

# Exploring the Motivational Use of Special Libraries from a User's ARCS Perspective\*

이용자의 ARCS 관점에서 본 전문도서관 동기적 이용 탐색

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#### **ABSTRACT**

This study reports on the motivational use of special libraries from a user's perspective that investigated four motivational components: attention, relevance, confidence, and satisfaction (ARCS) of the library users. Even though special libraries received relatively little attention compared to public libraries, special libraries could fill the niche of public libraries for the special and specific needs of the community in the current library environments in South Korea. Qualitative data were collected through individual interviews and forty people participated in the project. The findings of this study show the four themes (ARCS) that users need motivation as a way to start using a special library, thereby staying focused and revisiting the library. It is possible that the ARCS model will contribute to the implementation, application, and practice of both special libraries and their services in the library environment. The results are expected to expand our knowledge on the motivational ARCS use of special libraries and to serve as basic data when designing motivational strategies and plans of the systems for special libraries.

#### 초 록

이 연구는 도서관 이용자의 주의집중, 관련성, 자신감, 만족감(ARCS) 관점에서 본 4가지 동기 요인을 조사하여 이용자의 전문도서관의 동기적 이용을 탐색하였다. 전문도서관이 공공도서관에 비해 상대적으로 적은 관심을 받고 있지만 전문도서관은 현재 한국의 도서관 환경에서 지역사회의 정보 요구를 위해 공공도서관의 빈틈을 메울 수 있다. 개별인터뷰를 통해 질적 데이터를 모았으며 40명의 참여자가 프로젝트에 참여했다. 본 연구의 결과는 이용자가 전문도서관을 이용하기 시작하려는 방법으로 동기부여가 필요하다는 4가지 요인(ARCS)을 보여주었고 그것들을 통해 도서관에 대한 집중과 재방문을 유도할 수 있다는 것을 보였다. 또한 ARCS모델은 도서관 환경에서 전문도서관과 그 해당 서비스의 구현 적용 및 실행에 기여할 수 있다는 가능성을 보였다. 이 논문은 전문도서관의 동기적 ARCS모델 활용에 대한 지식을 넓히고 전문도서관을 위한 동기부여 전략 및 도서관 시스템 계획을 설계할 때 기초자료로 이용될 것으로 기대한다.

Keywords: special library, ARCS model, motivation, attention, relevance, confidence, satisfaction 전문도서관, ARCS 모델, 동기, 주의집중, 관련성, 자신감, 만족감

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### 1. Introduction

Studies on special libraries recently become popular because this activity provides useful information about how a library system and user feedback affect in use of current libraries. However, prior studies have emphasized analyzing a special library quantity and quality and have neglected important user characteristics such as motivation that can affect the special library use process. We argue here that the user's motivation as experienced by the current special library systems in South Korea, services, and programs can serve as a sensitive index of the use of special libraries, measured as attention, relevance, confidence, and satisfaction (ARCS) independent of a user's knowledge of special libraries. Keller's model of motivation is known as ARCS, which is an acronym of four components: attention, relevance, confidence, and satisfaction (Keller, 1987). Knowing the extent of motivation from ARCS behavior could guide the design of more efficient and effective special library systems in Korea.

According to the National Library Statistical System (2020), there are 620 specialized libraries in South Korea as of 2020, and 13 of 620 libraries have been continuously increasing since 2016, although a small number can be confirmed. The development of special libraries in Korea received relatively little attention compared to public libraries. Special libraries could address subject area that can fill an unfilled space in public libraries to meet the specific needs of the community in the current library environments in South Korea. Public libraries are

somewhat trapped in a large frame that must satisfy all community users' information needs by collecting and serving collections on all subjects for all age groups with diverse focuses and purposes. As a result, it may have resulted in overloads that could not satisfy everyone in some way. The collections in special libraries are often heavily concentrated in one subject area to support a specific group of users. Due to this subject specialization, the specialized collections can be often provided to the users, researchers, and institutions in the community (Online Computer Library Center, 2022). From a geographic and demographic point of view, since the overall size of the country or province in Korea is small and the population density is high depending on the region, special libraries may have the key to solving the above-mentioned problems.

Many factors influence the use of a library from a user's perspective that is considered predictable but beyond the control of a library's stakeholders. Consequently, both librarians and stakeholders often view their responsibility as providing good quality library collection, services, and programs, and assume it is the users' burden to determine whether or not to use the opportunity to take advantage of the library. Libraries are offering countless learning opportunities to the public and play an important role in the learning process. In this regard, motivating users to engage is a critical factor in a library's success. Can we consider motivation as a response to interest to understand the key influences on using a library? Can we improve motivation to use a library through systematic ways by identifying and finding information needs? Is it possible to develop a systematic approach to motivating a library use for users in the learning process? A concern for these questions led to the exploration of this study.

## 2. Theoretical background

To examine the motivational use of special libraries from a user's perspective, it is needed to review the context within which a special library and the intention to use the library happen. Thus, the present work theoretically includes definitions, studies, cases, and examples of special libraries in South Korea and the ARCS model of motivational theory.

