

Identifying the Outcomes Measures for Public Libraries in a Community Context

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Abstract: This study tries to identify the outcomes measures for public libraries through a set of surveys on how two kinds of public libraries (the prefectural and the city) are perceived by the visitors and the community residents. The surveys were conducted in 2003 and 2004 in Mito City (the capital of Ibaraki Prefecture with the population of 265,000) and their questionnaire items were based on the ASQ modules. It was found that these modules are appropriate for the Japanese community context as well, and the scores assessed by each user segment (divided by sex, age group and frequency of use) showed significant differences. From the findings, it can be said that the general population tends to differentiate the two kinds of libraries, but for regular users the difference seems to diminish.

1. Research background and purpose

While the public library's social value is self-evident, its activity has to be accountable to the community on which its financial burden is imposed. J. D. Stewart sets up five levels of accountability for the government that executes the authority delegated by the constituents (Stewart, 1984):

- 1) Accounting for probity and legality (observation of statutes and accounting regulations),
- 2) Process accountability (selection of effective means),
- 3) Performance accountability (economy and efficiency),
- 4) Program accountability (goal setting and its validity), and
- 5) Policy accountability (level of achievement and adequacy of policy).

Recent concern over the government failures and heightened people's expectations have demanded that government services not only abide by the law and fair procedure, but also should be accountable for the realization of effective performance. Along with accountability for the achievement level of service goals, their effectiveness and validity are now indispensable requirements. What is essential is not a simple assessment of service achievements, but an outcomes assessment that even covers the evaluation of policy statements.

As for the outcomes assessment for the public library, however, there have been no clear assessment measures established. In reality, the public library outcomes desired by the constituents depend on each community context, thus they are various. Furthermore, the outcome has a ripple effect, where a primary outcome produces a secondary outcome, and the measures that evaluate each of them have not been clarified yet. First, the outcomes of the public library have to be defined in the context of each community.

This study aims to identify the outcomes measures for the public library. As for the methodology, the community residents were asked how they used the public libraries, and what they expected from them, based on their stated preferences. Mito City, the capital of Ibaraki Prefecture, was chosen for this research. Ibaraki Prefecture lies in the middle of Honshu, northeast of the Kanto Plain, facing the Pacific Ocean. It is a relatively affluent region with a population of approximately 3 million. The city of Mito, 100 km northeast from Tokyo, lies in the north of the prefecture and is an old castle town of 265,000 people.

The Japanese system of public libraries places them under each municipal unit; prefecture subordinate to nation, and cities, towns and villages that are subordinate to prefecture. Public

libraries may be established under each of these. The prefectural library covers the whole body of its constituents, and city/town/village libraries cover the population within each unit. Since a prefecture contains cities, towns and villages, the public library system theoretically can offer its service doubly to constituents. According to the 2003 statistics, public libraries in Japan, including 47 prefectural libraries, number 2,672. The establishment rate of city libraries was about 98%, and that of town/village libraries was approximately 40%. Adding to these, there are a few thousands of community libraries that are not counted, and also tiny libraries for neighborhood children called *bunko no kai* that rely on voluntary management.

Mito City has one prefectural library, and three on the city level, one central and two branches. Another branch library is now under construction, and they also have book mobiles. The performance indicators of each library are shown in Table 1.

Table 1 : Ibaraki Prefectural Library & Mito City Library System (2003)

	Collection	Circulation	Reference transactions	Open days /yr.	ILL transaction (Loaned/Borrowed)
Prefectural	664,233 vols.	867,433 vols.	21,169 items	289 days	5,771/887
City	671,478 vols.	856,112 vols.	1,200 items	278 days	609/459

2. Research method

Although there have been numerous researches that ascertain public library users' preferences, not many have tried to study the library's accountability for their tailoring the service to the user's needs. One study along these lines is ASQ: Alternative Tools for Information Need and Accountability Assessments by Libraries, research undertaken in the 1980s California by Brenda Dervin et al (Dervin, 1987). Based on her gap theory, seven kinds of research modules - interviews, survey questionnaires, and community newspaper etc.- were used. The modules include questionnaire items expressed in "human terms" which were created by interviewing the people as to what kind of benefits they obtained from the library. They asked the library users whether they received any of the following benefits:

- 1) obtained ideas or understanding about something,
- 2) accomplished something; decided what to do or when or how to do it,
- 3) made contact with other people by meeting them at the library or learning to make contact with them there,
- 4) rest and relaxation and a quiet retreat,
- 5) motivation to do something,
- 6) a sense of belonging, and
- 7) pleasure, entertainment and happiness.

