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## A Study on Defining Communicative Characteristics of Public Libraries

Youngee Noh\*, Yoon-Jeong Kim\*\*, Woojung Kwak\*\*\*

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### ABSTRACT

This study intended to discover the communicative characteristics of libraries, such as locality, communality, interactivity, and organic vitality, and measure as to whether the components constituting them were appropriate, and based on the research results, it was intended to establish the role of public libraries based on communicative characteristics. As a result of the study, it finally turned out that the libraries had the four communicative characteristics of 'locality', 'communality', 'interactivity', and 'organic vitality'. The four communicative characteristics may be classified into 16 factors and 63 detailed factors accordingly. Examining the characteristics of library communication, first, locality means that local residents create and maintain the identity of a social, historical, and cultural locality while sharing the space of a library. In the library, the users can receive local life information or create a cultural identity of the locality through communication between the users. Second, communality is a fundamental factor in forming a community of local residents and represents the characteristics of a group formed based on place and geographical characteristics, culture and belief system, and interests. Third, interactivity refers to a kind of behavior in which users interact with other users, information providers, and books and information in the library to give and receive influence. The actions in which two or more objects share knowledge, thoughts, emotions, and opinions may be seen as being accomplished through interaction. Lastly, organic vitality means seeking the continuous maintenance and development of the community, and creating a lasting characteristic even in the changing environment of the library.

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\* This Study is a revision of the Corresponding Author' Master's thesis

\*\* Professor, Department of Library and Information Science, Konkuk University, South Korea (irs4u@kku.ac.kr) (First Author)

\*\*\*Master, Department of Library and Information Science, Konkuk University, South Korea (oo0nj199@gmail.com) (Corresponding Author)

\*\*\*\*Senior Researcher, Research Institute for Knowledge Content Development & Technology, Konkuk University, Chungju, Korea (woojung2243@naver.com) (Co-author)

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## 1. Introduction

In the 1990s, public libraries faced a crisis of a sharp decline in the rate of use due to the changing environments such as urbanization worldwide. Thereafter, Europe has responded to the changing social environment by increasing the user accessibility through a complex satisfiedhod that combines functions such as education, community, leisure, and commerce, with a focus on life centric public libraries (Noh et al., 2018). To date, library is a complex cultural space, a space for communication with the local community, a third space, a library space as a shelter, a maker space, and a specialized space (Kwak & Lee, 2018; Noh & Kim, 2019; Noh & Ro, 2019; Jeong & Kim, 2019; Yoon, 2020; Ahn, 2021) As various roles are enhanced, libraries appear to provide various community spaces, that is, communication spaces. That is, the current public library is not only a traditional information service, but also a role as a complex cultural space, and communication between the users, information, and space is required, and the library is responding accordingly with various spatial structures and services.

Meanwhile, social conflicts such as inter-generational conflict, localityal conflict, and gender conflict, which are emerging as social issues, are multilayered, deepened, and continuously amplified, and the level and scope of the social conflict structure are also expanding (Choi, 2019). Architect Yoo claimed that the cause of the intensifying conflict between classes was the lack of free space in the city (ebs, 2019). A city ought to have many benches, parks and plazas where people can stay for free, and people from different backgrounds can gather and fuse in these spaces. This is why a space where common memories may be built between classes and a space where people can mix and match is necessary (ebs, 2019). As such, public library is a space open to anyone regardless of class, age, or gender, and a representative space where various people can mingle. Public libraries are the places where the various users gather for various reasons, such as for obtaining desired information or participating in cultural lecture programs. Library is a space that integrates the users and supports the communication and exchange between the users. In particular, public facilities in the modern society play a pivotal role in the community and are closely related to the daily lives of local residents (Lim, 2017), and as library has recently been emphasized as a space for communication in the local community, communication among local residents is actively taking place. Hence, the establishment of role is necessary for the development of public libraries based on the communicative characteristics.

In this study, by deriving the communicative characteristics of the library and establishing the role of a public library based on this, it was intended to provide the useful basic data to ensure that the library can expand into a representative space for communication and exchange in the locality.

Hence, in order to discover the communicative characteristics of the library, an attempt has been made to conduct the Delphi survey by examining the literatures related to community, community space, and communication, and by presenting a theoretical basis. The role of public library as a communicative foundation of the library was derived to ensure that the library may be enhanced as a focal point of the local community and as a space for communication with users. Based on which, the role of the library based on communicative characteristics will help to increase the

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effectiveness of the library as a representative space for communication and exchange in the locality, and contribute to the theoretical expansion and supplementation of library communication and communication space.

## 2. Previous Studies

Previous studies were surveyed and analyzed with a view to achieve the purposes of the study of discovering the communicative characteristics of the library, and expanding the role of the library as a communication channel and a central point of the local community thereby. As a result, it was apparent that the studies of analysis have been undertaken on communication, community, and community, etc. of the library was conducted as a study on communication and interaction in public libraries, and space structure and structure, space design, furniture arrangement, etc.

### *2.1 Studies on communication carried out at the libraries*

This is a study that suggested ways to activate and develop public libraries through communicative characteristics, and a study of Kwon, Kwon, and Park (2020), who studied public libraries as complex cultural spaces and suggested the development direction of public libraries for local cultural branding, etc. was carried out. By analyzing the cases of domestic and overseas public libraries, the development direction of public libraries as complex cultural spaces was proposed. In their study, they classified the functions of complex cultural spaces into symbolism, complexity, expertise, participation, and accessibility, and claimed that they could be linked with public libraries. Noh and Kim (2020) conducted a perception survey targeting the public library librarians to understand the library communication characteristics and the librarians' perceptions. Based on which, the library communication characteristics such as locality, communality, and interactivity were derived, and as a result of the librarian's perception survey, it turned out that they had a positive view on space for the library communication. As high awareness and positive views are demonstrated, it was claimed that the library must have a plan prepared to activate communication.

A study was conducted on communication space and characteristics in small libraries as well as public libraries. As a study on small space for the library communication, Choi and Kim (2015) studied an alternative community base to replace elementary school to succeed in urban regeneration for community revitalization, as a small library that is easy to connect with local activities, whose pros and cons of the survey were analyzed. Furthermore, Yun (2008) identified the characteristics of the two groups of communities, implemented cultural programs according to the needs of each community, and made it possible to use and enjoy the resources produced through the cultural programs. Thereafter, she interviewed community members to evaluate their satisfaction and derived the experimental results. She claimed that a small library is a space for cultural enjoyment for local residents, and that in order to become a space that serves as a cultural love room, above all, the local residents' interest and voluntary participation ought to be accompanied.

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## *2.2 Studies on library communication in terms of space*

A study of Teng (2018) on the user centric rate of space use satisfiedhod and components of community libraries, proposing methods for implementing collective spaces of community libraries, and a study of Li and Chu (2019), etc., which analyzed the characteristics of community spaces demonstrated in floor plans of overseas public libraries newly built and operated since 2000 were carried out.

Lim, Hwang, and Lim (2016) investigated and analyzed the space structure and types of university libraries, which have various spaces for communication between the users, and identified the characteristics of university libraries. According to the correlation between information, users, and librarians, they classified the space of university libraries into analog shared space, digital shared space, and community shared space. Furthermore, a study was conducted by Choi and Dong-Sik Yoon (2018), which suggested the importance of community space by analyzing domestic and overseas university library spaces built or remodeled after the 2000s.

Other than which, the studies on communities such as community libraries and complex cultural communities have been conducted. Hwang (2016) planned a community library as a community facility, a library that accommodates various functions according to the purpose of use of local residents and may be changed in a multi-functional way. Accordingly, the design strategies and concepts of community libraries were applied by analyzing cases of overseas community libraries and architectural cases applying multi-functional spaces. Li (2021) analyzed community library cases and conducted a survey on the community library users, suggesting a plan for constructing a flexible space design for user centric community libraries for the future design and renovation of community libraries.

As a study on the community of complex cultural spaces, a study of Ra (2015) analyzed the meaning of complex cultural community spaces and theoretical considerations of complex cultural community spaces, and a study of Tsai (2020) which proposed service guidelines for the complex cultural space community area based on the surveys of users who used community spaces, which are complex cultural spaces, and contextual interviews, etc. were carried out.

