

A Study on the Evaluating Service Quality in Special Subject Repository: Focused on the 5·18 Archives

Dae-Hong Lee*, Hyun Jin Hong**

ARTICLE INFO

Article history:

Received 02 November 2017

Revised 24 November 2017

Accepted 15 December 2017

Keywords:

Archival Information Service,
Special Subject Repository,
Service Quality Components,
Recreation Elements of Records,
May 18 Archives

ABSTRACT

The purpose of this study is to measure and analyze the quality of service provided to the users by evaluating the service quality of the May 18 Democratic Uprising Archives, which is a representative, special subject repository, using the SERVQUAL model. To do this, revealing the relationship between factors such as service satisfaction of the archive users, overall service quality and intention of the action. Through this, this study developed service evaluation factors by considering the special subject repository.

1. Introduction

1.1 Research Objectives

As records management innovation on the national level is taking place in earnest, the importance of records is highlighted. As the gap for general users is narrowed by promotion through various media, the number of users searching for archives is increasing. Also, as public interest in the public sector has increased, more and more people are looking for related records. As a result, libraries and museums that provide large-scale independent archives or similar records services are increasingly required to identify customers in order to provide efficient services.

As a result of such changes in awareness, the archives are moving away from the conservation-oriented system of managing collected records, to providing various exhibition services and experiential learning programs both offline and online. These changes demonstrate that the need for the archives to shift to a service-oriented management system, such as the library's information service system,

* Interdisciplinary Program of Archival Studies, Chonnam National University, Korea (leeedh@jnu.ac.kr)

** Professor, Department of Library and Information Science, Chonnam National University, Korea (hjhong@jnu.ac.kr)

International Journal of Knowledge Content Development & Technology, 7(4): 85-106, 2017.
<http://dx.doi.org/10.5865/IJKCT.2017.7.4.085>

is evidenced by the fact that they are looking for changes to an active client-centered archival system.

Also, considering users' interest in searching archives in order to find records that meet their purpose, it can be said that differentiated services, according to the characteristics and sense of purpose of users are needed.

However, in the case of special subject-specific archives, the research for measuring and evaluating the quality of services provided by them is less than other fields. Therefore, the archives must find a way to have a quality of service that can respond effectively to the increased demand for a user's record request.

It is more important to find a way to discover the unique value of the subject archives rather than to find universality between them. Therefore, the services of the Special Subject Repository are proposed within their specific context rather than under a standard criterion.

As such, many Special Subject Repositories with different temporal backgrounds, approaches of direction, and criterion are worthy of study as individual repositories themselves. Among them, the May 18 Archives, as mentioned above, have a high specificity in that a single event has a symbolic representation in the city of Gwangju. Therefore, the value of this study is to identify the details of the May 18 Archives service as a particular case of the Special Subject Repository.

1.2 Preliminary research

Overseas, in relation to the evaluation of record information services, it is commonly pointed out that record information services must capture this context because the interaction between user groups and the archivists is at the core of the service (Conway 1986; Dowler 1988; Pugh 1992; Cox 1992; Yaker 2000). In Korean research, it has been pointed out that the improvement of a service area through the development of a service model for revitalizing records' use and the evaluation within the service evaluation index for the activation measures has proven useful (Han 2011; Yang 2011; Heo 2014; Kim 2016; Jeong 2016; Jeong 2017).

By summarizing these characteristics, it is possible to understand that services are provided at all times because of the characteristics of the public apart from the frequency of use by the users of the archives. It can be confirmed that quality control of the service provided by the archives is important because it has the expertise and cares about the qualitative concerns of users. However, existing studies are focused on public archives, and there are relatively few studies on Special Subject Repositories. With these limitations, I would like to carry out a study on the evaluation of the overall services of the Special Subject Repository; the evaluation factors, the type and scope of the services, and the evaluation methods according to the types and characteristics of the archives.

2. Theoretical background

2.1 Definition of Service Quality

Since the concept of service quality includes many components that reflect the space in which the concept exists, it is very difficult to create a model covering all of them. It is also possible to question the difficulty and effectiveness of applying the model in the same way. As noted, it is used in various meanings without obtaining consensus among researchers and practitioners, and there is a slight difference regarding quality according to each academic field. These differences can be categorized as a comprehensive approach, a user-centered approach, a product-centric approach, a manufacturing-based approach, and a value-driven approach. Each of these five perspectives has characteristics and strengths and weaknesses, so it is desirable to apply them in a multidisciplinary way, rather than weighing them in any one direction. Among them, user-centric or value-centric approaches are the most common.

2.2 Service Quality Evaluation Model

2.2.1 SERVQUAL Model Concept

The SERVQUAL model is a multi-item measure that can be used to understand customer expectations and evaluations in companies that provide services commonly used in service quality measurement in various industries.

In the U.S., Parasuraman, Zeithaml, and Berry (PZB) proposed the first SERVQUAL model by defining the concept of perceived service quality as a general judgment or attitude related to service excellence. I conducted a sample survey of 97 items representing ten dimensions of service quality identified in exploratory research for home appliance repair businesses, banking, long distance telephone services, securities brokerage businesses, and credit card companies. As a result, they were integrated into five SERVQUAL dimensions as they appeared to be highly correlated among the ten dimensions of service quality. Finally, as shown in <Table 1>, the service quality evaluation scale was narrowed down to 5 dimensions such as tangibility, reliability, responsiveness, assurance, and empathy.

Also, PZB proposed a revised SERVQUAL based on an empirical study of five private services in a follow-up study in 1991, which improved the existing SERVQUAL. The purpose of the SERVQUAL model is to provide a diagnostic methodology to discover the strengths and weaknesses of the service quality of an organization. The revised dimensions and items of the SERVQUAL model derived from a systematic and multi-step repetitive process that was applied throughout the service industry. It could be an evaluation criterion that could be applied to the all-around service industry.

Table 1. Five-Dimensional Definition of SERVQUAL Model

Service Quality assessment tenth-dimension	SERVQUAL Model Fifth-Dimension	Definition
Tangibility	Tangibility	Appearance of physical facilities, equipment, personnel, documents, staff, and communication
Responsibility	Responsibility	Ability to believe in the promised ability and perform it correctly
Responsiveness	Responsiveness	Attitude to help customers and provide prompt service
Ability	Assurance	Ability to communicate employees' knowledge and etiquette, trust, and confidence.
Etiquette		
Credibility		
Safety		
Availability	Empathy	Individual consideration and interest the company provides to its customers
Communication		
Understanding customers		

2.3 Archives Service Quality

As the roles and functions of the archives vary, the operational strategies of the archives related to the users must also be changed. Archives have changed from a place that preserves records for certain powers in the past to a repository of resources for research and study, and a democratic approach that keeps records for public purposes. Also, as the standard of living and the importance of records are gradually spreading, there is a growing expectation for a diversity of archival services.

