



Interior Arrangement in Children Libraries during the Covid 19 Pandemic Process: The Example of Konya Seljuk Municipality KPP Children's Library

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Abstract

The aim of this study is to analyse the compliance of the Seljuk Municipality Konya Plain Project Children's Library in Konya, Turkey with the design principles in line with the recommendations of the International Federation of Library Associations and Institutions. This descriptive study, which aims to analyse Konya Plain Project Children Library from a spatial point of view, was conducted according to the case study from qualitative research methods. In this study, the physical, ergonomic, and social suitability of the library was evaluated by photographing technique by making observations and measurements, presented with visual materials and the inadequacies in its structure were revealed. The fact that the building was designed as a municipal building and later converted into a library caused some of the parameters recommended by the International Federation of Library Associations and Institutions to not meet sufficiently. The fact that the library is located on the third floor has limited its relationship with the environment, its location in the centre of the city and on a noisy street, and the inability to control the sound in the study rooms have increased the noise level. The natural lighting of the library is determined to be uncontrolled and insufficient. It was determined that there were no building elements to control the sun, direction finding signs and a care room for babies or children. In addition, it was determined that ergonomic criteria were ignored in the design of the space. As a result of this study, it was determined that the Konya Plain Project Children's Library should be redesigned in terms of location, noise level, natural and artificial lighting, signage and wayfinding signs, child or baby care room. In addition, it has been determined that comfort and aesthetic elements have been at the forefront of the Konya Plain Project Children's Library, and it has been tried to keep up with the requirements of technology institutionally. Space design has been emphasized and suggestions have been developed in order to increase the use of children's libraries and to make the service appealing to wider audiences.

Keywords:

Children's library, interior design, pandemic, international federation of library associations, and institutions (IFLA) suggestions

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INTRODUCTION

Libraries are safe, functional, easily accessible and changeable places that support physical, mental, social and cultural development in the light of knowledge and skills, allow disadvantaged groups to move freely, and encourage communication and interaction (Gönen, Temiz and Akbaş, 2015). Libraries that prepare the society for the future have many responsibilities such as gaining the habit of reading books, supporting the learning process, creating a reading culture, and ensuring socialization. Within this area of responsibility, children's libraries that serve children are of immense importance.

The aim of children's libraries is to contribute to the personality-speech-language development of the child, to teach the information correctly, to give the habit of reading and to expand the imagination. In addition, these libraries are social environments that enable the child to spend effective time with his environment (mother, father, and friends) during the socialization process. In the U.S., the new goals of children's libraries under the "Every Child Is Ready to Read Program" are literacy, telling, singing, and playing games (Neuman, Molan and Celano, 2017). In addition to traditional information sharing, there should be many artistic activities such as concerts, conferences, workshops, outdoor activities, painting workshops, art studies, intelligence games, robotics and coding, virtual reality, exercise exercises, camping that contribute to the socialization of the child. (Akkaya and Odabaş, 2019). In addition, these libraries, which serve disadvantaged children, are expected to contribute to the different physical, spiritual, social, and psychological development of the child. In addition, new measures were introduced with the COVID 19 pandemic in Turkey in March 2020. Within the scope of these measures, the capacity and usage periods of the library spaces have changed. With the effect of the pandemic, the unsuitability of the areas in the libraries, the rapid breakthroughs in digitalization and the closure process have seriously disrupted the use of the libraries by children. In this context, the change in the purpose and importance of children's libraries over time, the increase in the diversity of users and activities, and the pandemic process have necessitated spatial differentiation and arrangements.

Spatial differentiation and arrangements; It should be in a design that will educate the child, support the imagination, provide social possibilities and develop while exploring. Unlike traditional library design, new library designs that encourage interdisciplinary work, facilitate group work, eliminate hierarchy, are more active and some departments are noisier need to be introduced. In the study conducted by Al Şensoy and Midilli Sarı (2020), it was reported that new generation libraries differ from traditional libraries, gain technological and digital content, offer functional spatial diversity to their users, allow flexible and aesthetic spatial organizations by melting the strict boundaries in the interior, and gain a remarkable and inviting appearance. In order to design a striking, inviting and flexible environment, interior spaces

should be transformable, modular interiors should be created with the presence of movable dividers and elements. Study and reading areas should range from single to multi-person desks, individual and group study rooms and comfortable seating, and should encourage interactive learning. Various furniture designs, including table dividers, bookcases or squares, should also create workspaces that are insulated from sound and visibility to varying degrees.