## *2.3 Implications of previous studies*

Based on the studies on communication carried out at the libraries, it turned out that public libraries are developing into complex cultural spaces where free communication is possible, and securing a communication space is necessary for libraries to become hubs of community communication. Furthermore, librarians were found to have a positive view of space for the library communication. In the case of a small library, it plays a role as a cultural community and cultural love room for local residents. However, there is a limitation that it is difficult to provide public services to public libraries, and it is necessary to expand opening hours and link with other community facilities, etc.

Library in terms of library space plays such an important role in promoting community development and community revitalization. Furthermore, it turned out that it is necessary to secure a space for

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communication in order for the library to become a hub of community communication. It currently provides various community spaces such as exhibition halls, cinemas, plazas, cafes, multipurpose rooms, children's spaces, and citizen service centers, which can play a role in enriching the cultural life of citizens. University library seems to need a change in perspective from the spatial arrangement and area of storage and reading seats to the hub of a community for communication with information, librarians and the users.

As a result of analyzing previous studies from such perspective, it turned out that the library is studied across various aspects as a cultural community, cultural love room, and community base space for the local residents.

However, the studies on the design and structure of space for the library communication were heavily carried out, and it was confirmed that what kind of service library ought to provide according to the communicative characteristics of the library, and the studies on the direction of the library were somewhat inadequate. Hence, in this study, an attempt has been made find out the role of the library as a communicative foundation of the library.

### 3. Research Questions

This study was intended to discover the communicative characteristics of the library through the Delphi survey and propose the role of the library as the center of the community and a communication space where anyone can mingle. The research questions raised in connection with this study are as follows.

- RQ 1 : What are the communicative characteristics of the library?
- RQ 2 : What are the components that form communicative characteristics?

### 4. Research Design and Methodology

#### *4.1 Development of a preliminary Delphi survey form*

In this section, an attempt has been made to verify the validity of the library's communicative characteristics to establish the role of a public library based on its communicative characteristics, and accordingly, developed the Delphi survey. Based on the studies of Kang (2018), Noh (2017a), Noh (2017b), Noh (2017c), Oh (2017), Noh et al. (2018), Baek (2018), Oh and Chu (2018), Hwang (2018), Noh and Kim (2020), and Yoon (2020), literature research on community or library community, communication space, etc., and studies on the educational, cultural, and social values of libraries, etc. were analyzed. Based on which, the library communication characteristics (locality, communality, interactivity, and organic vitality) were derived. Furthermore, literature research was investigated and analyzed using keywords such as local community, community, and communication of libraries, and components (middle class) and detailed factors (lower class) of communicative characteristics

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(upper class) were derived. Referring to the relevant previous studies, they were modified and supplemented to be suitable for evaluating the communicative characteristics of libraries, and finally, 75 evaluation measurement questions were derived as illustrated in <Table 1>.

Table 1. Preliminary survey form of library communication characteristics

Characteristics (upper class)	Component (middle class)	Number of detailed factors (upper class)
Locality	Libraries provide spaces and venues for community activities.	8
	Libraries form healthy communities.	5
	Libraries serve to form and strengthen communities.	4
	Libraries provide necessary information to local communities.	5
Communality	Libraries play a role in the formation of local cultural communities.	5
	Libraries contribute to improving interpersonal relationships.	6
	Libraries support active local activities among local residents.	3
	Libraries contribute to the formation of a sense of belonging to the local community through support for improving social adaptability.	5
Interactivity	Library is a space where different generations share their opinions.	6
	Library is a space to accommodate the leisure behavior of local residents.	5
	Library is a space for the growth of community culture.	3
	Libraries enhance local communities through interaction with local residents.	4
Organic vitality	As a representative space of the local community, library enhances the value of the residential environment.	5
	Libraries contribute to the creation of local jobs.	5
	Libraries contribute to physical and psychological health promotion through interaction.	6
Total		75

Source: Oh (2017); Kang (2018); Noh (2017a); Noh (2017b); Noh (2017c); Noh et al. (2018); Baek (2018); Oh, Chu (2018); Hwang (2018); Noh, Kim (2020); Yoon (2020)

#### 4.2 Design of expert group

The Delphi survey is a research technique which collects and comprehensively analyzes opinions or judgments targeting a group of experts in a specific field in order to adopt one of the many proposals on important issues (Lee, 2001; Jung & Cho, 2007).

In the Delphi survey, a group of experts does not gather in person, and the survey is conducted

repeatedly. It is a satisfiedhod of inducing a consensus by aggregating the survey results, informing the experts of the collected surveys, and re-answering with reference to them to coordinate and synthesize the opinions of experts (Lee, 2001; Jung & Cho, 2007).

By conducting an anonymous and repetitive survey, the Delphi survey can avoid incorrect psychological effects and attitudes, such as multiple tyrannies that can occur in the face-to-face consultation satisfiedhod, the influence of statements by authorities, and the attitude of sticking to only one opinion taken experts (Lee, 2001; Jung & Cho, 2007).

The existing previous studies have been conducted on the formation of library communities and local communities, but studies on the factors or characteristics that activate library communities and local communities are inadequate. Hence, in this study, the Delphi survey was conducted targeting library and library information science experts to derive library communication characteristics and verify the validity of the derived characteristics. Based on which, it was considered that it was most efficient and reasonable to present the communicative characteristics of the library and the detailed factors that constitute it, and accordingly, the Delphi technique was carried out.

#### 4.2.1 Survey subjects

To minimize errors in the Delphi survey and increase the reliability of the research, a group of at least 10 experts ought to be formed, and it is appropriate to select between 10 and 15 experts (Yoon, 2003).

In this study, a total of 10 professors of library and information department, public library directors and librarians, national library librarians, and professional librarians were selected as an expert group to reflect the representativeness and appropriateness, professional knowledge and skills of the experts on library and library and information science.

Table 2. Formation of expert group for the Delphi survey

Occupation & Position	Number Experiences		Number
Professor of Library and Information Science	4	Less than 5 years	3
Librarian of the National Library	1	5 years to less than 10 years	1
Director and Librarian of Public Library	4	10 years to less than 15 years	1
Librarian of Professional Library	1	15 years to less than 20 years	1
		20 years to less than 25 years	-
		25 years or longer	4
Total	10	Total	10

#### 4.2.2 Delphi survey procedures

The distribution of the Delphi survey questionnaire was sent out in writing through the expert's

email, and after encouraging responses through phone contact, the questionnaires were collected.

The Delphi survey was conducted on a total of three rounds targeting a group of experts, and the communicative characteristics of the library were finally drawn by analyzing the results of each round and revising and supplementing the evaluation factors.