### 2.1 Definitions of special libraries

The main purpose of special libraries is to provide specialized and professional collections, services, and programs on a specific subject or field to its specialized and limited users in subject-specific environments or organizations or the public (Libraries Act, 2009). It includes museum libraries, law libraries, medical libraries, hospital libraries, corporate libraries, and others (American Library Association; ALA, 2016b). Academic institutions also have their own special libraries in them. ALA (2016b) states that "special libraries, also called information centers, can serve particular populations, such as the blind and physically handicapped, while others are dedicated to special collections, such as the Library of Congress or a

presidential library". Special libraries also be a special branch of a public library that serves a specific interest or professional group such as a technical library or a special library that meets the needs of questions on a given subject such as a music library (Library & Information Science Network; LISBDNETWORK, 2018). This study adopted the term of special libraries identified by Shumaker (2017). According to Shumaker (2017, p. 8), special libraries usually have one or more of the following characteristics: "a focus on specialized information resources, usually of a limited subject scope; a focus on a specialized and limited clientele; and the delivery of specialized services to that clientele." Through the provision of a library, users can interact and engage in the learning process because the library offers an important source of knowledge to the needs of the users (Enwerem, Envuluanza, & Usuka, 2020). Kuhlthau (1988) investigated the library search process of students and developed a six-stage search process from the thoughts, actions, and feelings experienced in the process. Special libraries can work as a space for users to seek specific information and obtain learning. However, the existence of a special library does not mean that special library services will make a big difference or have a positive impact on users right away. This has important implications for special libraries and their services, which must have high quality as a sustainable library, even to prove that they are giving value to the community (Botha, Erasmus, & van Deventer, 2009). Any type of library is known to provide its collections and services to support education for the community. Thus, the quality of collections and services in a special library should be rendered in hopes of having information just in case and just for users (Kim, 2021).

# 2.2 Studies on special libraries in South Korea

Recently, public libraries in Korea have been recognized as an environment that can provide users with specialized collections on specific topics to users (Chang, 2020; Cho, 2008; Noh & Oh, 2018a; Noh, Oh, & Sim, 2017). Many previous research on special libraries have largely focused on the operational status (Noh et al., 2008), subject-specialized services (Noh et al., 2021; Noh, Oh, & Sim, 2017), subject-specialized librarians (Choi, 2012; Chung, 2007, 2009; Hwang, 2011), marketing management strategy (Lee, 2007), Service quality (Kim, 2021), and the issues and library policies of special libraries (Noh et al., 2021; Noh & Park, 2021). However, studies focusing on the experiences and perceptions of general users (including potential users) of special libraries are still lacking. Lee (2017) investigated the current state and librarian perception of information services to promoting services in special libraries. She discovered newly required tasks in special libraries were as follows, "introducing research information management tools, operating an advisory committee, and conducting publications-related tasks" (Lee, 2017, p. 157). Much attention from researchers has not been received on the marketing of a special library for a relatively long period of time. Lee (2007) presented the concept of special

library marketing, the examples of domestic and foreign special library marketing, and marketing management plans of special libraries in South Korea. Hwang (2011) investigated and analyzed how subject specialized service is operated in Korea special libraries and how subject specialist librarians recognize them. Subject specialized services for special libraries recently have more attention (Noh et al., 2021; Noh & Oh, 2018a; 2018b; Noh, Oh, & Sim, 2017; Noh, Shin, & Kwak, 2019; Noh & Park, 2021). Noh et al. (2017) investigated the opinions of librarians about services and librarianship of a special library. They emphasized the importance of qualification standard for librarians for subject-specialized library services and the operation of the governments' qualification standards protocol. A recent study(Kim, T., Kim, H., & Lee, 2021) examined how the situation of domestic medical libraries that provide information services related to Covid-19 and how the Covid-19 perceived by librarians affects the provisions of relation information and sources of that information. They showed that librarian's awareness of problems information services, and participation in Covid-19 were very high, while the perception of restrictions on information provision was low.

# 2.3 Examples of special libraries in South Korea

Special libraries can provide opportunities for communication and educational growth to the public and by building specialized collections, support research in specific subject areas so as to contribute to the creation of new knowledge. According to the Statista (2016), there are approximately 6,966 special libraries in the United States, and their roles of special libraries are very diverse, ranging from the presidential library to museum libraries, hospital libraries, and corporate libraries, providing a variety of research support. According to the National Library Statistical System (2020), it is reported that there are 620 special libraries, whereas 1,172 public libraries in South Korea as of 2020. Although it is increasing in quantity, the number of special libraries is indeed relatively small compared to public libraries. The number of special libraries should be expanded so that more diverse people can use them.

In this context, there is an urgent need for the growth of the number of special libraries, and recently, research on ways to characterize public libraries for one subject specialization is being conducted (Noh & Oh, 2018b; Noh, Shin, & Kwak, 2019), which can be a hybrid form of a public library and a special library. By examining the examples of special libraries in Korea, it is possible to find out what subjects the library wants to specialize in and what special materials it wants. The table below shows examples of the special libraries currently providing subject-specific services in Korea.

## 2.4 Motivation to use a library to seek information for learning

Motivation is multidimensional as it is influenced by individual's cognitive, emotional, psychological, and physical factors, as well as previous experiences and circumstances (Schunk, Meece, & Pintrich, 2014). The motivated user might have the inner strength to seek their information needs, to solve their problems, to improve their knowledge, and to learn what they trying to know while using a library to the demands of the needs. Motivation has a strong relationship with learning (Ferreira, Cardoso, & Abrantes, 2011). Thus, motivation is a crucial factor to learn something new and reduce uncertainty in a library use. Kuhlthau (1991) considered information seeking as a learning process. The learning process explained by Kuhlthau (1991), information search process (ISP) as a five-stage, is an iterative and endless process. During Kulthau's ISP formulation stage, uncertainty is reduced while increasing confidence as a focus and perspective on information needs are formed (Kuhlthau, 1988; 1993). It is at that time that the users restore motivation to return to the library with a positive experience in use of the library.