In modern society, a prerequisite for a proper government is to provide accurate information to the public and to share it with the people. To this end, archives should not only protect the rights and interests of all citizens but also play a role in preserving key aspects of cultural heritage. The nation should strive to develop a horizontal relationship in the vertical relationship of one-way information between the state and its citizens by activating disclosure of information and guaranteeing the right of people to know. At this time, the production, management, and service of records that can guarantee the truth of information are essential touchstones for developing a modern democratic society. The service of the archives within the context of such characteristics is represented by records of the archives distinguishing it from general data, and is provided through five steps as shown in <Table 2>.

Table 2. Service steps of archives

Step	Features
1	Registration and identity verification procedures
2	Introduction about business hours, procedure, fee, copyright, handling method
3	Initial interview
4	Continuous interaction with staff in the archives
5	Closing Interview Process

2.4 Service Functions and Roles of Archives

Archival services can be divided into some categories depending on the subject and characteristics of the records and the period of preservation. Also, it is possible to know that services should always be provided due to the characteristics of the archives having the publicity apart from the frequency of the users. In other words, it is important that the quality of the service provided by the archives with professionalism and qualitative concern for the user be emphasized (Cross 1997; Lee 2004; Seo, Jeong, & Choi 2006; Seol 2008).

2.5 May 18 Archives Records Service

Since the May 18 democratization movement is still an ongoing historical event that is guaranteed to be sustainable to this day, the media and contents expressing this event are quite diverse. Keeping the historical value as well as the political and social implications of the May 18 democratization movement in mind, comprehensive information services based on records should be approached comprehensively in terms of physical aspects and content.

Park (2007), proposed a linkage structure that integrates the media and content aspects in order to service the records. This linkage structure has a structural form in which six fields have mutually corresponded, in addition to forms and subjects such as oral testimony records, medical records, military records, administrative agency production records, photo/video records, and private records.

These services are actually being provided. For example, Open Archive, a digital record content providing site of the democratization commemoration business memorial service, selects relevant content topics for each month and collects records according to specific issues and topics. The special significance of the open archive is that it introduces the collections of records together with the content as a compilation of historical records, which are based on major democratization movements and generational classifications. In particular, one of them is the May 18 democratization movement, which suggests that the value of the May 18 democratization movement is not limited to a particular region or group but is widely recognized. The only one of its kind within the major democratization movements, the May 18 democratization movement has an independent institution for archives. In addition to this, it can be explained that it is not a static event that is fixed at a specific time and is not discussed anymore, but has a dynamic cultural heritage that actively reproduces discourse.

On February 10, 2017, based on the internal data that was sent to the archives by e-mail on Feb. 20, the May 18 Archives held a total of 61,568 records. The number of pages of UNESCO-registered records is about 860,000 pages. There are also a lot of unregistered records, and sorting is still going on. There are 676 records that are exhibited on the 1st, 2nd, and 3rd floor at the May 18 Archives, and 27,425 books including the sourcebook related to May 18 democratization movement, publications, papers and general books on the 4th floor. As such, the May 18 Archives is a rich resource of statements made by citizens at that time; a statement of the medical records of the victims, the medical records of the victims, May 18 democratization movement data produced by public institutions, trial data of military law institutions, information on victims' compensation from

the country, records of citizens and testimonies (dictation materials), black-and-white films and photographs, and a place of communication to share experiences with many users.

Unlike traditional archives, which are archival preservation centers, the May 18 Archives in Gwangju consists of seven layers that encompass the complex functions of archives, libraries, and museums. Based on the combined functions of the three elements, it manages records and designs and provides recording information content. It can also be said that it is a characteristic feature that considers the movement of the user who uses the recorder in the space configuration.

In this study, I selected the May 18 Archives for the in-depth study, and an independent, user-friendly multicultural institution with various cultural facilities such as libraries, exhibition halls, and research facilities. The purpose of this paper is to analyze the information services of each user according to a user's request. Although there are suggestions for promoting the development and use of recorded contents in existing research, there is not much of a view of the record information services which cover the procedures and regulations for overall services in the archives. I will conduct research through the May 18 Archives to discuss and evaluate the overall services in the actual archives, the evaluation factors and the types and characteristics of the records according to the types and characteristics of the records.

3. Research design

3.1 Setting up survey items

The purpose of this study is to measure the satisfaction of service quality components from the May 18 Archives and to find out whether there are any differences according to user characteristics. The results of this study are according to what I analyzed around how the satisfaction of the service quality components provided by the May 18 Archives affects the service satisfaction of the May 18 Archives.

In this study, I will focus on two aspects of the May 18 Archives based on the specificity of the Larchiveum as distinct from other archives.

First, as a permanent record management organization, it is necessary to provide a detailed Archival Information Service for each user's request based on a user-oriented service area. Although there are suggestions for promoting the development and use of recorded contents in the existing research, there is not much of a view on the record information service which covers the procedures and regulations for the overall service in the archives. I will conduct research through the May 18 Archives to discuss the evaluation of the overall service in the actual archives, the evaluation factors, the types and characteristics of the services that correspond to the types of records, and the evaluation methods. Therefore, I have tried to measure satisfaction with SERVQUAL which is the most commonly used evaluation model for measuring service quality.

Second, it is characteristic of a complex cultural institution that The May 18 Archives perform a detailed function within libraries, archives and museums. Larchiveum is a neologism created by combining the functions of libraries, archives, and museums. It is an organization with a combination

of functions of each institution in a single space, providing users with various information resources, preservation and research. The May 18 Archives have the same composite functions as Larchiveum, such as the design of information contents based on them, the management and use of data, and the spatial composition considering the movement lines and the office lines.

In this study, I've felt the necessity of analyzing the evaluation factors of Larchiveum. In particular, since the May 18 Archives is still an organization that constantly reproduces the emotions of the community called 'Gwangju,' it was necessary to further develop evaluation factors that emphasize communication within local communities. Therefore, Choi, & Rieh (2012) selected elements based on the spatial composition of Larchiveum. As a result of the study, the elements that reflect and evaluate aspects contributing to the reproduction of collective memories by emphasizing communication within the community were extracted and the three subcategories were exhibition planning, community culture, and recreation elements of records.