Table 3. Delphi survey methods and procedures

Step	Detailed Research Contents					
<b>Selection of experts</b>	<ul style="list-style-type: none"> <li>- Selection of experts for Delphi survey</li> <li>- Library and information department professor, and public library librarian, etc.</li> </ul>					
<b>Development of survey questionnaire form</b>	<ul style="list-style-type: none"> <li>- Analysis of previous studies to derive communicative characteristics of libraries</li> <li>- Develop the first questionnaire by deriving components and detailed factors of communicative characteristics</li> </ul>					
<b>1st survey</b>	<table border="1" style="width: 100%;"> <thead> <tr> <th style="text-align: center;">1st survey</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> <li>- Analyze and understand the importance of each item using the Likert 5-point scale</li> <li>- Supplement library communicative characteristics and components by adding open-ended questions</li> </ul> </td> </tr> </tbody> </table>	1st survey	<ul style="list-style-type: none"> <li>- Analyze and understand the importance of each item using the Likert 5-point scale</li> <li>- Supplement library communicative characteristics and components by adding open-ended questions</li> </ul>	<table border="1" style="width: 100%;"> <thead> <tr> <th style="text-align: center;">1st response result analysis</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> <li>- Verification of content validity and reliability</li> <li>- Derivation of secondary survey items reflecting expert opinions</li> </ul> </td> </tr> </tbody> </table>	1st response result analysis	<ul style="list-style-type: none"> <li>- Verification of content validity and reliability</li> <li>- Derivation of secondary survey items reflecting expert opinions</li> </ul>
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<ul style="list-style-type: none"> <li>- Verification of content validity and reliability</li> <li>- Derivation of secondary survey items reflecting expert opinions</li> </ul>						
<b>2nd survey</b>	<table border="1" style="width: 100%;"> <thead> <tr> <th style="text-align: center;">2nd survey</th> </tr> </thead> <tbody> <tr> <td>                     Importance analysis using Likert 5-point scale                      Presentation of the response results of the 1st round and request for explanation and reason for choosing an opinion that deviated from the central tendency                 </td> </tr> </tbody> </table>	2nd survey	Importance analysis using Likert 5-point scale Presentation of the response results of the 1st round and request for explanation and reason for choosing an opinion that deviated from the central tendency	<table border="1" style="width: 100%;"> <thead> <tr> <th style="text-align: center;">2nd response result analysis</th> </tr> </thead> <tbody> <tr> <td>                     Verification of content validity and reliability                      Based on the results of the 2nd response, the 3rd survey items reflecting expert opinions were derived.                 </td> </tr> </tbody> </table>	2nd response result analysis	Verification of content validity and reliability Based on the results of the 2nd response, the 3rd survey items reflecting expert opinions were derived.
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3rd survey						
Importance analysis using Likert 5-point scale Presentation of the results of the second round and request for explanation and reason for choosing an opinion that deviated from the central tendency						
3rd response result analysis						
Verification of content validity and reliability Comprehensive analysis of 1st to 3rd response results						
<b>Final derivation</b>	<ul style="list-style-type: none"> <li>▶ Final derivation of communicative characteristics of the library</li> </ul>					

The Delphi survey was conducted from February 20, 2021 through March 31, 2021 with preliminary



survey form drawn in advance. The distribution and collection of the survey questionnaire form was carried out through email, and the first Delphi survey was conducted for about a week from February 20, 2021 through February 27, 2021. The second survey questionnaire form was prepared based on the first survey results, and the third survey was evaluated by modifying the questionnaire based on the second Delphi survey results.

#### *4.3 Data Analytical Method*

In this study, the reliability verification and content validity were verified to derive the communicative characteristics of the library through the Delphi survey of a group of experts. It was adopted as the final evaluation factor based on the average and standard deviation of all satisfied factors. For the survey data, SPSS 21.0 and EXCEL were used to analyze frequency analysis for general characteristics and descriptive statistics such as percentage, mean, standard deviation, and quartile deviation. Based on which, the content validity was measured, while the standard deviation and quartile deviation were analyzed to analyze the extent of agreement, agreement, and CVR values were calculated to examine the content validity of individual questions.

### 5. Final Derivation of the Library's Communicative Characteristics

Currently, the role of the library as a place of communication and community is emphasized, but the communicative characteristics of the library and the detailed factors that form it are not yet defined. Hence, in this study, an attempt has been made derive the communicative characteristics of the library and establish the role of the library based on the communicative characteristics. Based on which, the Delphi survey was conducted to provide library communication related services using the communicative characteristics and components at the actual libraries.

To discover library communication characteristics and measure as to whether the characteristics are valid, 1) literature research on communities or library communities and communication spaces was investigated and analyzed. Accordingly, the library communication characteristics such as locality, communality, interactivity, and organic vitality were derived. 2) Literature with keywords such as local community, community, and communication in the library was analyzed, and the detailed factors of communication and community were grouped to conform to each communicative characteristics, and components (middle class) and the detailed factors of communicative characteristics (upper class) and the detailed factors (lower classes) were analyzed. 3) Thereafter, the Delphi survey questionnaire form was developed to measure as to whether the communicative characteristics of the library were valid, and the Delphi survey was conducted three times with 10 experts of library and library and information science. Based on which, an attempt has been made secure the reliability and validity of the expertise index. 4) As a result, 4 communicative characteristics, 16 components, and 63 detailed factors were finally derived.

#### *5.1 A comprehensive comparison of the Delphi survey and the selection of communicative characteristics components*

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### 5.1.1 Locality

The questionnaire on locality was derived with 4 primary components and 22 detailed factors. The characteristics of library communication were discovered and expert opinions were received by adding details about the details that were deleted when the questionnaire was produced. Among which, 8 factors were added as new questions according to the opinion that they correspond to locality. In the first survey, there were four detailed factors that did not satisfy the content validity, convergence, and agreement, yet considering that it was the first questionnaire, it was included in the second questionnaire for reevaluation.

In the second survey, 4 components and 27 detailed factors were conducted, and a total of 5 questions did not satisfy the content validity, convergence, and agreement of the Delphi survey. Furthermore, by synthesizing the experts' open-ended opinions and the questions rated below the 25% quartile by experts, the questions with similar or overlapping contents, and questions with ambiguous meanings were integrated, corrected, and deleted. That is, 11 questions were excluded, including the 5 questions that did not satisfy the standards for the adoption of evaluation factors, and a total of 16 detailed factors were adopted.

In the third questionnaire, content validity, convergence, and agreement were all satisfied.

Table 4. Locality's component selection process

Classification	Results of the 1st Delphi survey reflected	Results of the 2nd Delphi survey reflected	Results of the 3rd Delphi survey reflected
A	<p>Library provides a space for meeting, resting and chatting for communication.</p> <p>A separate meeting space is provided within the library facility for residents to use.</p> <p>A resting space is provided inside and outside the library where users can communicate naturally.</p> <p>Library provides a place for exchange where local residents can meet.</p> <p>Library provides a space for continuing education in the locality and communication among local residents.</p> <p>Library provides a venue for a variety of gatherings, including reading groups, conferences, and forums for social networking.</p> <p>Library provides a place for various community groups to gather and talk.</p> <p>Libraries are closely related to the lives of local residents and provide an environment for community activities.</p>	<p><b>(Sentence corrected)</b> Library provides a space for meeting, resting and chatting for local residents to communicate.</p> <p>→ <b>(Integrated)</b> Library provides spaces for rest and meetings that residents can freely use inside and outside of the library.</p> <p>Library provides a place for exchange where local residents can meet.</p> <p><b>(Integrated)</b> Library provides a venue for a variety of gatherings, including educational and reading groups, conferences, and forums for social networking.</p> <p>Library provides a place for various community groups to gather and talk.</p> <p>Libraries are closely related to the lives of local residents and provide an environment for community activities.</p>	<p><b>(Integrated)</b> Library provides spaces for rest and meetings that residents can freely use inside and outside of the library.</p> <p>Library provides a place for exchange where local residents can meet.</p> <p><b>(Deleted)</b></p> <p>Library provides a place for various community groups to gather and talk.</p> <p>Libraries are closely related to the lives of local residents and provide an environment for community activities.</p>

Classification	Results of the 1st Delphi survey reflected	Results of the 2nd Delphi survey reflected	Results of the 3rd Delphi survey reflected	
<b>B</b>	Library provides a space to share issues related to the locality, such as local issues and social and political issues.	<b>(Sentence corrected)</b> Library provides a space to share issues related to the locality, such as local problems and social issues.	Library provides a space to share issues related to the locality, such as local problems and social issues.	
	Through the library, residents come together and unite to solve local problems.	Through the library, residents come together and unite to solve local problems.	<b>(Deleted)</b>	
	Libraries serve to reflect the needs of the community and to be aware of local issues.	Libraries serve to reflect the needs of the community and to be aware of local issues.	<b>(Deleted)</b>	
	Libraries provide a space for recognizing and responding to community issues.	Libraries provide a space for recognizing and responding to community issues.	<b>(Deleted)</b>	
	Libraries provide education on citizenship or responsibility.	Libraries provide education on citizenship or responsibility.	<b>(Deleted)</b>	
		(New) Through the library, local residents' interest in the local community increases.	Through the library, local residents increase their interest in the local community.	
		(New) Understanding of the locality is increased through the library.	<b>(Deleted)</b>	
		(New) The area gets better through the library.	<b>(Deleted)</b>	
	<b>C</b>	Libraries create social, historical and cultural identities while sharing certain physical and geographical spaces.	<b>(Sentence corrected)</b> In libraries, local residents create social, historical, and cultural identities by sharing physical and geographical spaces and opinions.	In libraries, local residents create social, historical and cultural identities by sharing physical and geographical spaces and opinions.
		They create a community by participating in email, chatting, discussions, and video conferencing using the Internet and Wi-Fi in the library.	Create a community by participating in e-mail, chatting, discussions, and video conferencing using the Internet and Wi-Fi in the library.	<b>(Sentence corrected)</b> They use the library's Internet and Wi-Fi to create a community or participate in real-time community activities such as e-mail, chat, discussion, and video conference.
		(New) Real-time online communication between local residents is supported through the library's website.	<b>(Integrated)</b> They support online communication including reading clubs and cultural clubs through the library's website.	
		(New) Library helps community activities such as reading clubs and cultural clubs through its homepage.		
Libraries contribute to community development by attracting businesses to their area.		Libraries contribute to community development by attracting businesses to their area.	<b>(Deleted)</b>	
They contribute to the creation of a community by participating in organized meetings such as meetings with writers and lectures at libraries.		They contribute to the creation of a community by participating in organized meetings such as meetings with writers and lectures at libraries.	They contribute to the creation of a community by participating in organized meetings such as meetings with writers and lectures at libraries.	
		(New) They help the community and others through the library.	<b>(Deleted)</b>	