Savolainen (2011; 2015) specifically studied the factors that induce purposeful information seeking. The results showed that the cognitive and affective attributes of motivational factors provide the key to grasping the conceptualization of information uncertainty and need. Kuhlthau (1993; 1999) explored the thoughts, feelings, and behaviors that students experience as they undergo various stages of the ISP. She described that the ISP's exploration stage is the phase most students struggle with when they experience incomplete, inconsistent, and lack of confidence. Finding a library to seek information can be the stage of exploration in Kulthau's sixth stage of ISP (Kuhlthau, 1991). Information seeking

⟨Table 1⟩ Examples of special libraries in South Korea

Types of special libraries	Topical characteristics	Name of a special library	
Medical Library	Medical field, Medline, Medical journals, Pubmed, Printed and digital medical materials, Doctors, Patients, Health professionals, and Researchers	SNU Medical Library, Samsung Medical Information & Media Services, Yonsei University Medical Library, Korea University Medical Library	
Law Library	Law fields, Supreme Court Library facilitates court affairs by performing such duties as acquisition, cataloging, preservation, compilation, and publication of law books, library materials, and judicial publications, as well as offering pertinent information on those materials and providing library services	Supreme Court Library of Korea, Constitutional Court Library	
Science Library	Science and engineering fields, materials relating to life and physical sciences, engineering and technology	IBS Science Culture Center, Uijeongbu Science Library	
Food & Cooking Library	Food and cooking fields, deep look into the craft of cooking, where food production, literature, and experience of food coexist	Hyundai card Cooking library, Nongshim Library of Food Culture	
English Library	English fields, resources categorized per level/theme, and various English reading promotion programs	Yangcheon English Specialized Library, Busan English Library, Sacheon Children's English Library	
Music Library	Music fields, musical scores, recordings of performances, critiques, commentary, and composition	Uijeongbu Music Library, Shinwol Digital Information Library	
Art Library	Visual materials and printed collections for Arts, Design, and Architecture	Anyang Pavilion Library, Uijeongbu Art Library	
Film Library	Various materials such as films and DVDs, 15,000 video materials, 4,400 movie-related books, 2,000 specialized magazines	Jeonju Movie Special Library	
Cartoon Library	Various materials such as domestic and foreign comic books, non-books, theory books, and other cartoon related materials	Korea Manhwa Museum, Bucheon Cartoon Information Center	
Maritime Library	Develop and provide expert information guides for each subject in the field of maritime culture, such as history, territory and literature at sea	Korea National Maritime Museum & Maritime Library, Mokpo National Maritime University Library	
Human Right Library	Collects, organizes, and preserves human rights-related materials and provides them to employees, human rights organizations, and the general public		
Chinese translation Library	A special library for staff, professional translators, education center students, majors and researchers, focusing on the topic of classic Chinese translation as well as providing research materials for carrying out the purpose project by collecting and arranging domestic and foreign materials related to Chinese characters and classics	Chinese translation special library	

using a library is a learning process, where motivation to use the library is a critical factor to consider in order to understand behaviors such as why a specific behavior is made, what it is purposeful, why it lasts for a short time, or why it is infrequent as the principal issues of motivation (Fainburg, 2009). Although the ARCS motivation model has its origins in educational psychology, it is thought that this theory can be sufficiently applied to study the motivation of users to use a library to seeking information as a starting point for learning in the field of Library and Information Science (LIS).

#### 2.5 ARCS model of motivation

Keller (1987) developed a motivational model called ARCS. The ARCS model identifies four essential components which can be applied and sustained to a library user's motivation in the context of a library as a learning process: 1) Attention refers to arousing curiosity, stimulating interest in learning, and maintaining this throughout the use of a library; 2) Relevance refers to having users view the libraries as important, useful, and meaningful to them; 3) Confidence refers to providing opportunities to build users' feeling of self-efficacy based on learning success, and 4) Satisfaction refers to users feel a sense of satisfaction or reward with regard to their learning. Keller (2010) described the emotional, affective, and cognitive aspects of human behavior as constituent elements of motivation. Libraries cannot control all of these factors of users, but through understanding the nature of motivational behavior and careful plan-

ning they can create for users to use a library will help designing the library collection, services and programs. Motivation is "the process whereby goal-directed activity is initiated and sustained" (Schunk, Meece, & Pintrich, 2014, p. 5). Hence, it is important to understand the motivation of users of special libraries as to why they use the library, why they continue to use it, and why they stop using it. Sternheim (2016) emphasized public libraries as a place of learning where new knowledge is continuously created through the interaction between users and information resources. Harisanty (2019) emphasized that the school and academic libraries are places where high school students find information, and further described that the school library is a place where students feel comfortable, meet friends, finish projects, and enjoy reading and leisure.

In applying ARCS model to a library environment, the ARCS model is being studied in relation to information literacy education in libraries (Hauck, Reynolds, & Roverts, 2017). Few studies have focused about motivation in the use of library materials, services, and programs. Hess (2015) studied a motivational design for literacy library-based education to investigate how the ARCS model might affect student learning outcomes. Small, Zakaria, El-Figuigui (2004) studied the motivating effect of information literacy education for students provided by librarians at a community college. She found that the students had low self-confidence and lack of satisfaction, but found that all ARCS factors affected the students' motivation. In addition, the ARCS model is being studied for the design of a system for educational

motivation in a digital learning environment as well as a brick and mortar learning environment. Chang and Chen (2015) studied ARCS model for motivation on a blended information literacy course environment and revealed that ARCS-based digital material and motivational course design for learning are important factors for accomplishing online information literacy education and learning performance. Since the library provides learning in the environment of online (e.g., Digital libraries) and offline (e.g., Physical libraries), the ARCS model is expected to be applied well to designing a library system for users' motivation to use the library as well as the educational environment.