<Table 3> shows the survey items that were finally extracted including user characteristics.

Table 3. Survey items

Items	Detailed Items	Measure
User Characteristic	Purpose of visit	Nominal scale
	Number of archives used	
	Age	
	Gender	
	Residence	
Service quality Satisfaction by element	Tangibility (5 questions)	Likert-type 5 point scale
	Reliability (4 questions)	
	Responsiveness (3 questions)	
	Assurance (4 questions)	
	Empathy (5 questions)	
Reproducing Recordings Element	Exhibition Planning (2 questions)	
	Records development (2 questions)	
	Community Linkage (2 questions)	

3.2 Hypothesis setting

Based on the survey items, concrete hypotheses were set. The characteristics of the users set in the hypothesis are divided into the purpose of use, the number of uses, sex, and residence area closely related to the type using the May 18 Archives. This is because the characteristics of the users of the May 18 record book set in the hypothesis are important factors that exert the greatest direct influence on the services provided by the archives. The research hypotheses linking these user characteristics and survey items are as follows:

- Hypothesis 1) There will be differences in satisfaction; (satisfaction of service quality components, the satisfaction of Recreation Elements of Records) according to user characteristics (visit purpose, number of uses, age, sex, residence area).
- Hypothesis 2) Satisfaction with archival service quality components (tangibility, reliability, responsiveness, assurance, empathy) will affect user satisfaction and service user loyalty.
- Hypothesis 3) Satisfaction with the Recreation Elements of Records (exhibition planning, documentary development, community linkage) will affect user satisfaction and service user loyalty.

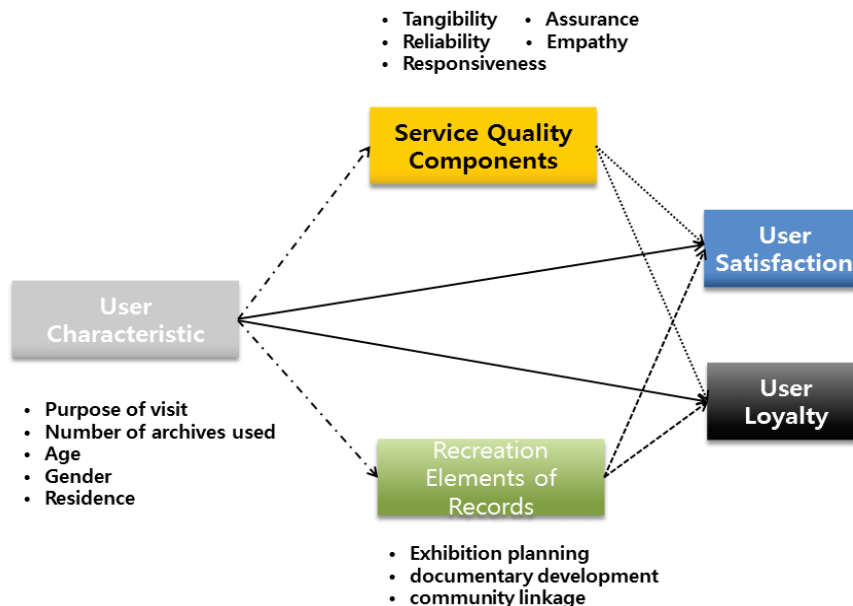


Fig. 1. Research Design Model

3.3 Methods of empirical research

3.3.1 Survey Questions and Survey Outline

Tangibility is defined as ‘the appearance of physical equipment, facilities, and equipment, staff, and communication materials.’ Therefore, in this study, whether or not information about facilities use of archives is provided, information (pamphlet, brochures, copies, etc.) about the display of records of archives is provided, whereupon facilities are clean. Also investigated whether the information about the archives can be easily obtained before visiting the archives. The five items were measured by the five-point Likert scale.

Reliability is defined as ‘the ability to trust a promised service and to perform it correctly.’ Therefore,

in this study, the staff in the archives should be aware of whether they are interested in solving the problem for the user, whether it is appropriate to maintain an accurate business process and service related records, and whether there is a standard of disclosure and a processing standard for the records held by the archives. Four items, such as whether the respondent's response to a questionnaire was appropriate at the time of reading, were measured using the 5-point Likert scale.

Responsiveness is defined as 'a variety of service capabilities that reflect the characteristics of the archives and attitudes to help customers and provide prompt service.' Therefore, in this study, whether or not the approach to the archival user type is provided, whether the staff member is appropriately structuring the contents reflecting the characteristics of the archives (event and exhibition) or whether the staff member is busy. The items were measured by a 5-point Likert scale.

Assurance is defined as 'the ability to convey the knowledge, courtesy, trust and assurance of archival staff.' Therefore, this study is to find out whether the user can feel comfortable in the exhibition room, whether the staff member has the knowledge to answer the user's questions, and whether the staff is always courteous and polite to the user. Four items were measured using the 5-point Likert-type scale.

Empathy is defined as 'individual consideration and concern provided by archives to customers, and consideration of educational and information accessibility.' Therefore, this study is to find out whether there are various access points (free bulletin boards, online surveys) to provide users' customized trips and seminars, whether to provide periodicals and e-newsletters for users, and whether to maintain the appropriateness of the reading regulations (restriction of original reading, limitation of loans, restriction of reading of non - public records) by the 5-point Likert scale.

The items related to the Recreation Elements of Records follow. It was measured whether the offline or online exhibition of various themes such as permanent exhibition, special exhibition, experiential exhibition, and external exhibition were based on records related to specific topics or policy issues with high social interest.

The records development items are as follows. Two items were measured: whether the records were reworked to develop and support information contents development, or educational programs using recorded materials.

Community linkages are as follows. Provide information on the role of the cultural promotion system (invited lectures, liberal arts lectures [university], regional concert support) based on the records of the archives or information on the possibility of utilizing the archives for historical studies and securing the identity of the area. 5-point Likert scale.

The sample of this study was selected by a visitor who visited the Gwangju May 18 Archives, which is a thematic archive. This survey was conducted by distributing questionnaires to 165 users visiting the May 18 Archives from February 24 to May 30, 2017. As a result, the total of 165 copies distributed was retrieved, but the total number of questionnaires was 144 with an exception of unclear 21 copies.

Statistical analysis of this study was performed using the SPSSWIN 23 program. Data analysis methods used in this study are reliability analysis, correlation analysis, one-way analysis of variance, and regression analysis.