Classification	Results of the 1st Delphi survey reflected	Results of the 2nd Delphi survey reflected	Results of the 3rd Delphi survey reflected
<b>D</b>	Libraries provide information on institutions related to politics, economy, and culture.	Libraries provide information on institutions related to politics, economy, and culture.	Libraries provide information on institutions related to politics, economy, and culture.
	Libraries provide information related to schools, careers, education, and community groups.	Libraries provide information related to schools, careers, education, and community groups.	Libraries provide information related to schools, careers, education, and community groups.
	Library shares life information such as local public transportation, traffic conditions, and weather.	Library shares life information such as local public transportation, traffic conditions, and weather.	Library shares life information such as local public transportation, traffic conditions, and weather.
	Libraries form the locality of local residents by providing local history and local materials.	Libraries form the locality of local residents by providing local history and local materials.	Libraries form the locality of local residents by providing local history and local materials.
	Libraries provide information about the city or residential area to local residents.	Libraries provide information about the city or residential area to local residents.	Libraries provide information about the city or residential area to local residents.
	(New) They provide the same local information as offline through the library's website.	<b>(Deleted)</b>	
	(New) Libraries enable rapid knowledge sharing through communication with local residents.	<b>(Deleted)</b>	

- A : Libraries provide spaces and venues for community activities.  
 B : Libraries are spaces that build healthy communities.  
 C : Libraries serve to form and strengthen communities.  
 D : Libraries provide the necessary information to the community.

Furthermore, the experts' opinions were reflected to derive the final factors, and two questions were integrated and one question was corrected to ensure that the meaning of the question could be conveyed well as intended. Finally, locality, the communicative characteristics of libraries, was derived with 4 components and 15 detailed factors.

Table 5. Final derivation of the locality’s detailed factors

Component	Detailed Factors
Libraries provide spaces and venues for community activities. (4)	<p>Library provides a space for meeting, resting, and chatting to support communication among local residents.</p> <p>Library is a place of exchange where local residents can meet.</p> <p>Library provides a place for various community groups to gather and talk.</p> <p>Libraries are closely related to the lives of local residents and provide an environment for community activities.</p>
Library is a space that forms a healthy community. (2)	<p>Library provides a space to share issues related to the locality, such as regional problems and social issues.</p> <p>Through the library, local residents increase their interest in the local community.</p>
Libraries serve to form and strengthen communities. (4)	<p>In libraries, local residents create social, historical and cultural identities by sharing physical and geographical spaces and opinions.</p> <p>They use the library’s Internet and Wi-Fi to create communities or participate in real-time community activities such as email, chat, discussions, and video conferencing.</p> <p>They support online communication including reading clubs and cultural clubs through the library’s website.</p> <p>They contribute to the creation of a community by participating in organized meetings such as meetings with writers and lectures at libraries.</p>
Libraries provide the necessary information to the community. (5)	<p>Libraries provide information on institutions related to politics, economy, and culture.</p> <p>Libraries provide information related to schools, careers, education, and community groups.</p> <p>Library shares life information such as local public transportation, traffic conditions, and weather.</p> <p>Libraries form the locality of local residents by providing local history and local materials.</p> <p>Libraries provide information about the city or residential area to local residents.</p>

### 5.1.2 Communalinity

The Delphi survey questionnaire for communalinity derived 4 primary components and 19 detailed factors. Expert opinions were also received on the detailed factors of community that were deleted when the first questionnaire was produced, and four factors were newly added after receiving opinions that they corresponded to locality. The two detailed factors that did not satisfy the content validity, convergence, and agreement in the first survey were included in the second survey questions and re-evaluated, considering that they were the first survey.

In the second survey, 4 components and 20 detailed factors were conducted, and all but one of them satisfied the content validity, convergence, and agreement of the Delphi survey. One question that did not satisfy the validity, the factors that were evaluated low by experts below the 25% quartile, and the experts’ opinions were combined, and the questions that conveyed the meaning ambiguously were combined and deleted. That is, 16 detailed factors were adopted except for a total of 4 factors.

In the third questionnaire, content validity, convergence, and agreement were all satisfied. Among

which, the questions with similar contents were integrated and modified by reflecting the opinions of experts.

Table 6. Community's component selection process

Classification	Results of the 1st Delphi survey reflected	Results of the 2nd Delphi survey reflected	Results of the 3rd Delphi survey reflected
<b>A</b>	Library supports the creation of a cultural space by linking its space with the local community.	Library supports the creation of a cultural space by linking its space with the local community.	Library supports the creation of a cultural space by linking its space with the local community.
	Participation in library cultural programs increases cooperation and communality among local residents.	Participation in library cultural programs increases cooperation and communality among local residents.	Participation in library cultural programs increases cooperation and communality among local residents.
<b>B</b>	Libraries plan programs through the voluntary participation of residents.	Libraries plan programs through the voluntary participation of residents.	Libraries plan programs through the voluntary participation of residents.
	They build a sense of cooperation among local residents through library programs.	(New) Library provides cultural education to everyone in the community.	Libraries provide cultural education to the community for everyone.
<b>B</b>	Interpersonal networks of participants are expanded through participation in library cultural programs and clubs.	They build a sense of cooperation among local residents through library programs.	<b>(Deleted)</b>
	The communication that takes place in the library improves the relationship between local residents.	(Integrated) The network of participants is expanded through participation in library cultural programs and clubs.	The network of participants is expanded through participation in library cultural programs and clubs.
<b>C</b>	They improve interpersonal relationships in the community through participation in library programs.	They promote community ties through programs and facilities that reflect regional characteristics.	They promote community ties through programs and facilities that reflect regional characteristics.
	They promote community ties through programs and facilities that reflect regional characteristics.	(Integration/Movement of Items) They promote community ties through programs or facilities that reflect regional characteristics.	They promote community ties through programs and facilities that reflect regional characteristics.
<b>C</b>	Participation in library cultural programs increases participants' bonds with others.	Library builds relationships with local residents through related programs and talent donations by cultural workers such as local writers.	Library builds relationships with local residents through related programs and talent donations by cultural workers such as local writers.
	Library builds relationships with local residents through related programs and talent donations by cultural workers such as local writers.	Library builds relationships with local residents through related programs and talent donations by cultural workers such as local writers.	Library builds relationships with local residents through related programs and talent donations by cultural workers such as local writers.
<b>C</b>	They support the community among local residents through the mentor-mentee program of the library.	They support the community among local residents through the mentor-mentee program of the library.	They support the community among local residents through the mentor-mentee program of the library.
	Through the library, they help to participate in local activities such as community events and seminars.	Through the library, they help to participate in local activities such as community events and seminars.	Through the library, they help to participate in local activities such as community events and seminars.
<b>C</b>	They provide support for donations or sponsorships to community organizations through the library.	They provide support for donations or sponsorships to community organizations through the library.	<b>(Deleted)</b>
	They support participation in community organizations and volunteer activities through the library.	They support participation in community organizations and volunteer activities through the library.	They support participation in community organizations and volunteer activities through the library.