Much of the research on motivation has been done in the field of education and educational psychology, focusing on ways to motivate people how to get the maximum learning performance and outcomes, and study better, harder, and faster. However, research on motivation has been less conducted in the LIS, focusing on outcomes and behaviors in information search.

## 3. Methodology

The purpose of this study is to examine and describe the experiences of attention, relevance, confidence and satisfaction of motivational ARCS model in users' special library use behaviors. Thus, the key research question in this study is as follows: How do users experience seeking special libraries from ARCS perspective?

In this study, exploratory qualitative methods were

considered and selected as appropriate techniques to facilitate the acquisition of in-depth information (Casula, Rangarajan, & Shields, 2020) and investigation of the features as it helps to identify key characteristics of the cases (Ragin, 1994). Thus, we used a qualitative design with an interpretive perspective as it is best able to connect participants' subjective interest or attention, relevance, confidence, and satisfaction with motivation to use a special library.

### 3.1 Participants

Forty participants (P1-P40) were recruited and interviewed about their experiences and perceptions of using special libraries in G city, South Korea. In this study, a purposive and selective sampling technique was used because opinions in a specific field are important and diverse samples are needed to secure in-depth and detailed information on the experiences and perceptions of users of special libraries (Gentles et al., 2015; Martínez-Mesa et al., 2016). There were 16 males and 24 females aged between 30 and 53 years (Mean=40.87, SD=6.02), focusing on the participants' perception and experience living in one city in a particular area with a particular interest. Since the participants in this paper are geared toward the general public users, we focused on special libraries that are open to the public users, not special libraries for limited and authorized users.

Participants had experience using a special library such as Medical library, English library or Science library. However, a significant number of participants (18 participants) had experience using children's libraries, although children's library is currently classified under a public library cluster in Korea.

### 3.2 Data collection and analysis

Qualitative data were generated using semi-structured interviews (see Table 2), lasting between 30 to 60 minutes and thematic analysis was used for data analysis. Thematic analysis method is one of the most used methods "for identifying, analyzing, and reporting patterns (i.e., themes) within data" (Braun & Clarke, 2006, p. 79) and was selected because it focused on exploring predetermined topics and participants' perceptions (Aspers & Corte, 2019; Clarke & Braun, 2013). O'Connor and Joffe (2020) stated that at least two independent coders are required to establish intercoder reliability. Although there is a lack of consistency in the translation process, the purpose of translation is to achieve semantic equivalence between two different languages (Regmi, Naidoo, & Pilkington, 2010). Thus, this study employed three coders to establish the coding frame in consistent ways and Brislin's model of translation was used because it is considered appropriate in the process of cross-culture translation (Jones et al., 2001).

According to the six-step coding process (Nowell et al., 2017), 20 variables from the transcriptions were identified and then clustered into four categories: attention, relevance, confidence, and satisfaction (See Table 3 & Table 4).

## 4. Findings and discussion

We analyzed the transcripts of the interviews for predetermined themes concerning ARCS motivational use of a special library use from a user's perspective. The variables corresponding to each component of the ARCS model are not mutually exclusive but rather very related to each other. This study is, to our knowledge, the first qualitative study carried out in a library setting to investigate motivation of users searching for a special library using ARCS model.

#### 4.1 Attention

In ARCS model of motivational theory, Keller (1987) described that it is important to attract and retain the learners' interests and attention. The key question in getting attention is knowing whether the

Themes	Example questions
Attention	How can a special library stimulate the curiosity of its users, focus and retain its attention?
Relevance	How can a special library be relative to the users?
Confidence	How can a special library and its materials change expectations for the users' success?
Satisfaction	How can a special library increase the satisfaction of the users?

⟨Table 3⟩ Description of thematic analysis

Identifiers	Definition	Thematic aspects
The attraction of library resources, the attraction of library services, the attraction of library media used, the attraction of library collections, the attraction of library programs, having curiosity on library materials, having advertisement and marketing	This involved the users' activities or action of addressing or taking special care of the library.	Attention
Having a feeling of wanting to succeed in library, the feeling that the library materials are filled as needed, the feeling that the contents of the library materials are relevant to the needs, the feeling that the services and programs are relevant to the wants	This related to users' relevant library experiences for their wants and needs.	Relevance
Having a confident feeling of experiencing knowledge acquisition, having a confident feeling of experiencing flexible library space, having a feeling of being happy about the library	This focused on users' developing success expectation and confidence,	Confidence
Having a feeling of being satisfied with the library resources experienced, having a feeling of being satisfied with the library programs experienced, having a good feeling about the library services, having a good feeling about the library experiences, feel good about the achievement of using the library, feel good about the library facilities	This related to users' overall satisfying experiences and achievements.	Satisfaction

⟨Table 4⟩ Phase of thematic analysis

Step	Phase of Thematic Analysis	Stage Activities
1	Familiarizing yourself with your data	In this stage, read and re-read the transcripts to become familiar with the data: "I did not know that there was a special library in my community. If the special library actively promotes it, holds various events, and gives souvenirs, I think it will be able to keep people interested in it."
2	Generating initial codes	In this stage, create initial codes and labels that represent important characteristics, including peer debriefing and documentation of all researcher meeting and debriefings.
3	Searching for themes	In this stage, discern ideas and concepts that provide the hierarchies of concepts and themes.
4	Reviewing themes	In this stage, additional codes from the transcripts were examined and incorporated into the themes and its sub-theme, if any.
5	Defining and naming themes	In this stage, search for themes in the data as consistent and meaningful patterns, and documentation of them naming.
6	Producing the report	In this stage, interpret to make meaning and describe analysis in sufficient details.