We used these questionnaire items to assess people's purposes for their use of the public library service in their own community. Their responses would show what kind of service developments they expected from the public library, and how they evaluated them. Aiming at these, we conducted the following two surveys.

The first survey was conducted with the 653 users who visited the Ibaraki Prefectural Library in the month of October 2003. Considering the differences between a U.S. community and Japanese one and also between the times, we added two additional items to the above ASQ items:

- 1) received adequate advices from the staff and
- 2) accessed services remotely through the net

(This set of 9 items is referred to as ASQ+ in the following). The Ibaraki Prefectural Library, now evaluates all of its services more intensively than most libraries in Japan, so it was assumed that

its services were already tailored closely to user needs.

Based on the result of the first survey, the second survey was conducted by mailing to the randomly sampled 1,000 constituents of Mito City where the prefectural library is located, asking how they viewed the prefectural and city libraries. This survey targeted the general public including non-users of the library, and aimed to understand how the communal residents viewed the co-existence of prefectural and city libraries.

3. Research result (1)

The first survey was conducted on two days (one weekday, the other weekend) by systematically sampling 1,368 visitors from those above the high school age and handing them the survey sheets. 653 of them responded. 573 of respondents used the library more than monthly, showing 87.7% (88%) of the samples were very steady users. They were asked to evaluate each item of the ASQ+ from two viewpoints: how important it was to them and how useful is the prefectural library service for each item. The importance of each item was ranked on 1 to 7 scaling (with 1 least important and 7 the most important), and for the library’s convenience a choice of “do not know,” which does not count, was added. The respondents were also asked to specify the user attributes, such as sex, age group, occupation, frequency of library use, access to library, use of other libraries, etc. Figure 1 below shows the importance of each ASQ+ item.

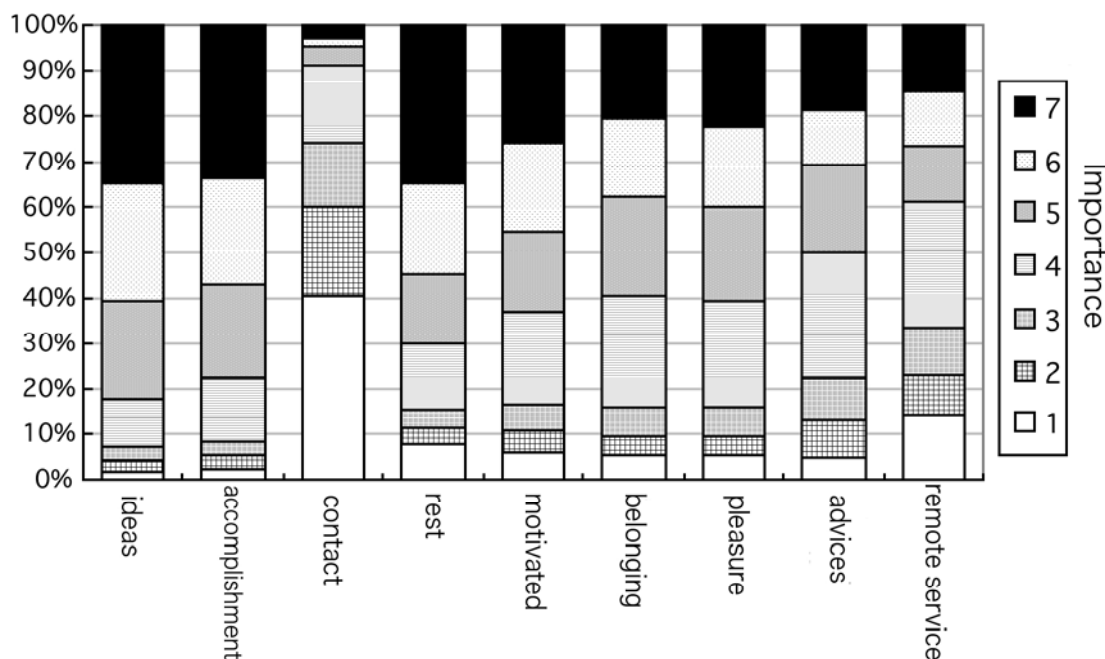


Figure 1 Respondents’ attitudes to the prefectural library with the ASQ+ (importance)

While it was found that 6 of ASQ items were ranked higher than 5 by more than 60% of the respondents (the scores for usefulness corresponded with them), many did not consider the third one (“Made contact with other people”) as important. It was the same in the original ASQ survey. Users of both Japanese and American public library showed much the same responses to the ASQ items. Purposes of use, at least expressed in this manner, can be said to be correlate across communities and times. The evaluation for the added two items was not necessarily high, reflecting the present condition of public library services in Japan.