In spatial arrangement, color is one of the most important factors in determining the relationship established with the environment. Appropriate use of color can transform a boring space into a lively one (Hashempour and Taghizadeh Sapchi, 2015). In multi-storey library buildings, the use of the same color in the sections that are connected to each other and the use of different colors for each floor will help the users to find certain areas. In fact, the colors of the books and journals should be taken into consideration when choosing a color. Natural lighting should be preferred instead of artificial lighting, large glass surfaces should be used and attention should be paid to the use of solar control elements. Inadequate use of solar control elements can cause dazzling in the users, overheating of the interior in the summer environment, and heat protection in winter security (Dewe, 2016). Therefore, solar control systems should be integrated into the facades.

The functional and effective use of furniture in space design, its presence of form and aesthetic elements, increasing the visual quality of the space accelerates the arrival of children to the library. The features such as size, formality, colour, texture, ergonomics, comfort, durability, functionality, and socialization of the reinforcement elements used in the space help children to adopt this space (Yavuz Önen, 2021). In addition, the lighting, ventilation, noise freeness of the library, the presence of visual signs, accessibility and security contribute to the physical, spiritual, social, and psychological development of the child (Kakırman Yıldız, Yalçınkaya and Saydam, 2018).

IFLA (2018) suggested that children's libraries should be served under equal conditions without making any distinction between the target audience (age, race, gender, economic and social level, education, etc.). Similarly, Altay (2020) emphasized that children's libraries should be provided not only for the children of Turkish families living in our country, but also for the children of families under temporary protection status. In this context, the city in which the study was conducted has an important place as it hosts many refugees or immigrants with different cultures in terms of different nations, different beliefs, different ethnic groups and linguistic diversity.

According to the Public Libraries Regulation (2012), children's libraries must be in every province. In Konya, which served as the capital of the Anatolian Seljuk State for many years and is a city that learns with its historical past and cultural heritage and conveys what it has learned, many libraries were opened during the Seljuk and Ottoman period, and some of them have been preserved until today. Today, 69 of the libraries

in Konya consist of schools, eight public libraries and one children's library. Seljuk Municipality KPP Children's Library is the first and only library in the city.

In addition, this study is important in terms of processing the "space theme" in the design of the space and creating a "new dream world" for children and being the first and only example of the city. The adoption of the thematic design, which aims to attract the attention of children and is decorated with space visuals, is interesting for the provision of repeated visits by children. The fact that the historical texture of the city is taken into consideration in its design will prevent the loss of culture by establishing a connection between the past and the future and ensuring that children adopt the urban texture and values.

One of the important advantages of the library is that it enables children, parents and educators to interact with different activity areas. The library is planned as an institution away from the perception of a nursery, where children spend time with their families and engage in educational and instructive activities.

In this context, the aim of the study is to analyse the compliance of the Seljuk Municipality Konya Plain Project (KPP) Children's Library, which is the first and only one in Konya, Turkey, with the design principles in line with the International Federation of Library Associations and Institutions (IFLA).

METHODOLOGY

Purpose and Scope of the Study: The aim of this study is to analyse the Seljuk Municipality KPP Children's Library in Konya from a spatial point of view. In this context, the suitability of the library in terms of physical (user age ranges, lighting, colour, noise, comfort, signage and directions, accessibility), ergonomics, health and safety parameters and social distance were evaluated.

Type/Design of the Study: This descriptive study, which aims to analyse the KPP Children's Library opened in 2019 in Konya, which is among the largest provinces and top 10 most populous cities of Turkey in terms of surface area (Figure 1), was carried out according to the case study from qualitative research methods. Case study is a methodological approach that involves an in-depth examination of a limited system using multiple data collection to systematically gather information about how it functions and works (Chmiliar, 2010). Multiple data can be observations, interviews, documents, and audio-visual materials. This data collection source can also be extended to movies, photographs, video recordings, life stories, and nonverbal communication (Yin, 1984). In this qualitative study, observations and measurements were made and the spaces evaluated by photographing technique were presented with visual materials.

Figure 1. The location of Konya on the map of Turkey



Sample of the Study: The sample of the study was selected from Seljuk Municipality KPP Children's Library. KPP Children's Library was opened in 2019 with a project conducted by Seljuk Municipality, Seljuk District Directorate of National Education and KPP Administration. The library serves children between the ages of 4-10.