Note, From "Thematic Analysis: Striving to Meet the Trustworthiness Criteria" by L. S. Nowell, et al., 2017, International Journal of Qualitative Methods, 16(1), p.4

library catching and keeping the user's attention: "What can a library do to capture the users' interest?", "How can the librarians stimulate an attitude of inquiry?", "How can a library use a variety of tactics to maintain the users' attention?" Attention in the context of libraries can refer to the user's interest, and if attention to a library is high, then a use of library would be expected to be correspondingly high.

## 4.1.1 Promoting the existence of a special library with marketing and advertising

Many participants had neither experience nor knowledge of special libraries. It seems that special libraries in Korea are still revealing the limitations of its quantity and existence to some extent, where they exist, rather than providing effective and systematic library services to participants. As a special library continues to grow and evolve in importance, the library stakeholders need to employ diverse marketing and advertising strategies to reach current and potential users in the community. Marketing is the process of identifying the library users' needs and determining how best to meet their needs and wants, while advertising is the activities of promoting the library and its collection, services and programs through information channels (ALA, 2016a). Several said that it was difficult to reach a special library and use all the services the library offered. Participant (P33) said that "I didn't know that was available."

"I did not know that there was a special library in my community. If the special library actively promotes it, holds various events, and gives souvenirs, I think it will be able to keep people interested in it." [participant 20]

"I think that it is necessary to have a special library depending on the children or the target

age, and there needs programs provided by the library that fit their needs. In the process of growing up, children should have library experiences, and I think it is the role of public institutions to create such experiences." [participant 17]

Participants want to know the existence of special libraries through advertisements or publicity using the Internet or SNS, and to inform them of its services and programs. In order to promote a special library in various and effective ways (e.g., online, offline, SNS various newspapers and broadcasting media, etc.), it is necessary for the libraries and librarians to implement and apply systematic marketing strategy protocols.

"Special library is an unfamiliar word to me. I hope the library can inform its existence through events, programs, and publicity." [participant 6]

"I borrowed English children's literature books from the children's library to teach my children's English when they were young. I think the special library can make YouTube channel, or advertise on TV to get people's attention, or promote it on Internet cafe sites where there are people who need information about the subject." [Participant 2]

It is not always the case that since special libraries are in place, users will automatically flock to it. Marketing special libraries from a user's successful experience is a key for success of special libraries. Hence, it is important for special libraries to inform the public of their collections and services through marketing and to increase users' interest by repeatedly being exposed to them through the media as a means of advertisements.

## 4.1.2 Improving physical and intellectual accessibility with open availability of special library resources

The results of this study show that the availability and accessibility of special libraries appear to be important in attracting users' interest. A study also shows that a systematic procedure is needed to promote user awareness, in order to maximize users' access to and use of library resources (Eiriemiokhale & Ibeun, 2017). Library resources accessibility and availability work as determinants of library use (Monokpo & Ntogo-Saghanen, 2020; Oriogu, 2015). A recent study found a significant positive correlation between access to and use of library resources and students' actual use of the library (Monokpo & Ntogo-Saghanen, 2020). This is still valid in this study confirming that participants are interested in a library located nearby to comfortably visit for their specialized information needs. Participants described the relationship between geographic accessibility and interest:

It would be nice to have a place that is a little closer in terms of distance and space, where I can go there immediately when I am curious about some subject. I think that's more important. For example, when I am interested in a certain field, I can go there right away. For example, when

I go to an art museum, I may just appreciate a certain art work and then become curious about art, right? So, I thought that it would be nice to have such a library next to an art museum. If such a library was close nearby, I thought that it would be possible to expand such interest. [Participant 3]

In order to satisfy intellectual freedom and experience play, a library like a bookstore is nearby, so it will help stimulate curiosity and focus if I can read books comfortably. [Participant 19]

Another (P35) added: "First of all, the library needs to be nearby to get my attention. If there is such a space, I think that being able to see materials suitable for the subject not far away is a service in itself and it has some meaning". Another (P13) specified:" If it is a library that can be easily found around me, such as a library about art next to an art museum, or a library where I can find materials related to tea or coffee, like a cafe, I think I will visit it often". Another participant valued intellectual access to a library resources in the current Corona era:

In fact, in this day and age, I would like it to be a medium that can be easily searched for on the Internet like the original text rather than a book-like material, and can be viewed through any terminal system anytime, anywhere. I think finding a bookshelf is also an important skill, but when I'm at work, I can't spend time looking through books. So, I hope it comes out as an information resource that provides only necessary information by typing keywords like the Internet. [Participant 8]

I think it would be the best if I could type the search terms on the library website and easily see the necessary original document service available. [Participant 16]

Since there are a fair number of small libraries and children's libraries nearby in the community, characterizing these public libraries into a subject-specialized library seems to be one of the solutions for maximizing accessibility and availability. Access to special libraries should be promoted so that diverse users can easily access and use them.