Furthermore, the scores were converted (rank score 1=5pts, 2=3pts, 3=1pt, 4=0pt, 5=1pt, 6=3pts, 7=5pts) to make a comparison among various user segments.

Table 2 Importance and usefulness scores on the ASQ+ and notes for face analysis

purposes of use	explanatory notes for Chernoff face	importance	usefulness
①ideas	eccentricity of the face ellipse (lower half)	254.8	277.5
②accomplishment	eccentricity of the face ellipse (upper half)	235.4	235.9
③contact		-251.7	-210.2
④rest	eyes & pupils (distance, angle, central height, etc.)	197.0	195.3
⑤motivated	length of the face and the hair	155.6	167.7
⑥belonging	eyebrow (angle, height, length)	130.1	125.8
⑦pleasure	nose (width, length)	140.1	156.2
⑧advice	nose (width, length)	91.1	104.7
⑨remote service	mouth (curvature, width, central height)	14.1	45.3

These results, grouped up in segments, are expressed in Chernoff faces below. The female and male faces of the young look quite similar, but the male faces of the middle-aged and the elder have a very different feature. The results, with “energetic” women and “tired-looking” men, seem as if they symbolized a notable social change in today’s Japan. Large differences were made evident among the user segments.

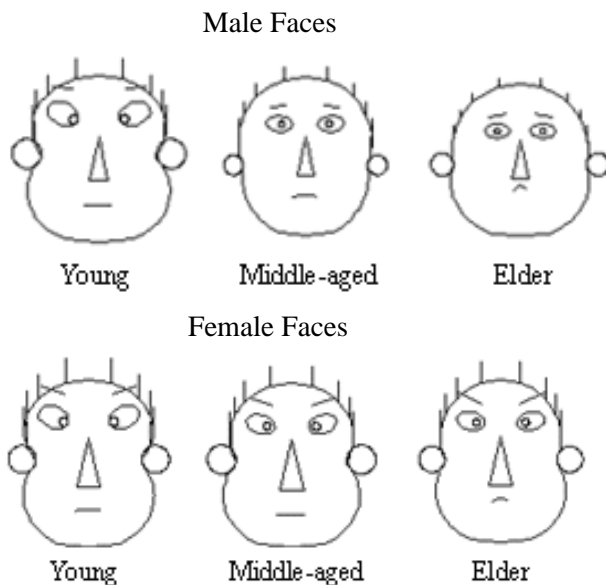


Figure 2 Face analysis of age and sex segments

4. Research result (2)

A total of 455 people responded to our mail-in survey. The valid responses numbered 453, and the response rate was 45.94% (14 were returned due to wrong addresses, and 2 responses were invalid). 51.4% of the respondents were female. Compared with the population rate, that of the respondents was slightly biased toward females (examined with a chi-square test: $\alpha=0.05$). More than a half of the respondents were so-called non-users, with 26.3% having never used the library and 26.7% not within a year. In this survey, attributes such as the respondent’s sex, age group and occupation were of course asked, but there were several other questions added: the image the respondents had of the library, whether or not they used it (reasons for no usage/frequency of use),

how they distinguished the prefectural library from the city libraries, and how far it was to each of these libraries from their home. Furthermore, the questionnaire items were rearranged by deleting the fifth (“motivated”), the sixth (“belonging”) and the ninth (“remote service”) from the ASQ+ and by newly inserting “library as a cultural asset” (this survey is referred to as ASQ+2 in the following). As in the first survey, the respondents were asked to rank them on 1 to 7 scaling, and also to specify their demand for the library service.

The responses to the ASQ+2, which involved non-users, ranked all items except the “contact with others” higher than 5 points on both the average and the median. That is to say, eliminating this one, the rest of the ASQ+2 items are basically expected as the outcomes from the library use.

It should be noted, however, that there were several items whose scores of importance showed significant differences between more-than-monthly users and less-than-monthly or non users as shown in Table 3 (Mann-Whitney test: $\alpha=0.05$). The differences seem to have derived from the respondents’ actual experiences of library use.