Classification	Results of the 1st Delphi survey reflected	Results of the 2nd Delphi survey reflected	Results of the 3rd Delphi survey reflected
<b>D</b>	<p>They inspire local attachment and pride in the library.</p> <p>They contribute to solidarity as a member of the local community through various information guidance services and educational programs.</p> <p>Libraries enhance attachment to the community by providing local jobs, education and special programs for people with disabilities.</p> <p>Libraries play an important role in helping migrants or multicultural families adapt to a new community.</p> <p>Libraries provide migrants with resources for literacy, language acquisition, and economic confidence, contributing to a sense of belonging to the community.</p>	<p>They inspire local attachment and pride in the library.</p> <p>They contribute to solidarity as a member of the local community through various information guidance services and educational programs.</p> <p>Libraries enhance attachment to the community by providing local jobs, education and special programs for people with disabilities.</p> <p>Libraries play an important role in helping migrants or multicultural families adapt to a new community.</p> <p>Libraries provide migrants with resources for literacy, language acquisition, and economic confidence, contributing to a sense of belonging to the community.</p> <p>(New) Library provides local information guidance programs for the culturally underprivileged.</p> <p>(New) Libraries contribute to narrowing the cultural gap between localities.</p> <p>(New) Library strives to bridge the cultural gap between local residents.</p>	<p>They inspire local attachment and pride in the library.</p> <p>They contribute to solidarity as a member of the local community through various information guidance services and educational programs.</p> <p>Libraries enhance attachment to the community by providing local jobs, education and special programs for people with disabilities.</p> <p>(Integrated) Libraries provide migrants with resources for literacy, language acquisition, and economic confidence, contributing to a sense of belonging to the community.</p> <p>(Integrated) Library strives to bridge the cultural gap between local residents.</p>

- A : Libraries contribute to the formation of local cultural communities,  
 B : Libraries contribute to improving interpersonal relationships.  
 C : Libraries support active local activities among local residents.  
 D : Libraries contribute to the formation of a sense of belonging in the local community by supporting the improvement of social adaptability.

Furthermore, to derive the final factor, one question was corrected to ensure that the meaning of the question could be conveyed well as intended, and one similar/overlapping question was integrated. Finally, locality, the communicative characteristics of libraries, was derived with 4 components and 16 detailed factors.

Table 7. Final derivation of detailed factors of communality

Component	Detailed Factors
Libraries contribute to the formation of local cultural communities. (4)	<p>Library supports the creation of a cultural space by linking its space with the local community.</p> <p>Participation in library cultural programs increases cooperation and communality among local residents.</p> <p>Libraries plan programs through the voluntary participation of residents.</p> <p>Libraries provide cultural education to the community for everyone.</p>
Libraries contribute to improving interpersonal relationships. (4)	<p>The network of participants is expanded through participation in library cultural programs and clubs.</p> <p>They promote community ties through programs and facilities that reflect regional characteristics.</p> <p>Library builds relationships with local residents through related programs and talent donations by cultural workers such as local writers.</p> <p>They support the community among local residents through the mentor-mentee program of the library.</p>

Component	Detailed Factors
Libraries support active local activities among local residents. (2)	Through the library, it helps to participate in local activities such as community events and seminars. They support participation in community organizations and volunteer activities through the library.
Libraries contribute to the formation of a sense of belonging to the local community through support for improving social adaptability. (5)	Libraries contribute to building a sense of belonging through communication and support for community activities, instilling a sense of attachment and pride in the locality. They contribute to solidarity as a member of the local community through various information guidance services and educational programs. Libraries enhance attachment to the community by providing local jobs, education and special programs for people with disabilities. Libraries provide migrants with resources for literacy, language acquisition, and economic confidence, contributing to a sense of belonging to the community. Library strives to bridge the cultural gap between local residents.

### 5.1.3 Interactivity

The Delphi survey questionnaire for interactivity consisted of 4 primary components and 18 detailed factors. Two factors were included again for the detailed factors of interactivity that were deleted when discovering library communication characteristics. The two detailed factors that did not satisfy the content validity, convergence, and agreement in the first survey were not deleted, but included in the second survey questions for reevaluation.

The second survey conducted a survey targeting a total of 5 components and 20 detailed factors, including the two newly added questions from the first survey. All but two of them satisfied the content validity, convergence, and agreement of the Delphi survey. The two questions that did not satisfy the validity, the factors that experts rated low at 25% or less in the quartile, and the experts' opinions were combined and deleted, and the sentences of the questions that conveyed the meaning were ambiguous were corrected. That is, 18 detailed factors were adopted except for a total of 2 factors.

In the third questionnaire, it turned out that content validity, convergence, and agreement were all satisfied.

Table 8. Interactivity's component selection process

Classification	Results of the 1st Delphi survey reflected	Results of the 2nd Delphi survey reflected	Results of the 3rd Delphi survey reflected
A	Library serves as a network channel between local contents and local residents. Libraries contribute to the expansion of local residents' communities by sharing social and regional issues and ideas. Libraries enable rapid knowledge sharing through communication. Libraries help create and maintain community social connections.	Library serves as a network channel between local contents and local residents. Libraries contribute to the expansion of local residents' communities by sharing social and regional issues and ideas. (Sentence corrected) Libraries enable rapid knowledge sharing through communication. Libraries help create and maintain community social connections.	Library serves as a network channel between local contents and local residents. Libraries contribute to the expansion of local residents' communities by sharing social and regional issues and ideas. Libraries enable rapid knowledge sharing through communication. Libraries help create and maintain community social connections.



Classification	Results of the 1st Delphi survey reflected	Results of the 2nd Delphi survey reflected	Results of the 3rd Delphi survey reflected
<b>B</b>	Libraries share the community and local consciousness that groups and individuals have.	Libraries share the community and local consciousness that groups and individuals have.	Libraries share the community and local consciousness that groups and individuals have.
	Library strives to respect and reflect the opinions of various groups.	Library strives to respect and reflect the opinions of various groups.	Library strives to respect and reflect the opinions of various groups.
	Libraries support cultural participation opportunities for local residents by providing programs such as exhibitions, movies, and script writing.	Libraries support cultural participation opportunities for local residents by providing programs such as exhibitions, movies, and script writing.	Libraries support cultural participation opportunities for local residents by providing programs such as exhibitions, movies, and script writing.
	Library provides information on various leisure activities in the locality and supports cultural events and events.	Library provides information on various leisure activities in the locality and supports cultural events and events.	Library provides information on various leisure activities in the locality and supports cultural events and events.
	Libraries provide users with opportunities for leisure and help relieve stress.	Libraries provide users with opportunities for leisure and help relieve stress.	Libraries provide users with opportunities for leisure and help relieve stress.
<b>C</b>	Libraries improve users' relaxation and leisure activities by providing a variety of books, videos, and recreational materials.	(Sentence corrected) Library supports users' rest and leisure activities by providing various books, video materials, and recreation-related materials.	Library supports users' rest and leisure activities by providing various books, video materials, and recreation-related materials.
	Library is composed of various spaces as cultural and leisure facilities.	Library is composed of various spaces as cultural and leisure facilities.	Library is composed of various spaces as cultural and leisure facilities.
	They promote a sense of community through participation in living culture in the library.	(Sentence corrected) Library promotes a sense of community through cultural activities such as exhibitions, movies, and reading.	Library promotes a sense of community through cultural activities such as exhibitions, movies, and reading.
	Library uses various cultural resources of the locality to form communication and trust among local residents.	Library uses various cultural resources of the locality to form communication and trust among local residents.	Library uses various cultural resources of the locality to form communication and trust among local residents.
	Libraries contribute to the spread of national cultural homogeneity among local residents through cultural support.	(Sentence corrected) Libraries contribute to the spread of cultural homogeneity among local residents through local cultural support.	Libraries contribute to the spread of cultural homogeneity among local residents through local cultural support.
<b>D</b>	Library is a space where services such as integrated care for children in the community are provided.	Library is a space where services such as integrated care for children in the community are provided.	Library is a space where services such as integrated care for children in the community are provided.
	The relationships with local residents are improved through libraries, helping with difficult tasks.	The relationships with local residents are improved through libraries, helping with difficult tasks.	<b>(Deleted)</b>
	When conflicts or problems arise within the locality, the library resolves them on its own under the leadership of local residents.	When conflicts or problems arise within the locality, the library resolves them on its own under the leadership of local residents.	<b>(Deleted)</b>
	As a direct living space for users, community activities at the library to share various information take place.	(Sentence corrected) As a daily living space for users, community activities at the library to share various information take place.	As a daily living space for users, community activities at the library to share various information take place.
		(New) Libraries help local residents grow and develop by acquiring new knowledge and skills.	Libraries help local residents grow and develop by acquiring new knowledge and skills.
<b>E</b>		(New) The interest in self-development (competence development) increases through the library.	The interest in self-development (competence development) increases through the library.