### 4.2 Relevance

Keller (1987) states that "relevance can be thought of as personal learning needs and curiosity of the individuals". A successful library collection, services and programs must establish relevance to motivate users. The learning process through a use of special library should show the usefulness of the collection, services and programs of the library so that users can bridge the gap between the contents and the reality. The library can help establish relevance by using concrete collections, services and programs that the users will be familiar with. Why should the users care about the subject specialized resources and how does it connect to the user's needs and wants? In the context of libraries, if the effort of the users increases during a library use, then relevance would be expected to correspondingly high.

## 4.2.1 What makes special libraries so special? Satisfying users' specific need and want

Why are special libraries important to the community? What do they need from it? To establish relevance, special libraries need to consider how the contents in the library connect to the user's goal and motives. The results of this paper show that the subject of a special library is an important factor for the participants in determining the use of the special library. One participant (P24) explained: "If there is a subject that can arouse my interest, I will go to that special library. Also, if there is a subject that my children are interested in, I think I will go there with my children." Participants said that a special library is needed for a place of interest and learning of children, and this shows that a special library that helps children's education is necessary. Another participant (P39) specified: "I think there is a need for a place of learning where children can have more diverse experiences."

Some participants said that a special library was needed for those who study specialized knowledge or those for research. Participant (P5) stated: "I think a special library will be useful when I need specialized knowledge in the field I am interested in for my research." One Participant (P2) further explained:

Based on my experience, I visited the special li-

brary because I needed medical books when I was studying my major, and I was able to find books that were difficult for me to find in existing public libraries at medical library. As such, a subject-specialized library contains books related to one field, so it is easy to find research or academic materials, so I think it is essential for those who study in depth academically.

Participants also mentioned the emergence of a variety of special libraries covering many subjects. Participant (P4) stated:

There are so many topics in our daily life, right? I am very interested in the subject in my daily life. To be honest, I want my children to be exposed to so many different things, so I hope that children's libraries will be created with a variety of specialties in each subject. [Participant 4]

I use it often because it is a good opportunity because I can meet directly through a book about the field I like more, the field I am interested in. [Participant 9]

Participant (P29) further explained that "I feel that a library specializing in subject matter is absolutely necessary because the library instills an open and positive mind in children and gives them a view to the world with an open mind rather than a negative one". Participants feel that special libraries are unique because the space for cultures and places of fun will have a positive impact on children's future.

One participant (P23) illuminated the importance of a special library in managing one's time because the library has high expertise in his favorite subject, saying "if there is a library with a focusing subject, then the time will by greatly shortened first because people are busy and the library has specialized information where the subject materials are there. Since I can access what I want through various offline and online channels, I think I will be able to quickly save a lot of time and get things that are helpful to me more often in the library."

Special libraries should be unique because it focuses on the specific interests of its user population, and should not seek to duplicate information that can be provided through public library, school library, or university library.

# 4.2.2 Finding relevant resources, services, and programs

One of the main reasons for participants visited the library was to provide educational opportunities for their children. In particular, many participants said that they had visited the children's library. Participant (P33) stated that "··· my child is very interested in English and Chinese. Because of this, he is showing a lot of interest in movies and music, and I also use the English library frequently to help my child's interest. Also, since he is particularly interested in foreign languages, I need a library that can satisfy his curiosity about it." Participant (P28) believed that children's library can provide her child with quality resources, which is important for their educational purpose: "··· If we only stay at home,

the number of books my child can see is limited, but if we look at the children's library, we can choose many books we want, so I think it is very educational."

Participants described the challenges of facing many irrelevant fields and areas of interests as they attempted to visit to use a library. They found it difficult to distinguish the quality relevant materials in order to satisfy their needs from a variety of resources and fields in the library. This shows that participants fully consider personal relevance aspects before using the library. Participant (P38) stated:

In the case of my children now, when we go to the library, there are too many books in too many directions and in too many fields. However, different children have their own interests. In particular, my child is very interested in sports and athletics, and this is also just a book in the field that he is interested in, although he cannot directly see bigger players in a bigger world such as the American Major League than any book in Korea. I would like to be able to access it in such a way, and it seems that the subject library is particularly popular because there are specific books that can be viewed in more detail in the fields that our children and our children like. [Participant 38]

Although a subject-specialized library is not a library that helps everyone equally, I think it would be good for those who really need knowledge or research on the materials. When doing research, not all of the journals or books you need are available in your local library. In such a

situation, it would be really nice to have a library that collects all the materials necessary all at once for writing a paper or thesis. I think it's a good library. [Participant 18]

Public libraries often lack information resources on the specific topics for which users are inquiring. Participant (P27) stated: "In the past, I was trying to subscribe Science magazines such as Nature, Science Donga, and National Geographic but it was difficult to get such materials by myself. So, I looked for it in the library, but it was difficult to find it in the local library. They are expensive, too."

It is important to know that relevance of users can come from the way the library resources and services are being provided. Keller (1987) pointed out that relevance relates to learning materials presented to the needs and conditions of the learners. Library resources, services and programs should be made in such a way to make it be familiar with the users' needs, namely with providing customized materials for each age group. Special libraries and librarians that can change to satisfy the new and special needs of users and can manage the evolving forms of library (e.g. hybrid) cost effectively will survive and thrive in the new era. Thus, a special library should provide a wide range of materials on a specific topic that is difficult to be found in general libraries.