Table 3 Importance scores for both library systems measured with ASQ+2

		accomplish- ment	contact	rest	ideas	pleasure	advice	cultural asset
more than monthly	mean	6.08	2.36	5.16	6.12	5.29	5.17	5.29
	median	6.33	1.84	5.45	6.23	5.44	5.39	5.63
less than monthly to more than annually	mean	5.95	2.58	5.12	5.97	4.82	5.14	5.53
	median	6.22	2.16	5.52	6.24	4.85	5.33	6.05
less than annually / non-users	mean	5.59	2.64	4.86	5.41	4.16	4.90	5.41
	median	5.85	2.52	4.88	5.67	4.21	4.88	5.68

The importance score for each item might help distinguishing the roles of the prefectural and the city libraries, and in all but the “pleasure” significant differences were confirmed (Wilcoxon signed-ranks test: $\alpha=0.05$). As shown in the Table 4, the scores for “accomplishment,” “rest,” “ideas” and “cultural asset” were higher for the prefectural library, and those for other items were higher for the city libraries. Also, among more-than-monthly users, significant differences were found only for the “accomplishment,” “ideas” and “advice.” The perceptual differences between the frequent users and the less frequent or non users were clearly shown here, too.

Table 4 Importance scores for prefectural and city libraries measured with ASQ+2

mean value	accomplish- ment	contact	rest	ideas	pleasure	advices	cultural asset
prefectural library	5.77	2.57	4.99	5.67	4.53	5.01	5.42
city libraries	5.30	2.77	4.89	5.48	4.63	4.80	5.08

Furthermore, along with the ASQ+2 module we asked the respondents to rank their demand, again on 1 to 7 scaling, for the actual 9 services offered by the prefectural and the city libraries:

- 1) entertainment materials,
- 2) research materials and seats,
- 3) materials useful for work and business,
- 4) local materials,
- 5) multimedia materials,
- 6) inter-library cooperation,

- 7) internet search,
- 8) consultation and
- 9) remote services.

With all responses counted, there were significant differences between the prefectural and the city libraries in all but the “multimedia materials.” The city libraries earned a higher score only on “entertainment materials,” and it was the prefectural library that earned higher scores on “research materials and seats,” “materials useful for work and business,” “local materials,” “inter-library cooperation,” “internet search,” “consultation” and “remote services” (Wilcoxon signed-ranks test: $\alpha=0.05$). Among the more-than-monthly users, however, only “entertainment material” (the score for the city libraries exceeded that for the prefectural one), “local material” and “inter-library cooperation” (the scores for the prefectural library exceeded that of the city ones) showed significant differences. As seen with the ASQ+2, with users of more frequency, the items that show significant differences came to be limited.

5. Discussion

The assessment measures identified with the ASQ as the items of library outcomes were confirmed by most responses from library users in a Japanese community as they once were in an American one. It might mean that the contents of library outcomes abstracted to this extent gain a wide support. Depending on user segments divided by sex and age etc., however, there were differences of preference among the items. Also, the significant differences between regular and irregular users found in the survey inclusive of non-users are rich in implications as to how each group used the library service. It is essential to further refine the outcomes measures by grasping the context of each segment, and by exploring the scenarios of usage that eventually generate the outcomes.

There is still an on-going dispute among many prefectural libraries in Japan as to how to set their goals and purposes due to the co-existent city/town/village libraries, and their sharing of roles has not necessarily been made clear. These two surveys found significant differences between the libraries of two levels, the prefectural and the city, except for the recreational purposes. Even for the concrete service items actually offered in both types of libraries, differences were confirmed in 9 items excluding the “multimedia materials.” For the continual users, however, differences between the prefectural and the city libraries tended to become limited.

To sum it all up, most of the constituents perceive these two kinds of libraries as separate entities (for example, the prefectural library as an institute that is helpful for academic researches and studies and the center of inter-library cooperation; the city libraries as a “neighborhood library”). As the actual usage develops, however, the user perception of differences in these two types of libraries seems to diminish. And this, in turn, embodies the difficulties for the prefectural and the city libraries (especially for those established by the cities the size of Mito) to distinguish themselves from the other kind of libraries.

Dervin, Brenda; Clark, Kathleen (1987) *ASQ: Alternative Tools for Information Need and Accountability Assessments by Libraries*. Peninsula Library System, Belmont, Calif.

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