A : Library is a space where various generations share their opinions.  
 B : Library is a space to accommodate the leisure behavior of local residents.  
 C : Library is a space for cultural growth in the community.  
 D : Libraries enhance local communities through interaction with local residents.  
 E : Library supports the capacity development of local residents.

Accordingly, and finally, interactivity, which is the communicative characteristic of libraries, was derived with 5 components and 18 detailed factors.

Table 9. Final derivation of detailed factors of interactivity

Component	Detailed Factors
Library is a space where different generations share their opinions. (6)	Library serves as a network channel between local contents and local residents. Libraries contribute to the expansion of local residents' communities by sharing social and regional issues and ideas. Libraries enable rapid knowledge sharing through intergenerational communication. Libraries help create and maintain community social connections. Libraries share the community and local consciousness that groups and individuals have. Library strives to respect and reflect the opinions of various groups.
Library is a space to accommodate the leisure behavior of local residents. (5)	Libraries support cultural participation opportunities for local residents by providing programs such as exhibitions, movies, and script writing. Library provides information on various leisure activities in the locality and supports cultural events and events. Libraries provide users with opportunities for leisure and help relieve stress. Library supports users' rest and leisure activities by providing various books, video materials, and recreation-related materials. Library is composed of various spaces as cultural and leisure facilities.
Library is a space for the cultural growth of the local community. (3)	Library promotes a sense of community through cultural activities such as exhibitions, movies, and reading. Library uses various cultural resources of the locality to form communication and trust among local residents. Libraries contribute to the spread of cultural homogeneity among local residents through local cultural support.
Libraries enhance local communities through interaction with local residents. (2)	Library is a space where services such as integrated care for children in the community are provided. As a daily living space for users, community activities at the library to share various information take place.
Libraries support the capacity development of local residents. (2)	Libraries help local residents grow and develop by acquiring new knowledge and skills. The interest in self-development (competence development) increases through the library.

#### *5.1.4 Organic vitality*

The Delphi survey questionnaire on organic vitality consisted of 3 primary components and 16 detailed factors. Two new factors were added by reflecting expert opinions on the detailed factors of organic vitality that were deleted when discovering library communication characteristics. The two detailed factors that did not satisfy the content validity, convergence, and agreement in the first survey were not deleted, but included in the second survey questions for reevaluation.

In the second survey, a total of 3 components including 2 newly added questions and 18 detailed factors were surveyed. It turned out that all but three of them satisfied the content validity, convergence, and agreement of the Delphi survey. The three questions that did not satisfy the validity and the experts' opinions were combined and modified and deleted. Accordingly, 15 detailed factors were adopted except for a total of 3 factors.

In the third questionnaire, it turned out that content validity, convergence, and agreement were all satisfied.

Table 10. Organic vitality's component selection process

Classification	Results of the 1st Delphi survey reflected	Results of the 2nd Delphi survey reflected	Results of the 3rd Delphi survey reflected
<b>A</b>	Library serves as a representative space for the locality and a community center for local residents.	Library serves as a representative space for the locality and a community center for local residents.	Library serves as a representative space for the locality and a community center for local residents.
	Libraries function as local symbols or landmarks.	Libraries function as local symbols or landmarks.	Libraries function as local symbols or landmarks.
	When the library becomes a local attraction, the economic value of the area is improved by attracting other local residents or tourists.	When the library becomes a local attraction, the economic value of the area is improved by attracting other local residents or tourists.	When the library becomes a local attraction, the economic value of the area is improved by attracting other local residents or tourists.
	Having a library close to home increases the value of the community.	Having a library close to home increases the value of the community.	Having a library close to home increases the value of the community.
	Library's community facilities contribute to revitalizing the local economy.	Library's community facilities contribute to revitalizing the local economy.	Library's community facilities contribute to revitalizing the local economy.
<b>B</b>	Libraries provide information on entrepreneurship to support local residents' entrepreneurship.	Libraries provide information on entrepreneurship to support local residents' entrepreneurship.	Libraries provide information on entrepreneurship to support local residents' entrepreneurship.
	Libraries provide assistance to local residents in starting or operating existing businesses in the locality.	Libraries provide assistance to local residents in starting or operating existing businesses in the locality.	<b>(Deleted)</b>
	Libraries help us acquire new knowledge and skills that are important for our time.	Libraries help us acquire new knowledge and skills that are important for our time.	Libraries help us acquire new knowledge and skills that are important for our time.
	They provide information on new jobs (jobs) in the locality and employment information needed by job seekers in the locality.	They provide information on new jobs (jobs) in the locality and employment information needed by job seekers in the locality.	They provide information on new jobs (jobs) in the locality and employment information needed by job seekers in the locality.
	Library supports job search and job information, finding materials related to how to write a resume, submitting applications online, and receiving job training.	Library supports job search and job information, finding materials related to how to write a resume, submitting applications online, and receiving job training.	Library supports job search and job information, finding materials related to how to write a resume, submitting applications online, and receiving job training.
		(New) Library provides business information free of charge when small and medium-sized businesses plan a new business or need to know related regulations.	<b>(Deleted)</b>
		(New) Various business related books, journals, and online DBs provided free of charge by the library are helpful for business development.	Various business related books, journals, and online DBs provided free of charge by the library are helpful for business development.
<b>C</b>	Libraries contribute to the promotion of community health and well-being.	Libraries contribute to the promotion of community health and well-being.	Libraries contribute to the promotion of community health and well-being.

Classification	Results of the 1st Delphi survey reflected	Results of the 2nd Delphi survey reflected	Results of the 3rd Delphi survey reflected
	Library provides medical and health information (health insurance information, doctor information, information on discounted drugs, and diet information).	Library provides medical and health information (health insurance information, doctor information, information on discounted drugs, and diet information).	Library provides medical and health information (health insurance information, doctor information, information on discounted drugs, and diet information).
	Library provides a space for local residents to use the exercise facilities inside and outside the library.	Library provides a space for local residents to use the exercise facilities inside and outside the library.	<b>(Deleted)</b>
	Libraries provide welfare facilities, spaces, and services for the elderly, children, and the disabled.	Libraries provide welfare facilities, spaces, and services for the elderly, children, and the disabled.	Libraries provide welfare facilities, spaces, and services for the elderly, children, and the disabled.
	They provide services to heal the psychological problems of local residents.	They provide services to heal the psychological problems of local residents.	They provide services to heal the psychological problems of local residents.
	Through library psychological healing (reading therapy, psychodrama, theme lectures, horticultural therapy, etc.), they support the formation of consensus and learning desirable communication methods.	Through library psychological healing (reading therapy, psychodrama, theme lectures, horticultural therapy, etc.), it supports the formation of consensus and learning desirable communication methods.	Through library psychological healing (reading therapy, psychodrama, theme lectures, horticultural therapy, etc.), it supports the formation of consensus and learning desirable communication methods.

A : As a representative space of the local community, the library enhances the value of the residential environment.  
 B : Libraries contribute to the creation of local jobs.  
 C : Library contributes to physical and psychological health promotion through interaction.