### 4.3 Confidence

Keller (1987) described that confidence as "helping the learners believe or feel that they will succeed and control their success." The learners' confidence is focused on raising the expectation of success, and the expectation of success can control the learner's entire learning process. Providing library users a control to estimate the probability of success is an important factor in the library use. In the context of libraries, if the provision of the quality service to users increases during a library experience, then confidence would be expected to correspondingly high.

# 4.3.1 Providing knowledge acquisition and experiencing quality services

Library quality services come from various sources such as library resources but are not limited to library materials, librarians, programs and facilities. Users' confidence increases when they feel positive that they are doing well for their goals and objectives while using a library. What are the user's goals and objectives in using a library? Once users experience a high-quality service from the library to achieve educational goal, they will be confident in using the library.

Participants recognized that the library had helped to boost their confidence as they gain knowledge to understand and solve problems, enabling them to work collaboratively. Participant (P12) stated that: "In my opinion, it would be nice to have a one-day class so that children can do it, or to give a lecture or something like that, not only reading books, but also getting to know this knowledge a little more before reading a book and encountering other books. I think science-related stuff would be fine, art or music-related libraries, I think it would be nice to

have a more subdivided variety."

Another participant (P2) further explained that "If you go to a children's library, you can see a lot of books, but now it seems that children go to the library because of the things they can do in a variety of ways with peers while touching books in front of my eyes. On top of that, it is good to be able to exchange information with other parents that I did not know, and to exchange information."

Participant (P37) indicated the needs for a special library that collaborates with children's school works or projects, saying that "I thought that it would be good if the library's programs were conducted in connection with K-12 school curriculum-based textbooks." It would be nice to have a variety of program experiences that can be done in conjunction with the works and projects in school, or a program that children can approach in a more in-depth way and stimulate their curiosity rather than the content from books appropriate for their age.

Participant described the difficulties of finding detailed information by subject as they attempted to search for it in small libraries.

There are small libraries around me, but the small libraries do not provide detailed information by subject. So, if I can use a special library that is organized by subject, I can find books or things that I want a little more professionally. [Participant 20]

Enwwerm et al. (2020) said that "a special library is usually established in small complexes, thus the

size of spatial consideration is determined by the available space the parent organization has, and the estimated user community the library is expected to serve." Characterizing children's libraries into a subject-specialized library will be able to give knowledge acquisition opportunities for the community as the libraries are highly on demand both by the children and their parents.

## 4.3.2 Providing special library spaces with flexibility and multifunctional buildings

A paradigm shift for special libraries is needed in which "the library is no longer simply a quiet place" to lead to information resources, instead analog and digital space where we learn how to connect and use all types of information resources, and to experience library programs and activities (Bailey et al., 2015). Confidence focused on users' developing expectations of success, satisfaction with the library use, and flexible library space experiences. That is, when users feel that they did well in using the library, their confidence rises. To do so, flexibility and multifunctionality in space of the library must be designed. Positively interacting with a special library requires confidence so that users can convey their experience to others and can be beneficial to the community.

Participant (P8) noted that: "Since there is still a lot of quiet atmosphere in the library, even in the children's library, children don't like to go the library. So I wish it is good for the library to have a space where children laugh, talk loud, think together, and collaborate with friends in a different way that the current library does." Participant (P29) also mentioned that experiential activities were necessary, and emphasized the need for a transition from a static atmosphere in a library to a dynamic one:

The library has an atmosphere where something should be quiet, but it is difficult for children to read books quietly. I think it's good to move and be active with children. I don't think children always read a lot just because they go to the library. I think it's better to do it in a way that we can enjoy together with the children's experience center. [Participant 29]

Cafe.. Cartoon cafe? I went to a cafe space where I could read such a book, but it was so good that the child could go into such a small space with peace of mind and read while talking, and as long as he did not avoid the people around him, he reads a book and discusses it with the people next to him. [Participant 15]

Experience programs on the subject matter in a special library are more important and necessary than any other type of libraries. To solve this issue, special libraries should be designed and built into a convergence service that allows users to do something physically while reading books such as VR (Virtual Reality) & VA (Virtual Augmented) experience hall, a sport-experience center, and an entertainment-experience center, and others, if possible.

#### 4.4 Satisfaction

Keller (1987) described that satisfaction makes people feel good about their accomplishments. User satisfaction can be obtained by using various information resources and services to meet users' information needs on topics of interest (Tiemo & Ateboh, 2016). In the context of a special library, users should be satisfied with what they have achieved in their learning process in the library. If a library user gets high attention to the resources and services of a special library, and feels relevant while using the library, and get confident as he accomplishes his goal, then the level of the user satisfaction will be accordingly high.

## 4.4.1 User satisfaction comes from library resources and services

To address participants' satisfaction, Participants mentioned various factors regarding satisfaction, but complex factors that should be present in the library together including comfortable atmosphere, friendly librarians, various experience spaces, and cafes.

Among these, the services and resources of special libraries seem to give direct satisfaction to the participants. In particular, the importance of an appropriate combination of online and offline was addressed for the provision and access of resources. Participant (P34) noted that:

... it should be convenient, and convenience means that I can search anytime, anywhere online without any special skills, and I think that the cost (using the library) should be low or free, and if there is a service offline that finds and interprets the materials and process the information customized to me, I think it will be the best service. [Participant 34]

I come to the library to find the books I need, but it takes time, so I search in advance at home and reserve the book I want. It would be nice if this kind of system is available so when I arrive the library, I can read it right away. [Participant 20]

Providing digital resources and its ubiquitous access will be the key to figure out what the user community needs from a physical library and make sure that the special library is designed to accommodate them. Participant (P22) further mentioned the importance of e-books, online programs and digital contents and emphasized their access and use:

There are a lot of e-books coming out these days, and if you make the books in specialized libraries available as e-books, I think it will be easier to read them anytime, anywhere. So, if a special library does that, I think more interest and accessibility will increase and satisfaction will also increase. [Participant 22]

Kids these days are more than just reading books...