4. Results of empirical analysis

4.1 Reliability Analysis

Satisfaction reliability analysis of service quality components showed that the reliability coefficient of satisfaction with tangibility was .763, the reliability coefficient of satisfaction with reliability was .864, the reliability coefficient of responsiveness was .772, the assurance coefficient of satisfaction with assurance .850, and the reliability of satisfaction with empathy was .932. It was found that the internal consistency between the items was very high on all items.

Satisfaction of Record Reproducing Elements: As a result of the reliability analysis, the reliability coefficient of satisfaction with exhibition planning was .782, the reliability coefficient of satisfaction with recording development was .885, and the confidence coefficient with community link was .772. The internal consistency between the items was very high.

4.2 Satisfaction Difference of Service Quality Components and Recreation Elements of Records according to User Characteristics

The gender of the users showed no significant difference between the service quality components of the archives and the satisfaction of the Recreation Elements of Records.

After analysis of variances, there was a meaningful difference about the user's age and the satisfaction with the exhibition planning and the development of the records ($F = 6.398$, $p < 0.01$ / documentary development: $F = 5.455$, $p < 0.01$). Therefore, the Tukey HSD method was used as a post-hoc test to determine where significant differences occurred. As a result of the analysis, it was found that the satisfaction level is the lowest among those aged '50 and over.' It seems necessary to reflect the demands of the generation that actually experienced the time.

The reliability and responsiveness of the service quality components were also significantly different. (Reliability: $F = 4.663$, $p < 0.01$ / responsiveness: $F = 3.097$, $p < 0.05$). As a result of conducting the Tukey HSD method in post-hoc test, it was found that 'Seoul/Gyeonggi areas' had higher satisfaction than 'Gwangju-Jeolla areas.' In order not to go beyond one-time visits, it is necessary to appropriately provide information on exhibitions related to the May 18 Archives via e-news, blogs, and SNS.

There was a significant difference between the intention of visiting and the tangibility, reliability, responsiveness and assurance. ($F = 6.142$, $p < 0.01$ / Reliability: $F = 3.644$, $p < 0.01$ / Responsiveness: $F = 3.035$, $p < 0.01$ / assurance: $F = 3.159$, $p < 0.05$). The Tukey HSD method was used as a post-hoc test. The results of the analysis showed that the satisfaction level of the 'task' was lower than that of 'exhibition' and 'research.' The reason for the dissatisfaction of the people who came for the purpose of the task is that most of the records of the May 18 Archives are confidential and cannot be easily accessed.

There was a significant difference between the users' use frequency and quality of service components (tangible, trustworthy, responsive, confident, empathic), and Recreation Elements of Records (tangibility: $F = 5.716$, $p < 0.01$) / assurance: $F = 5.828$, $p < 0.01$ / Responsiveness: $F = 6.097$, $p < 0.01$ / assurance: $F = 7.014$, $p < 0.01$ / 12.162, $p < 0.01$). Therefore, the Tukey HSD method

was used as a post-hoc test to determine where significant differences occurred. As a result of the analysis, the satisfaction level decreased as the frequency of use increased. It is expected that users will be able to draw up the will to revisit the services by providing diverse and new records through the planning of the special exhibition hall (See Appendix 1, Appendix 2, Appendix 3, Appendix 4).

4.3 Impact of Satisfaction with Service Quality on User Satisfaction

The optimal model for the relationship between user satisfaction and service quality components was found to be 48.7%. This suggests that tangibility plays an important role in user satisfaction among five components of service quality. Therefore, if satisfaction of the use of facilities of the May 18 Archives through such areas as (external parking facilities, etc.), staff's clean-cut good looks, and high public relations of archives is provided, it is expected that the satisfaction of the archives pre-promotion will increase the satisfaction of users. (See Table 4). In addition, the results of this study can be summarized as follows.

4.4 Impact of Satisfaction with Service Quality on User Loyalty

The optimal model for the relationship between customer satisfaction and service loyalty was found to be 57.2% in terms of empathy for user loyalty. This study suggests that empathy plays an important role in user loyalty among the five components of service quality. Therefore, the more research support services for academic research cater to user's individual interests and the more there exists maintenance of appropriate reading restriction regulations, it will be found that these factors produce a higher satisfaction level among users. (See Table 5).

4.5 The Effect of Satisfaction with the Recreation Elements of Records on User Satisfaction

As a result of finding the optimal model for the user's satisfaction with the recreational element of the records, 22.5% of the community-related explanatory power about user satisfaction was found. This suggests that among the three elements of record reproduction, the community linkage of the records plays an important role in the satisfaction of the users. Therefore, when the identity of the region through record-based cultural festivals and recordings is captured, we will expect to see an increase in user satisfaction. (See Table 6).

4.6 Effects of Satisfaction with Recreation Elements of Records on User Loyalty

As a result of finding the optimal model for the effect of satisfaction on the user's loyalty, the community-related explanatory power of user loyalty was 47.5%. This suggests that among the three elements of record reproduction, the community linkage of records plays an important role in the loyalty of the users. It is expected that the loyalty of users will be increased when the satisfaction of the record cultural system and local history research support which can capture local identity through the records of the May 18 archives is raised (See Table 7). In this way,

the loyalty of the users can be increased.

Table 4. Influence of Satisfaction with Service Quality Components on User Satisfaction

Model	R	R ²	Modified R ²	Standard error of estimate	Note percentage
Tangibility	.841	.487	.468	.518	.000
Responsibility	.543	.295	.275	.800	.000
Responsiveness	.467	.218	.202	.839	.000
Assurance	.455	.207	.185	.848	.000
Empathy	.493	.243	.216	.832	.000

* p<.05 , ** p<.01

Table 5. The Effect of Satisfaction with Service Quality Components on User Loyalty

Model	R	R ²	Modified R ²	Standard error of estimate	Note percentage
Tangibility	.659	.434	.413	.595	.000
Responsibility	.605	.366	.348	.627	.000
Responsiveness	.604	.364	.351	.626	.000
Assurance	.633	.400	.383	.610	.000
Empathy	.756	.572	.557	.517	.000

* p<.05 , ** p<.01

Table 6. Effect of Satisfaction with Recreation Elements of Records on User Satisfaction

Model	R	R ²	Modified R ²	Standard error of estimate	Note percentage
Exhibition Planning	.225	.050	.037	.922	.026
Documentary development	.210	.044	.031	.925	.041
Community linkage	.474	.225	.214	.833	.000

* p<.05 , ** p<.01

Table 7. Effect of Satisfaction with Recreation Elements of Records on User Loyalty

Model	R	R ²	Modified R ²	Standard error of estimate	Note percentage
Exhibition Planning	.302	.091	.078	.746	.001
Documentary development	.319	.102	.089	.742	.001
Community linkage	.689	.475	.468	.567	.000

* p<.05 , ** p<.01

4.7 Additional Open Surveys

Table 8 below is a description of additional open surveys. The questions in the open questionnaire were classified as “Details of the questionnaire participants’ below”, “Please describe freely if you want to talk about the records service provided by the May 18 Archives”. As can be seen from the analysis of the open questionnaire, there is an extensive lack of parking facilities, lack of publicity of the May 18 Archives, and lack of contents of the archives exhibition.

