times$ Whether Users Want to Allow Food and Drinks in Libraries (Libraries that Allow Food/Drink)

|  | Please allow both | Please allow only drinks | Please allow only food | Do not allow either | Others | No response | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 to 19 years | 30.0\% | 40.0\% | 0.0\% | 30.0\% | 0.0\% | 0.0\% | 100.0\% |
| 20 to 29 years | 22.2\% | 77.8\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 100.0\% |
| 30 to 39 years | 18.2\% | 54.5\% | 0.0\% | 27.3\% | 0.0\% | 0.0\% | 100.0\% |
| 40 to 49 years | 28.6\% | 71.4\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 100.0\% |
| 50 to 59 years | 28.6\% | 57.1\% | 0.0\% | 14.3\% | 0.0\% | 0.0\% | 100.0\% |
| 60 to 69 years | 30.8\% | 23.1\% | 0.0\% | 46.2\% | 0.0\% | 0.0\% | 100.0\% |
| $70+$ years | 5.9\% | 35.3\% | 0.0\% | 52.9\% | 0.0\% | 5.9\% | 100.0\% |
| Total | 21.6\% | 47.3\% | 0.0\% | 29.7\% | 0.0\% | 1.4\% | 100.0\% |

TABLE XIX
Users' Age $\times$ Whether Users Want to Allow Food and Drinks in Libraries (Libraries that Disallow Food/Drink)

|  | Please allow both | Please allow only drinks | Please allow only food | Do not allow either | Others | No response |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 to 19 years | $27.3 \%$ | $54.5 \%$ | $0.0 \%$ | $18.2 \%$ | $0.0 \%$ | $0.0 \%$ |
| 20 to 29 years | $11.1 \%$ | $44.4 \%$ | $0.0 \%$ | $44.4 \%$ | $0.0 \%$ | $0.0 \%$ |
| 30 to 39 years | $18.2 \%$ | $45.5 \%$ | $0.0 \%$ | $18.2 \%$ | $100.0 \%$ |  |
| 40 to 49 years | $11.1 \%$ | $22.2 \%$ | $0.0 \%$ | $44.4 \%$ | $100.0 \%$ |  |
| 50 to 59 years | $33.3 \%$ | $33.3 \%$ | $0.0 \%$ | $33.3 \%$ | $0.0 \%$ | $100.0 \%$ |
| 60 to 69 years | $16.7 \%$ | $16.7 \%$ | $0.0 \%$ | $58.3 \%$ | $0.0 \%$ | $0.0 \%$ |
| $70+$ years | $20.0 \%$ | $0.0 \%$ | $0.0 \%$ | $40.0 \%$ | $100.0 \%$ |  |
| Total | $18.3 \%$ | $0.0 \%$ | $36.3 \%$ |  | $40.0 \%$ | $0.0 \%$ |

TABLE XX
THE TIME IT TAKES TO GET FROM HOME TO THE LIBRARY×WHETHER USERS WANT TO ALLOW FOOD AND DRINKS IN LIBRARIES (LIBRARIES THAT ALLOW FOOD/DRINK)

|  | Please allow both | Please allow only <br> drinks | Please allow only <br> food | Do not allow either | Others | No response | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less than 10 minutes | $16.7 \%$ | $55.6 \%$ | $0.0 \%$ | $27.8 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ |
| $10 \sim 29$ minutes | $23.3 \%$ | $46.5 \%$ | $0.0 \%$ | $30.2 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ |
| $30 \sim 59$ minutes | $20.0 \%$ | $30.0 \%$ | $0.0 \%$ | $40.0 \%$ | $0.0 \%$ | $10.0 \%$ | $100.0 \%$ |
| One hour or more | $33.3 \%$ | $66.7 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ |
| Total | $21.6 \%$ | $47.3 \%$ | $0.0 \%$ | $29.7 \%$ | $0.0 \%$ | $1.4 \%$ | $100.0 \%$ |

TABLE XXI
The time it Takes to Get from Home to the Library $\times$ Whether Users Want to Allow Food and Drinks in Libraries (Libraries that Disallow FOOD/DRINK)

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Please allow both | Please allow only <br> drinks | Please allow only <br> food | Do not allow either | Others | No response | Total |
| :---: |
| Less than 10 minutes |