## 5.2 Derivation of the library's final communication characteristics and components

In this study, in order to derive the communicative characteristics of libraries, the Delphi survey was conducted three times targeting the experts of library and library and information science, and finally, 4 communicative characteristics of locality, community, interaction, and organic vitality and 16 configuration factors and 63 detailed factors were derived.

First, the components of locality are 'libraries provide spaces and places for community activities', 'libraries are spaces that form healthy communities', and 'libraries contribute to forming and enhancement communities' and 'libraries provide necessary information to the community.'

Second, it was verified that the components of community are 'libraries contribute to the formation of local cultural communities', 'libraries contribute to improving interpersonal relationships', 'libraries support active local activities among local residents', and 'libraries contribute to the formation of a sense of belonging in the local community through support for improving social adaptability.'

Third, interactivity was derived such that 'library is a space where various generations share opinions', 'library is a space to accommodate local residents' leisure behavior', 'library is a space for cultural growth of local community', 'libraries improve local communities through interaction with local residents', and 'libraries support capacity development of local residents'.

Lastly, organic vitality turned out to have such components as 'library as a representative space of the local community enhances the value of the residential environment', 'library contributes to creation of jobs in the locality', and 'library contributes to physical and psychological health promotion through interaction'.

Table 11. Library’s final communicative characteristics based on Delphi survey

Characteristics	Component
<b>Locality (4)</b>	<b>Libraries provide spaces and venues for community activities. (4)</b>
	Library provides a space for meeting, resting, and chatting to support communication among local residents.
	Library is a place of exchange where local residents can meet.
	Library provides a place for various community groups to gather and talk.
	Libraries are closely related to the lives of local residents and provide an environment for community activities.
	<b>Library is a space that builds a healthy community. (2)</b>
	Library provides a space to share issues related to the locality, such as regional problems and social issues.
	Through the library, local residents increase their interest in the local community.
	<b>Libraries serve to form and strengthen communities. (4)</b>
	In libraries, local residents create social, historical and cultural identities by sharing physical and geographical spaces and opinions.
They use the library’s Internet and Wi-Fi to create communities or participate in real-time community activities such as email, chat, discussions, and video conferencing.	
They support online communication including reading clubs and cultural clubs through the library’s website.	
They contribute to the creation of a community by participating in organized meetings such as meetings with writers and lectures at libraries.	
<b>Libraries provide necessary information to the community. (5)</b>	
Libraries provide information on institutions related to politics, economy, and culture.	
Libraries provide information related to schools, careers, education, and community groups.	
Library shares life information such as local public transportation, traffic conditions, and weather.	
Libraries form the locality of local residents by providing local history and local materials.	
Libraries provide information about the city or residential area to local residents.	
<b>Community (4)</b>	<b>Libraries contribute to the formation of local cultural communities. (4)</b>
	Library supports the creation of a cultural space by linking its space with the local community.
	Participation in library cultural programs increases cooperation and communality among local residents.
	Libraries plan programs through the voluntary participation of residents.
	Libraries provide cultural education to the community for everyone.
	<b>Libraries contribute to improving interpersonal relationships. (4)</b>
	The network of participants is expanded through participation in library cultural programs and clubs.
	They promote community ties through programs and facilities that reflect regional characteristics.
	Library builds relationships with local residents through related programs and talent donations by cultural workers such as local writers.
	They support the community among local residents through the mentor-mentee program of the library.
<b>Libraries support active local activities among local residents. (2)</b>	
Through the library, it helps to participate in local activities such as community events and seminars.	
They support participation in community organizations and volunteer activities through the library.	
<b>Library contributes to the formation of a sense of belonging to the local community through support for improving social adaptability. (5)</b>	
Libraries contribute to building a sense of belonging through communication and support for community activities, instilling a sense of attachment and pride in the locality.	
They contribute to solidarity as a member of the local community through various information guidance services and educational programs.	
Libraries enhance attachment to the community by providing local jobs, education and special programs for people with disabilities.	
Libraries provide migrants with resources for literacy, language acquisition, and economic confidence, contributing to a sense of belonging to the community.	
Library strives to bridge the cultural gap between local residents.	

Characteristics	Component
<b>Interactivity (5)</b>	<b>Library is a space where different generations share their opinions. (6)</b>
	Library serves as a network channel between local contents and local residents. Libraries contribute to the expansion of local residents' communities by sharing social and regional issues and ideas. Libraries enable rapid knowledge sharing through intergenerational communication. Libraries help create and maintain community social connections. Libraries share the community and local consciousness that groups and individuals have. Library strives to respect and reflect the opinions of various groups.
	<b>Library is a space to accommodate the leisure behavior of local residents. (5)</b>
	Libraries support cultural participation opportunities for local residents by providing programs such as exhibitions, movies, and script writing. Library provides information on various leisure activities in the locality and supports cultural events and events. Libraries provide users with opportunities for leisure and help relieve stress. Library supports users' rest and leisure activities by providing various books, video materials, and recreation-related materials. Library is composed of various spaces as cultural and leisure facilities.
	<b>Library is a space for the cultural growth of the local community. (3)</b>
	Library promotes a sense of community through cultural activities such as exhibitions, movies, and reading. Library uses various cultural resources of the locality to form communication and trust among local residents. Libraries contribute to the spread of cultural homogeneity among local residents through local cultural support.
	<b>Libraries enhance local communities through interaction with local residents. (2)</b>
	Library is a space where services such as integrated care for children in the community are provided. As a daily living space for users, community activities at the library to share various information take place.
	<b>Libraries support the capacity development of local residents. (2)</b>
	Libraries help local residents grow and develop by acquiring new knowledge and skills. The interest in self-development (competence development) increases through the library.
<b>Organic vitality (3)</b>	<b>As a representative space of the local community, the library enhances the value of the residential environment. (5)</b>
	Library serves as a representative space for the locality and a community center for local residents. Libraries function as local symbols or landmarks. When the library becomes a local attraction, the economic value of the area is improved by attracting other local residents or tourists. Having a library close to home increases the value of the community. Library's community facilities contribute to revitalizing the local economy.
	<b>Libraries contribute to the creation of local jobs. (5)</b>
	Libraries provide information on entrepreneurship to support local residents' entrepreneurship. Libraries help us acquire new knowledge and skills that are important for our time. They provide information on new jobs (jobs) in the locality and employment information needed by job seekers in the locality. Library supports job search and job information, finding materials related to how to write a resume, submitting applications online, and receiving job training. Various business related books, journals, and online DBs provided free of charge by the library are helpful for business development.
	<b>Libraries contribute to physical and psychological health promotion through interaction. (5)</b>
	Libraries contribute to the promotion of community health and well-being. Library provides medical and health information (health insurance information, doctor information, information on discounted drugs, and diet information). Libraries provide welfare facilities, spaces, and services for the elderly, children, and the disabled. They provide services to heal the psychological problems of local residents. Through library psychological healing (reading therapy, psychodrama, theme lectures, horticultural therapy, etc.), they support the formation of consensus and learning desirable communication methods.

## 6. Discussion and Future Studies

This study presented the two research questions of ‘What are the communicative characteristics of a library?’ and ‘What are the components that form the communicative characteristics?’ The results of the previous studies examined are as follows.

### *6.1 Communicative characteristics of library*

Based on this study, the communicative characteristics of library were derived as ‘locality’, ‘community’, ‘interactivity’, and ‘organic vitality’. Depending on the researchers, who claimed as community factors, locality, communality, and organic vitality (Somme & Ross, 1958), or locality, communality, and interactivity (Hillery, 1955), it turned out that various community factors such as locality, communality, organic vitality, publicity, interactivity, intimacy, social relationship, and openness were claimed (Kim & Park, 2004; Sung & Jeon, 2006; Cho, 2014; Choi & Yoon, 2018; Oh, 2017; Lee, Jeon, & Lee, 2018; Nisbet, 1962; Minar & Greer, 1969; Davis & Herbert, 1993). Among which, the community factors commonly claimed by the researchers were analyzed, and as a result, the factors that form a common bond in the community or community turned out to be locality, communality, interactivity, and organic vitality. That is, the library communication characteristics were derived as the four types of locality, communality, interactivity, and organic vitality.