Table 8. Detailed response about additional open-poll response

Detailed Items	Frequency
Lack of publicity	12
Parking facility complaint	5
Lack of archive records contents	5
Staff kindness satisfaction	2
Archives environment satisfaction	3
Hope to visit	4
Activate the archives online homepage	2
Educational value satisfaction	2
Difficulty understanding questionnaire item	2

5. Conclusion

In this study, the evaluation factors of the service quality provided by the records management agency were measured through the user satisfaction survey and the research was conducted to present the future of the archives.

In this study, the evaluation factors of the service quality provided by the records management agency were measured through the user satisfaction survey and the research was conducted to present the future of the archives.

In addition, the characteristics of the users of the archives are divided into the purpose of visit, number of times of use in the archives, age, sex, residence area, and the components (tangibility, credibility, responsibility, assurance, empathy) and Recreation Elements of Records (Exhibit planning, documentary development, community linkage), and regression analysis of the effect on service user satisfaction. Collection of materials was used in the questionnaire survey and the questionnaire survey was conducted on 165 representative users of the democratic movement of May 18, which are representative thematic archives. The statistical package was analyzed using SPSSWIN 23. The results of this study are as follows.

First, for the user satisfaction study we considered factors based on evaluation items, and the reliability of service quality components such as ‘tangibility’, ‘reliability’, ‘responsiveness’, ‘assurance’, and ‘empathy’. The cronbach’s alpha value of all elements is significantly higher than 0.7. Therefore,

it was verified that there is no problem in performing additional analysis. The satisfaction of each element was, '763' for tangibility, '.864' for reliability, '.772' for responsiveness, '.850' for assurance, and '932' for empathy. Tangibility was the lowest, followed by responsiveness. Overall, the users of the May 18 Archives were generally satisfied with all the evaluation factors. However, it was relatively low in terms of tangibility.

Satisfaction with tangibility was the lowest because of dissatisfaction with 'accessibility to the archives' and 'prior information on the archives' among the five evaluation factors of tangibility. Most users have pointed to the lack of access to external parking facilities and archival promotion. Therefore, I think that the satisfaction of the service will be improved if the tangibility is complemented as follows. As a countermeasure for tangibility, it is necessary to consider whether to secure free parking facilities or to jointly use parking facilities of outside facilities, i.e. (Cultural Complex). The difficulty of obtaining prior information in the archives can be attributed to a lack of publicity for the archives. In addition, I will consider the establishment of public relations strategies such as record-related educational events and seminars utilizing the potential resources of local communities such as universities and civic groups, attracting trips connected with schools, and activating military groups and organizations.

Second, it analyzes the demographic characteristics of users.

The purpose of the visit was the largest number of exhibitions (57.6 %). Next, interest is 17.4%, others (homepage reorganization, curiosity, and meeting) are 13.9%, and task is 8.3%. The number of archives used was the highest at 61.1% for one time, 11.1% for 2 times, 13.2% for 3 times, and 14.7% for 4 times or more. The average age of visit to the archives was 59.7% in the age group of 20 ~ 30 years old, 18.8% in the age group of 30 ~ 40 years, 9.7% in the age group of 40 ~ 50 ,(7.6%)? and those who are under 19 years of age are 4.2%. Sex was 61.1% for women and 38.9% for men. The residents of Gwangju and Jeolla provinces were the highest number of residents with 48.6%. The residents of Seoul and Gyeonggi were 24.3%, while the residents of Busan, Daegu and Gyeongsang areas were 11.1%, Daejeon and Chungcheong areas 7.6% , Gangwon 6.3% and Jeju area 2.1%.

The results of <Hypothesis 1> are as follows. The verification result of satisfaction with user characteristics (visiting purpose, the frequency of use, age, sex, residential area) was analyzed in <Hypothesis 1> synthetically. Regarding the purpose of the visit, 57.6% of the visitors visited due to the viewing of the exhibition. As a result of the analysis, it was found that the satisfaction level of 'exhibition viewing' was higher than that of 'task' and 'interest.' This can be considered as a problem of overcoming limitations and expandability of archives. In order for the May 18 Archives to be more available, the contents of the archives should be accurately grasped and various topics should be determined, and the contents of the exhibition should be systematically structured so as to be faithful to the subject. In other words, it is necessary to improve the completeness of contents in order to understand the main events and significance of the May 18 democratization movement by designing differentiated exhibition contents from other related contents. To do this, I would like to construct the story line so that the display background is not simply a list of the types of records, but that the background and context of the production of each document surrounding the characters, are linked within a single context in the overall scenario. In close cooperation

with historians, it has been found that exhibitions would benefit from being held in accordance with historical significance and characteristics. It is necessary to select appropriate records for exhibition scenarios so that they have not only the contents linkage of the records but also the visual linkages by appropriately arranging them. Also, the exhibition density should be efficiently configured so that the user can perceive the display interval of the exhibition properly. In addition to an interesting array of exhibits, visitors would have the opportunity to make use of experience displays so that users can create and experience out of them. The exhibition description service could provide explanations of the exhibition records in a multilingual manner so that foreigners can use the contents of the exhibition. Also, foreigners should be able to quickly respond to user's questions and requests. When designing the exhibit line, it is best if it is made easy to use the signboards in areas where there is a high possibility of causing confusion among the users, thus making it easy to find the positions of the entrances and exits in each exhibition room so that there is no confusion in the visitors' view. In order to overcome limitations, it is possible to think about the nature of complex cultural functions (external factors of exhibition: outdoor resting space, food and drink resting space) and plan exhibitions connected with other institutions, such as cultural centers, in the operation of the archives.

Satisfaction with service quality components and the recreation elements of records factor according to a user's frequency of use of a records showed higher satisfaction more than '2 times' and '7 times' when the number of uses was 'once'. As the number of uses increases, the satisfaction level decreases. The selection of the theme, which is the core of the exhibition, depends on the quality and quantity of the records of the archives. It is necessary to set up a special thematic gallery and a different exhibition theme from the regular exhibition hall, and change the period to one month or three months on average to provide new and varied records to new users. This will lead to the expectation of the next exhibition, which will lead to a return visit, and inspire the effect of publicizing the archives.