## B. Results of Cross Tabulation

We wanted to consider the characteristics of users who wanted to eat and drink in libraries based on our preliminary results. To do this, we conducted cross tabulation of survey items (11) "Whether users want to allow food and drinks in libraries," (2) "Users’ age," (4) "The time it takes to get from home to the library," (5) "Frequency of library visits," and (6) "Duration of library visits." Tables XVIII and XIX show the cross tabulation results with regard to survey item (11) "Whether users want to allow food and drinks in libraries" and (2) "Users' age" in libraries that allow and disallow food and/or drinks, respectively. It revealed that $70 \%$ to $100 \%$ of users between 10 years and 59 years of libraries that allowed food and/or drinks answered "Please allow both" or "Please allow only drinks", as shown in Table XVIII, (e.g., $70.0 \%$ ( $30.0 \%+$ $40.0 \%$ ) of 10 year to 19 year olds users answered "Please allow both" or "Please allow only drinks"). Tables XX and XXI show the cross tabulation results with regard to survey items (11) "Whether users want to allow food and drinks in libraries" and (4) "The time it takes to get from home to the library" in
libraries that allow and disallow food and/or drinks, respectively. It revealed that all users who answered "One hour or more" from home to the library wanted to drink in libraries. Tables XXII and XXIII show the cross tabulation results with regard to survey item (11), "Whether users want to allow food and drinks in libraries" and (5) "Frequency of library visits," in the case of libraries that allowed food and/or drinks, most users who answered "Please allow both" or "Please allow only drinks" were those who used libraries "two or three days a week" $(87.0 \%)$. In the case of libraries that disallowed food and drinks, most users who answered "Please allow both" or "Please allow only drinks" were those who used libraries "two or three days a month" ( $69.3 \%$ ). Tables XXIV and XXV show the cross tabulation results with regard to survey item (11) "Whether users want to allow food and drinks in libraries" and (6) "Duration of library visits" in libraries that allow and disallow food and/or drinks, respectively. With regard to users of libraries that allowed food and/or drinks, it was seen that the answers "Please allow both" or "Please allow only drinks" gradually increase as the duration of visits increases.

TABLE XXII
Frequency of Library Visits $\times$ Whether Users Want to Allow Food and Drinks in Libraries (Libraries that Allow Food/Drink)

|  | Please allow both | Please allow only <br> drinks | Please allow only <br> food | Do not allow <br> either | Others | No response | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Almost every day | $36.4 \%$ | $45.5 \%$ | $0.0 \%$ | $18.2 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ |
| Two or three days a week | $34.8 \%$ | $52.2 \%$ | $0.0 \%$ | $13.0 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ |
| One day a week | $15.4 \%$ | $46.2 \%$ | $0.0 \%$ | $38.5 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ |
| Two or three days a month | $5.6 \%$ | $44.4 \%$ | $0.0 \%$ | $44.4 \%$ | $0.0 \%$ | $5.6 \%$ | $100.0 \%$ |
| One day a month | $20.0 \%$ | $60.0 \%$ | $0.0 \%$ | $20.0 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ |
| Several times a year | $0.0 \%$ | $33.3 \%$ | $0.0 \%$ | $66.7 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ |
| First time | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ |
| Total | $21.6 \%$ | $47.3 \%$ | $0.0 \%$ | $29.7 \%$ | $0.0 \%$ | $1.4 \%$ |  |

## TABLE XXIII

Frequency of Library Visits $\times$ Whether Users Want to Allow Food and Drinks in Libraries (Libraries that Disallow Food/Drink)

|  | Please allow both | Please allow only drinks | Please allow only food | Do not allow either | Others | No response | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Almost every day | 0.0\% | 20.0\% | 0.0\% | 80.0\% | 0.0\% | 0.0\% | 100.0\% |
| Two or three days a week | 20.0\% | 40.0\% | 0.0\% | 20.0\% | 20.0\% | 0.0\% | 100.0\% |
| One day a week | 11.1\% | 33.3\% | 0.0\% | 33.3\% | 22.2\% | 0.0\% | 100.0\% |
| Two or three days a month | 30.8\% | 38.5\% | 0.0\% | 23.1\% | 7.7\% | 0.0\% | 100.0\% |
| One day a month | 0.0\% | 40.0\% | 0.0\% | 60.0\% | 0.0\% | 0.0\% | 100.0\% |
| Several times a year | 27.3\% | 27.3\% | 0.0\% | 45.5\% | 0.0\% | 0.0\% | 100.0\% |
| First time | 0.0\% | 0.0\% | 0.0\% | 50.0\% | 50.0\% | 0.0\% | 100.0\% |
| Total | 18.3\% | 33.3\% | 0.0\% | 36.7\% | 11.7\% | 0.0\% | 100.0\% |