Examining the characteristics of library communication, first, locality means that local residents create and maintain the identity of a social, historical, and cultural locality while sharing the space of a library. At the library, the users can receive local life information or create a cultural identity of the locality through communication between the users.

Second, communality is a fundamental factor in forming a community of local residents and represents the characteristics of a group formed based on place and geographical characteristics, culture and belief system, and interests.

Third, interactivity refers to a kind of behavior through which the users interact with other users, information providers, and books and information in the library to give and receive influence. The actions in which two or more objects share knowledge, thoughts, emotions, and opinions may be seen as carried out through the interaction.

Lastly, organic vitality means the act of seeking the continuous maintenance and development of the community, and of creating a lasting characteristic even in the changing environment of the library.

### *6.2 Components of communicative characteristics*

The contents of the library community in literature studies were analyzed such as community or library community, communication space, and research on the educational, cultural, and social values of libraries (Kang, 2018; Noh, 2017a; Noh, 2017b; Noh, 2017c; Noh et al., 2018; Baek, 2018; Oh & Chu, 2018; Hwang, 2018; Noh & Kim, 2020; Yoon, 2020). Based on the previous studies, components (middle class) and detailed factors (lower class) of communicative characteristics

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(upper class) were derived, and based on which, the Delphi survey was conducted.

In the Delphi survey, the questions rated as lower than the 25% quartile by experts and open-ended opinions from experts were combined, and similar or overlapping questions and questions with ambiguous meanings were integrated and modified. Furthermore, the questions that did not satisfy the standards for selection of evaluation factors were excluded, and the questions that satisfied all of the content validity, extent of convergence, and extent of agreement were adopted as the detailed factors. As a result, the 4 communicative characteristics of locality, community, interactivity, and organic vitality were finally derived as 16 components and 63 detailed factors.

Examining the components by communicative characteristics, first, locality is derived as 5 components and 15 detailed factors such as first, 'library provides space and place for community activities', 'library is a space that forms a healthy community', 'library forms and enhances community' and 'library provides necessary information to the community' and 'library provides necessary information to the community'.

Second, the components of community turned out to have 4 components and 15 detailed factors such as 'libraries contribute to the formation of local cultural communities', 'libraries contribute to improving interpersonal relationships', 'libraries support active local activities among local residents', and 'libraries contribute to the formation of a sense of belonging in the local community through support for improving social adaptability'.

Third, interactivity turned out to have 5 components and 18 detailed factors such as 'library is a space where various generations share their opinions', 'library is a space to accommodate the leisure behavior of local residents', 'library is a space for the cultural growth of the local community', 'library improves local communities through interaction with local residents', and 'library supports competency development of local residents'.

Fourth, organic vitality derived as 3 components and 15 detailed factors such as 'library is a representative space of the local community and enhances the value of the residential environment', 'library contributes to creation of jobs in the locality', and 'library contributes to physical and psychological health promotion through interaction'.

## 7. Conclusion and Recommendations

Currently, public libraries have emerged as the spaces for communication, exchange, and experience, and are discussed as the community centers for local communities. As such, the communicative characteristics of the library, a representative communication space for the local community, were intended to be discovered, and its role was intended to be sought. Hence, in this study, the previous studies on library communication, space for the library communication, and community were analyzed, and the communicative characteristics of libraries were primarily derived. Next, in order to find out if it is appropriate as a library's communicative characteristics, the components and details of locality, communality, interactivity, and organic vitality were explored, grouped according to each characteristic, and the Delphi survey questionnaire was developed together. The Delphi survey was conducted three times by organizing 10 experts of library and library and information science

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as an expert group, and finally, the communicative characteristics and factors were derived. As a result, libraries were found to have communicative characteristics such as 'locality', 'community', 'interactivity', and 'organic vitality'. Based on the four communicative characteristics, the role of the library was sought to be explored. The summary of the Delphi survey's analytical results of this study is as follows.

First, the four components of locality were derived, which turned out to be 'libraries provide spaces and places for community activities', 'libraries are spaces that form healthy communities', 'libraries form and enhance communities' and 'libraries provide necessary information to the community.'

Second, four components of communality were derived. They were found to be 'libraries contribute to the formation of local cultural communities', 'libraries contribute to improving interpersonal relationships', 'libraries support active local activities among local residents', 'libraries support local residents to improve their social adaptability and contribute to the formation of a sense of belonging in society.'

Third, there are five components of interactivity, which are 'library is a space where various generations share their opinions', 'library is a space to accommodate the leisure behavior of local residents', 'library is a cultural growth of the local community.' 'libraries improve local communities through interaction with local residents', and 'libraries support capacity development of local residents'.

Lastly, three components of organic vitality were derived, which turned out to be 'libraries increase the value of the residential environment as a representative space of the community', 'libraries contribute to creation of jobs in the locality', and 'libraries promote interaction and contribute to the improvement of physical and psychological health.'

Based on such results of this study, the roles of public libraries based on their communicative characteristics are as follows.

First, the role of the library to enhance locality is to provide a variety of spaces for community activities as a space to form a healthy community, contribute to the creation and enhancement of the community, and provide the necessary information.

Second, to enhance the sense of community, library must contribute to the formation of a sense of belonging to the local community by supporting the formation of a local cultural community, improvement of interpersonal relationships, and improvement of social adaptability to enhance the sense of community, and support active local activities among the local residents.

Third, the library's role in enhancing interactivity ought to include providing a space for various generations to share their opinions, accommodating leisure behavior, and growing the culture of the local community. Accordingly, the library ought to improve the local community through interaction with the local residents and support the development of the local residents' capabilities.

Fourth, examining the role of the library to improve organic vitality, the library, as a space representing the local community, ought to contribute to the creation of jobs in the locality according to the policy direction and operation of the library in response to social changes, and the user's body through interaction, and must also contribute to the locality and its residents by promoting psychological health. It is apparent that organic vitality is achieved not only through the traditional roles and functions of the library, but also through the introduction of new concepts and expanded services. Such organic vitality can help increase the value of the living environment as a representative

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space of the local community.

This study discovered the communicative characteristics to enhance the role of the library as a communicative space. In the future, it is necessary that studies be conducted where priorities are identified through the AHP pairwise comparison of components or detailed factors of the library's communicative characteristics, and depending on the priority, it would be necessary to apply step by step for each type such as size and locality of the library, or identify communication methods that may be practiced. Furthermore, as the studies on the communication between the users and librarians, the follow-up studies such as reference service and research on the influence of active communication of librarians as information providers such as community issues and cultural activities on the of users' behavior of library use would need to be carried out.

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[ About the authors ]

**Younghee Noh** has an MA and PhD In Library and Information Science from Yonsei University, Seoul. She has published more than 50 books, including 3 books awarded as Outstanding Academic Books by Ministry of Culture, Sports and Tourism (Government) and more than 120 papers, including

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one selected as a Featured Article by the Informed Librarian Online in February 2012. She was listed in the Marquis Who's Who in the World in 2012-2016 and Who's Who in Science and Engineering in 2016-2017. She received research excellence awards from both Konkuk University (2009) and Konkuk University Alumni (2013) as well as recognition by "the award for Teaching Excellence" from Konkuk University in 2014. She received research excellence awards from 'Korean Y. Noh and Y. Shin International Journal of Knowledge Content Development & Technology Vol.9, No.3, 75-101 (September 2019) 101 Library and Information Science Society' in 2014. One of the books she published in 2014, was selected as 'Outstanding Academic Books' by Ministry of Culture, Sports and Tourism in 2015. She received the Awards for Professional Excellence as Asia Library Leaders from Satija Research Foundation in Library and Information Science (India) in 2014. She has been a Chief Editor of World Research Journal of Library and Information Science in Mar 2013 ~ Feb 2016. Since 2004, she has been a Professor in the Department of Library and Information Science at Konkuk University, where she teaches courses in Metadata, Digital Libraries, Processing of Internet Information Resources, and Digital Contents.

**Kim Yoon-Jeong** has masters in Library and Information Science from Konkuk University, Chungju.

**Woojung Kwak** has an PhD In Library and Information Science from Konkuk University, Chungju. She is Researcher of the Institute of Knowledge Content Development & Technology.

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