It was the lowest in 'task' in tangibility, reliability, responsiveness, and assurance according to a user's purpose of visit. The reason for the dissatisfaction of the people who came for the purpose of 'task' is that most of the records of the May 18 Archives cannot be easily accessed. There are several agencies that manage records, such as the May 18 research institute of Chonnam National University and the May 18 Memorial Foundation. This suggests that the May 18 Archives alone has considerable weaknesses in the accessibility of traffic with other organizations and the concentration of related research. To complement this, the May 18 Archives should be able to display the records of other related institutions or to eliminate the thirst of researchers through joint management of newly discovered records.

The satisfaction of exhibit planning and records development according to the user's age was the lowest in 'over 50.' It is presumed that the ages of '50 and over' experienced May 18 directly, and the direction of the events and the development of current exhibitions and records were different from generations after May 18 (under 50 years old). Therefore, it is necessary to create a mechanism so that their memories and experiences can be reflected in the development and display of records, and also that the May 18 Archives can cover the entire generation.

In the analysis of satisfaction with reliability and responsiveness according to the user's residence

area, it was confirmed that satisfaction with reliability and responsiveness was higher than that with 'Gwangju and Jeolla-do areas' when the residential area was 'Seoul-Gyeonggi areas.' In order to increase the satisfaction of long-distance users, the following can be supplemented. In order to establish, maintain, and strengthen relationships with those who use the archives, it is important to constantly communicate with visitors. It is also essential to establish a database for current users and future users. To accommodate users and geographical weaknesses, it is hoped that they will not only go on one-time visits but that in doing so, this will also lead to ongoing visits. To do this, they need to provide information on news related to the May 18 Archives through e-news, blog, SNS, publication of various publications, and special events related to archives.

Regression analysis of satisfaction with service quality components (tangibility, trustworthiness, responsiveness, assurance, empathy) of <Hypothesis 2> showed 48.7% of the descriptive power of user satisfaction. This suggests that tangibility plays an important role in user satisfaction among five components of service quality. Therefore, if satisfaction of acquiring advance information about parking facilities and staff availability exists, it is possible to obtain an increased effect. The difficulty of obtaining prior information in the archives can be attributed to the lack of publicity for the archives. Therefore, I will consider the establishment of public relations' strategies such as record-related educational events and seminars utilizing the potential resources of local communities, such as universities and civic groups, attracting trips linked to schools, and activating military organizations and groups.

As a result of regression analysis of satisfaction with service quality components of <Hypothesis 2> on user loyalty, the explanatory power of empathy around user loyalty was 57.2%. This study suggests that empathy plays an important role in user loyalty among the five components of service quality. Therefore, if satisfaction is maintained for providing research support services for academic research and maintenance of appropriateness of reading restrictions, a higher level of loyalty is possible to obtain an increased effect.

As a result of the regression analysis of satisfaction with the recreation element of the <Hypothesis 3>, 22.5% of the respondents expressed a community-related explanation for user satisfaction. This suggests that among the three elements of the recreation of records, the community linkage of records plays an important role in user satisfaction. The collection of archives related to the community is accepted as a part of the local culture, and the identity of the region can be formed through it. This can be an example of a natural connection between records and the community, and it may affect the increase in user satisfaction. In addition, if the invitation lectures for local residents, along with the support of local concerts, and lecture courses are activated to provide the users with the best services, the May 18 Archives will develop from a collection of simple event records, and it will function as a historical and cultural hub connecting past and present.

As a result of the regression analysis of the satisfaction of service quality component of <Hypothesis 3> on user loyalty, 47.5% of the users expressed loyalty to the community. This suggests that among the three elements of record reproduction, community linkage of the records plays an important role in the loyalty of the users. Therefore, the loyalty of users can be increased when the local identity is recorded through the record-based cultural festivals and records.

This study finds its value in approaching the service quality evaluation element of the Special

Subject Repository. The limitations of this study, however, are that it cannot be universalized because it targets a single institution - the May 18 Archives. Since the Special Subject Repository is the one who wants to value the specificity of individual subjects, it is hard to say that the results of this study have derived a common quality of service evaluation factor to be applied to various subject archives. However, if studies on the quality evaluation indicators of various subject archives are continued in the future, the universality of the specific values of individual subjects will be proven, and it is expected that universalized evaluation criteria will be prepared based on accumulated research.

References

- Choi, Y., & Rieh, H. Y. (2012). Functional planning of larchiveum that integrates the functions of archives, libraries and museums. *Journal of the Korean BIBLIA Society for library and Information Science*, 23(4), 457-477.
- Choi, Young-sil. (2012). *Research on Larchiveum Spatial Planning Based on Functional Conversions of Archives, Libraries and Museums*. (Master's Thesis), Myongji University.
- Conway, P. (1986). Facts and Frameworks: An Approach to Studying the Users of Archives. *American Archivist*, 49(4), 393-407.
- Cox, R. J. (1992). Researching Archival Reference as an Information Function: Observations on Needs and Opportunities. *RQ*, 31(3), 387-390.
- Dowler, L. (1988). The Role of Use in Defining Archival Practice and Principles: A Research Agenda for the Availability and Use of Records, *American Archivist*, 51, 76-82.
- Han, Soo-Yeon. (2011). *A Study on the Development of Archive Service Quality Scale: Focused on Public Institutions*. (Master's Thesis), Ewha Womans University.
- Heo, Duk-Hang. (2014). *A Study on Evaluation Indicators of Archival Information Services*. (Master's Thesis), Myongji University.
- Jeon, In-Su., & Bae, Il-hyun. (2006). *Service Marketing*. Seoul: McGraw-Hill korea.
- Jeong, Ha-Jeong. (2017). *A Study on Evaluation of Service Quality for Records Centers in the Local Governments: Based on Seoul Metropolitan City*. (Master's Thesis), School of Seoul Women's University.
- Jeong, Woo-cheol. (2016). *Users' Evaluation of Information Services in University Archives*. (Master's Thesis), Myongji University.
- Jones Erick. (2014). *Quality Managemet for Organizations Using Lean Six Sigma Techniques*. CRC press.
- Kim, Du-Ri. (2015). *A study on Users' Perception of Archival Reference Services in a University Archive*. (Master's Thesis), Chonbuk University.
- Lee, Jung-Hak. (2009). *Service Marketing*. Seoul: daewangsa.
- Lee, Yoo-Jae. (2008). *Service Marketing*. Paju: hakhyunsa.
- Lee, Young-Sook. (2007). A Study on Development Directions for Public Archival Information Service. *JRMASK*, 7(2): 73-94.
-