TABLE XXIV
Duration of Library Visits $\times$ Whether Users Want to Allow Food and Drinks in Libraries (Libraries that Allow Food/Drink)

|  | Please allow both | Please allow only <br> drinks | Please allow only <br> food | Do not allow either | Others | No response | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less than 30 minutes | $18.2 \%$ | $36.4 \%$ | $0.0 \%$ | $45.5 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ |
| $30 \sim 59$ minutes | $9.1 \%$ | $40.9 \%$ | $0.0 \%$ | $45.5 \%$ | $0.0 \%$ | $4.5 \%$ | $100.0 \%$ |
| One $\sim$ Two hours | $13.3 \%$ | $60.0 \%$ | $0.0 \%$ | $26.7 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ |
| Two hours or more | $38.5 \%$ | $50.0 \%$ | $0.0 \%$ | $11.5 \%$ | $0.0 \%$ | $0.0 \%$ | $100.0 \%$ |
| Total | $21.6 \%$ | $47.3 \%$ | $0.0 \%$ | $29.7 \%$ | $0.0 \%$ | $1.4 \%$ | $100.0 \%$ |

TABLE XXV
Duration of Library Visits $\times$ Whether Users Want to Allow Food and Drinks in Libraries (Libraries that Disallow Food/Drink)

|  | Please allow both | $\begin{gathered} \hline \hline \text { Please allow only } \\ \text { drinks } \\ \hline \end{gathered}$ | Please allow only food | Do not allow either | Others | No response | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less than 30 minutes | 0.0\% | 25.0\% | 0.0\% | 50.0\% | 25.0\% | 0.0\% | 100.0\% |
| $30 \sim 59$ minutes | 25.9\% | 29.6\% | 0.0\% | 25.9\% | 18.5\% | 0.0\% | 100.0\% |
| One $\sim$ Two hours | 0.0\% | 52.9\% | 0.0\% | 47.1\% | 0.0\% | 0.0\% | 100.0\% |
| Two hours or more | 33.3\% | 16.7\% | 0.0\% | 41.7\% | 8.3\% | 0.0\% | 100.0\% |
| Total | 18.3\% | 33.3\% | 0.0\% | 36.7\% | 11.7\% | 0.0\% | 100.0\% |

## V.CONCLUSIONS

In this study, we used a questionnaire survey to clarify the opinions of library users on allowing food and drinks in libraries. First, we revealed that a large number of users did not know that food and/or drink were allowed in their libraries. Libraries may not have clearly notified users that food and/or drinks were allowed perhaps because librarians may have been concerned that users' eating and drinking may damage library materials. On the other hand, the number of users who answered "Drinks/Food should be allowed in parts of the library" was larger than the number of users who answered "Drinks/Food should be allowed in the whole library." Moreover, the most popular reason for "Do not allow either" was "Because the books get dirty." Library users may also have been concerned that allowing food and drinks in libraries could damage library materials. However, the most common explanations as to how users damaged library materials were "Getting wet by rain" and "[It was] damaged by someone (e.g., children and pets)." The incidence of damage by food and drinks were relatively few. We therefore infer that librarians and users do not have to worry about food and drink stains on library materials.

It was revealed that users who wanted to eat and drink in libraries were younger people. In particular, they wanted to drink in libraries. The study also revealed that users who spent more time to get to the libraries from their homes preferred to eat and drink in libraries. It was also shown that users who were staying for longer durations in libraries that allowed food and drinks tended to want to eat and drink.

Additionally, it was shown that users of libraries that allowed food and drinks came to libraries more frequently and stayed for longer durations.

Finally, the study results also revealed that the ratio of users who came to libraries to study was not higher in libraries that allowed food and drinks as compared to those that did not. We therefore infer that librarians do not have to worry that their libraries will be filled with students who come to study (as is common during term-end examinations) only because food and
drinks are allowed.
On the basis of these revelations, we conclude that food and drinks in libraries are effective amenities to help users use libraries without imposing a burden on librarians.

In this research, the questionnaire survey was conducted only on library users. Next, we would like to conduct a similar survey on people who do not usually come to libraries.

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