Since they use their mobile phones a lot, they try not to read books these days, so I think it would be good to have books with the images in digital form or something like that. [Participant 33]

If the user's level of attention, relevance, and confidence is high and positive, user satisfaction will also increase accordingly. Thus, it is important to create a library environment that users can use effectively, to hire and provide professional personnel when providing programs, to strengthen library services by increasing the number of programs provided, and to provide a convenient library system to increase satisfaction.

## 4.4.2 User satisfaction comes from physical comforts

Participants seek their comfort, convenience, and sometimes quiet for reading or studying or sometimes loud or noisy for working together. Physically distancing loud activities from quiet places can be a way to reduce unwanted sound. Space in a special library come in a variety of sizes and shapes. How can it be redesigned to satisfy information needs of special library users? This kind of question and issue for a deeper assessment of the special library space for the users' physical comforts should be carefully considered for improving existing spaces and facilities. Participant (P14) noted that "... the comfort of body and the atmosphere of the mind also give me satisfaction. A comfortable sofa is better than a hard chair." Another participant (P37) specified that "the library room is comfortable because it is warm in winter and cool in summer. The only thing I hate in the library is that I should not make any noise or sound."

The findings of this study show the four themes (ARCS) that users need to motivated as a way to start using a special library, thereby staying focused and revisiting the library. These four themes are closely related, interconnected, interfering, and influencing each other. The literature demonstrates a correlation between relevance and satisfaction in university libraries with information resources (Okpokwasili & Okoro, 2015). In the context of this study, participants repeatedly spoke of the importance of information resources, services, and programs that a special library provides to the community. Among the participants, online resources of information available in a special library have been mentioned as a means of the medium of communicating users' needs and have demonstrated preferences in promoting a special library use specifically in patrons who are technology savvy. Participants reflected on the experiences in which satisfaction was determined by the quantities of information resources as well as the quality of the services and programs sought in the special library. In many studies, user satisfaction was examined by the library information resources and services (Ahmed, 2017; Alam, 2020; Martensen & Grønholdt, 2003). An important finding was that most participants with their children sought special information on their children's information needs for the most part, but their own information needs and wants were considered as the second priority. This finding is important because the participant with their children, especially those in the communities are more concerned with their children's daily knowledge acquisition activities than spending time to obtain information on their own and the motivation of their information-seeking problems. Thus,

the types of information resources that a special library provides sought by the participants with their children are crucial to improving the special library collections. Adequate and reliable information resources are essential to promoting the existence of a special library to users. Their inability to secure the right subject-specialized information resources could further diminish users' motivation to use the library. Improving through factors found on these four ARCS themes, special libraries may raise individuals' self-efficacy and enhance user satisfaction in using the special library.

We have shown that the ARCS model has the latent abilities to contribute to the quality implementation, application, and practice of special libraries and their resources and services in the current library environments. We expected that different types of libraries would elicit different user experiences and perceptions, but this was not the case. The reason is that users view special libraries, public libraries, small libraries, and other libraries as all in one library system, thus similar results were derived beyond these types of library institutions.

### 5. Conclusion

Exposure to special libraries, particularly in the subject-specialized area, is necessary for users, but the special libraries available in Korea are often scarce or incomplete. Special libraries should be an appropriate place for people to access subject-specialized information resources. With the diversity of the peo-

ple's interest, more and more people will seek help from special libraries. Thus, it has become increasingly important for special libraries to have a well-equipped collection, services, and programs to properly satisfy users' information needs. To that end, this study investigated the ARCS motivational use of a special library user experience when conducting the general public interview from a user's perspective.

Special libraries should: 1) keep users interested; 2) let users make the use of the library and feel educationally useful; 3) create positive confidence in users' goals; and as a result, 4) inspire user satisfaction. To do so, library stakeholders may use this research to improve the quality of information resources, programs, and services of special libraries. Adequately well-prepared special libraries will lead to the maximization of user experiences, contributing to a higher level of knowledge information education in the community. To survive, special libraries have to evolve into something more attuned to modern needs and tailor-made to local communities. Furthermore, considering the results of this study, the hybrid form of a public library and a special library may rather play a good role in satisfying users by age groups and subjects. This paper considers that while there are certainly significant barriers facing librarians, stakeholders, and policy makers in developing special libraries, that many of the issue effecting the level of motivation could be increased with the implementation of an effective motivational strategies and plan.

## 6. Limitations

There are some limitations to this study. First, it is not generalizable because it is an exploratory study that covers only 40 participants and their perceptions and experiences. The second limitation of the study is the potentials for different results between perceptions and experiences. Although we expected participants having experiences of using a special library, many of the participants had no experience.

Thus, some views were not obtained from empirical experiences, but rather from their perception. Another limitation is that this study is not intended to discuss the dichotomous distinction or preference between public and special libraries. Rather, if a public library has a subject-specialized character and serves a specific group of users, it is thought that using the experiences and perceptions of their users can be helpful in designing a special library.

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