- Millar, L. A. (2010). *Archives: Principles and Practices*. Chicago: Neal-Schuman Publishers. Translated by Kim, Yong., Kim, Su-Jung., Chang, Jun-Kab. (2015). *akaibeu: wonliwa silje*. Jeonju: Garam.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). Servqual: A Multiple-item Scale for Measuring Consumer Perc. *Journal of Retailing*, 64, 12-37.
- Pugh, Mary J. (1992). *Providing Reference Services for Archives and Manuscripts*. Chicago: Society of American Archivists. Translated by Sul, moon-won. (2004). *gilogjeongboseobiseu*. seoul: Jinli Tamgu.
- Seol, Moon-Won. (2008). Direction and Challenges of Record Information Service. *Records Manager*, 3, 10-19.
- Shu, Myung-Ae. (2011). A Study on Activating Museum Marketing Strategy through the Quality Mannagement. *Journal of Museum Studies*, 20, 51-88.
- Yakel, E. (2000). Thinking Inside and Outside the Boxes: Archival Reference Services at the Turn of the Century. *Archivaria*, 49, 140-160.
- Yang, Hye-Young. (2011). *A Study on the Evaluation of an Archival Service using SERVQUAL*. (Master's Thesis), Sung Kyun Kwan University.
- Yoon, Jae-Hong. (2008). *Understanding of Quality Management*. Pusan: Dong-A University Publishing.

[About the authors]

Dae-Hong Lee received bachelor's degree in History Education from University of Woosuk in Jeonbuk, South Korea, in 2015, and the M.S. degree in Interdisciplinary Program of Archival Studies from the Chonnam National University, South Korea, in 2017. Since 2016, He has been a teaching assistant with the School of Library and Information, Chonnam National University.

Hyun-Jin Hong received the M.S. degree in Library and Information Science from University of Michigan in Ann Arbor, U.S.A., in 1986, and the Ph.D. degree in Library and Information Science from the Yonsei University, South Korea, in 1993. Since 1995, she has been a Professor with the School of Library and Information Science, Chonnam National University. She has authored/coauthored over 60 journal and conference papers. Her major interests are library management, public library, and research methods. She has been a reviewer of many journals, including the *Journal of Korean society for library and information science*, *Korean society library and information*.

[Appendix 1] satisfaction difference according to user age

Items			Age					합계
			㉑	㉒	㉓	㉔	㉕	
Service Quality Components	Tangibility	N	6	86	27	14	11	144
		Average	4.4333	4.3395	4.2222	4.5429	4.3091	4.3389
		Standard Deviation	.63770	.53496	.57200	.52873	.60242	.54927
		F	.836					
		p-value	.505					
	Reliability	N	6	86	27	14	11	144
		Average	4.5833	4.3227	4.3611	4.5	4.25	4.3524
		Standard Deviation	0.46547	0.61461	0.60181	0.51887	0.74162	0.60549
		F	.551					
		p-value	.699					
	Responsiveness	N	6	86	27	14	11	144
		Average	4.5	4.2287	4.2222	4.2857	4.2121	4.2431
		Standard Deviation	0.58689	0.63506	0.69183	0.70234	0.71915	0.65041
		F	.267					
		p-value	.899					
	Assurance	N	6	86	27	14	11	144
		Average	4.7917	4.4913	4.5926	4.5357	4.1364	4.5
		Standard Deviation	0.40052	0.55763	0.40518	0.57893	0.79344	0.55706
		F	1.831					
		p-value	1.26					
Empathy	N	6	86	27	14	11	144	
	Average	4.2667	3.9791	3.9556	4.0571	3.7273	3.975	
	Standard Deviation	0.50067	0.73694	0.81963	0.81308	1.00905	0.77075	
	F	.536						
	p-value	.709						
Recreation Elements of Records	Exhibition Planning	N	6	86	27	14	11	144
		Average	4.33	3.97	4.22	4.43	3.09	4.01
		Standard Deviation	0.516	0.723	0.738	0.756	0.861	0.787
		F	6.398					
		p-value	.000					
	Records Development	N	6	86	27	14	11	144
		Average	3.83	3.9	4.26	4.21	3	3.92
		Standard Deviation	0.816	0.767	0.801	0.914	0.806	0.841
		F	5.455					
		p-value	.000					
Community Linkage	N	6	86	27	14	11	144	
	Average	4.5	4.15	4.07	4.14	3.68	4.11	
	Standard Deviation	0.632	0.715	0.743	0.819	1.25	0.781	
	F	1.275						
	p-value	.283						

* p<.05 , ** p<.01,
 ㉑19 and under, ㉒over 20 years old~under 30, ㉓over 30 years old~ under 40,
 ㉔over 40 years old~under 50, ㉕over 50 years old

[Appendix 2] satisfaction difference according to user's residence area

Items			User's residence area						
			㉑	㉒	㉓	㉔	㉕	㉖	합계
Service Quality Components	Tangibility	N	35	9	11	70	16	3	144
		Average	4.3771	4.4000	4.3636	4.2371	4.6000	4.6000	4.3389
		Standard Deviation	0.5309	0.4690	0.6682	0.5660	0.4321	0.4000	0.5493
		F	1.42						
		p-value	.221						
	Reliability	N	35	9	11	70	16	3	144
		Average	4.55	4.3611	4.6818	4.1286	4.5781	4.8333	4.3524
		Standard Deviation	0.3920	0.5464	0.4484	0.6766	0.4806	0.2886	0.6054
		F	4.663**						
		p-value	.001						
		post-hoc test	㉑>㉔						
	Responsiveness	N	35	9	11	70	16	3	144
		Average	4.4952	4.2963	4.5758	4.0524	4.2917	4.1111	4.2431
		Standard Deviation	0.5324	0.5879	0.5393	0.6706	0.6309	1.0183	0.6504
		F	3.097*						
		p-value	.011						
		post-hoc test	㉑>㉔						
	Assurance	N	35	9	11	70	16	3	144
		Average	4.6786	4.3333	4.6818	4.375	4.5938	4.6667	4.5
		Standard Deviation	0.4679	0.5994	0.4755	0.6178	0.3966	0.1443	0.5570
F		2.035							
	p-value	.077							
Empathy	N	35	9	11	70	16	3	144	
	Average	4.1086	4.2667	3.9818	3.8771	4	3.6667	3.975	
	Standard Deviation	0.7473	0.7348	0.86	0.7423	0.8547	1.2055	0.7707	
	F	.787							
	p-value	.560							
Recreation Elements of Records	Exhibition Planning	N	35	9	11	70	16	3	144
		Average	4.29	4.06	3.86	3.91	4.06	3	4.01
		Standard Deviation	0.546	0.527	1.002	0.834	0.793	1	0.787
		F	2.035						
		p-value	.077						
	Records Development	N	35	9	11	70	16	3	144
		Average	4.1086	4.2667	3.9818	3.8771	4	3.6667	3.975
		Standard Deviation	0.7473	0.7348	0.8600	0.7423	0.8547	1.2055	0.7707
		F	0.880						
		p-value	.496						
	Community Linkage	N	35	9	11	70	16	3	144
		Average	4.27	4.28	4.18	3.99	4.16	4.17	4.11
Standard Deviation		0.711	0.755	0.751	0.803	0.851	1.041	0.781	
F		0.763							
	p-value	0.578							

* p<.05, ** p<.01,

㉑Seoul · Gyeonggi, ㉒Gangwon, ㉓Daejeon · Chungcheong areas, ㉔Gwangju · Jeolla areas,

㉕Busan · Daegu · Gyeongsang areas, ㉖Jeju area

[Appendix 3] difference in satisfaction according to purpose of visit

Items			Purpose of visit					
			㉑	㉒	㉓	㉔	㉕	합계
Service Quality Components	Tangibility	N	83	4	12	25	20	144
		Average	4.4892	4.55	3.8833	4.064	4.29	4.3389
		Standard Deviation	0.52196	0.37859	0.60578	0.46447	0.4962	0.54927
		F	6.142**					
		p-value	.000					
	post-hoc test	㉑>㉓						
	Reliability	N	83	4	12	25	20	144
		Average	4.4759	4.5625	3.875	4.18	4.3	4.3524
		Standard Deviation	0.52472	0.51539	0.84275	0.56605	0.6718	0.60549
		F	3.644**					
		p-value	0.007					
	post-hoc test	㉑>㉓						
	Responsiveness	N	83	4	12	25	20	144
		Average	4.3775	4.5	3.9167	3.9867	4.15	4.2431
		Standard Deviation	0.61103	0.57735	0.72648	0.56503	0.74516	0.65041
F		3.035						
p-value		0.02						
post-hoc test	㉑>㉓							
Assurance	N	83	4	12	25	20	144	
	Average	4.5904	4.625	4.0208	4.41	4.5	4.5	
	Standard Deviation	0.48385	0.47871	0.82199	0.47806	0.6438	0.55706	
	F	3.159**						
	p-value	0.016						
사후분석	㉑>㉓							
Empathy	N	83	4	12	25	20	144	
	Average	4.0337	3.55	3.9167	3.76	4.12	3.975	
	Standard Deviation	0.82036	0.3	0.95139	0.55076	0.712	0.77075	
	F	1.108						
	p-value	0.355						
Recreation Elements of Records	Exhibition Planning	N	83	4	12	25	20	144
		Average	4.02	3.75	4.13	4.02	3.93	4.01
		Standard Deviation	0.817	0.5	0.882	0.77	0.712	0.787
		F	0.229					
		p-value	0.922					
	Records Development	N	83	4	12	25	20	144
		Average	4.01	3.88	4	3.6	3.93	3.92
		Standard Deviation	0.841	0.25	1.066	0.791	0.799	0.841
		F	1.189					
		p-value	0.318					
Community Linkage	N	83	4	12	25	20	144	
	Average	4.2	4.5	3.83	3.8	4.23	4.11	
	Standard Deviation	0.781	0.408	1.174	0.577	0.678	0.781	
	F	2.045						
p-value	0.091							

* p<.05 , ** p<.01, ㉑exhibitions, ㉒research, ㉓task, ㉔interest, ㉕etc

[Appendix 4] difference in satisfaction according to the number of times of use of the archives

Items		Times of use of the archives					
		㉑	㉒	㉓	㉔	합계	
Service Quality Components	Tangibility	N	88	35	11	10	144
		Average	4.4568	4.1886	4.3455	3.82	4.3389
		Standard Deviation	0.53644	0.48976	0.3908	0.64256	0.54927
		F	5.716**				
	p-value	0.001					
	post-hoc test	㉑>㉔					
	Reliability	N	88	35	11	10	144
		Average	4.4773	4.2357	4.2955	3.725	4.3524
		Standard Deviation	0.59769	0.49238	0.63066	0.6061	0.60549
		F	5.828**				
	p-value	0.001					
	post-hoc test	㉑>㉔					
Responsiveness	N	88	35	11	10	144	
	Average	4.3826	4.0381	4.3333	3.6333	4.2431	
	Standard Deviation	0.65417	0.5034	0.63246	0.63732	0.65041	
	F	6.097**					
p-value	0.001						
post-hoc test	㉑>㉔						
Assurance	N	88	35	11	10	144	
	Average	4.608	4.4214	4.5	3.825	4.5	
	Standard Deviation	0.52495	0.53127	0.3873	0.62417	0.55706	
	F	7.014**					
p-value	.000						
post-hoc test	㉑>㉒						
Empathy	N	88	35	11	10	144	
	Average	4.2273	3.7029	3.6545	3.06	3.975	
	Standard Deviation	0.75151	0.58284	0.53733	0.63979	0.77075	
	F	12.278**					
p-value	.000						
post-hoc test	㉑>㉒						
Exhibition Planning	N	88	35	11	10	144	
	Average	4.07	3.91	4.27	3.45	4.01	
	Standard Deviation	0.753	0.836	0.754	0.762	0.787	
	F	2.543					
p-value	0.059						
Records Development of Records	N	88	35	11	10	144	
	Average	3.98	4	3.68	3.4	3.92	
	Standard Deviation	0.8	0.899	0.783	0.937	0.841	
	F	1.871					
p-value	0.137						
Community Linkage	N	88	35	11	10	144	
	Average	4.33	3.84	4.18	3.05	4.11	
	Standard Deviation	0.723	0.616	0.681	0.832	0.781	
	F	12.162**					
p-value	.000						
post-hoc test	㉑>㉒						

* p<.05 , ** p<.01,
 ㉑1, ㉒2-3, ㉓4-6, ㉔7 or more times