Collection of Data: In this study, observation and measurement methods were used to perform the spatial analysis of the Seljuk Municipality KPP Children's Library during working hours between June and October 2021. Observations and measurements were made from the researcher's tar. There are no universal stands for the size and design of the children's library facilities (Polat et al., 2020). In this study, the articles in the study proposed by IFLA (2018) (International Federation of Library Associations and Organizations) for space design and translated into Turkish as "Guide to Library Services for Children in the 0-18 Age Group" (Polat et al., 2020) were evaluated. These items/criteria are:

- Criterion 1. Central location on the ground floor
- Criterion 2. Suitable design for users with age-specific requirements
- Criterion 3. Enough space for books, newspapers, magazines, and non-print collections
- Criterion 4. A flexibility that allows for a variety of activities
- Criterion 5. Appropriate navigation signs
- Criterion 6. Space for childcare, including breastfeeding and diaper changing
- Criterion 7. Family friendly and toilet for all genders
- Criterion 8. Noise factors by age range
- Criterion 9. Suitable and sufficient natural or artificial light
- Criterion 10. Suitable room temperature to ensure good working conditions throughout the year
- Criterion 11. Spaces and furniture suitable for child safety (Polat et al., 2020).

Collection of Data: In this study, observation and measurement methods were used to perform the spatial analysis of the Seljuk Municipality KPP

2.5. Limitations of the Research: In the study, the problems or solution suggestions of the library staff regarding the space were not included in

the scope of the research. In addition, the results obtained from this study can only be generalized to the library where the research was conducted.

3. Results and Evaluation

In this study, Seljuk Municipality KPP Children's Library was evaluated from a spatial point of view and analysed according to IFLA criteria. Accordingly, the analysis of the criteria considered is as follows:

Criterion 1. Central location on the ground floor

Seljuk Municipality KPP Children's Library is located on an area of 300 m² in Aydınlıkevler, Seljuk district of Konya province (Figure 2). It is close to the Children's and Gynaecology and Maternity Hospital, in a central and busy area in terms of transportation. The library, which is on the third floor of the Family Life Centre, started to serve in 2019. The library has 3 staff members as 1 principal and 2 instructors. The library consists of a single floor. The lower floors of the library belong to the municipality and are used by different units of the municipality.



Figure 2. Location of Seljuk Municipality KPP Children's Library

Seljuk Municipality KPP Children's Library is a library that will contribute to the mental and socio-cultural development of our children, to ensure that they are equipped with knowledge and skills, and that has functions as a social development centre (Seljuk Municipality KPP Children's Library, 2022). Although it is easily accessible and designed to allow them to move comfortably in disadvantaged groups, it is located on the third floor (Figure 3). The fact that the library is located on the third floor has limited the child's relationship with the environment. Although it is also important to give the idea that the book can be read anywhere in the book-space relationship, the fact that it is not on the ground floor has caused the child's relationship with the external environment to be broken.

Where the library will be located is especially important in terms of accessibility. In addition, a study conducted by Kakırman Yıldız, Yalçınkaya and Saydam (2018) reported that the location of libraries affects child psychology. In this respect, libraries should be in a central location, on a route suitable for public transportation, in a single storey, gardened, accessible place. Although it is disadvantageous in terms of noise that the building is on the ground floor, it is the most suitable floor in terms of access (Küçükcan, 2015).

Figure 3. Entrance of Seljuk Municipality KPP Children's Library



Criterion 2. Suitable design for users with age-specific requirements

Children with different ages, educations, abilities, tendencies, needs, culture, social support systems and economic status constitute a heterogeneous group (IFLA, 2018). Anthropometric measurements of children (height, weight, body mass index, head, neck and shoulder measurements, arm circumference, chest and waist measurements, skin fold thickness, lower and upper extremity measurements) are affected by their age. In the literature, 0-2 years of age is accepted as infancy, 2-6 years as play, 6-12 years as school and 13-19 years as adolescence (MNERT, 2009). Although every individual up to the age of 18 is defined as a child according to the UNICEF Convention on the Rights of the Child, the Public Library Regulation states that the upper limit of the age group in which children's library services are provided is 14.

In this study, Seljuk Municipality KPP Children's Library serves the 4-10 age group. According to the data of the Turkish Statistical Institute (TSI) 2021, the population between the ages of 0-17 is 22,738,300 and constitutes 26.9% of the country's population. In Konya, the child population is 2,277,017 and its proportion in the total population is reported as 28% (TSI, 2022). In Konya, which hosts one-tenth of the total child population, the number of children's libraries to serve this population is only one. This shows that approximately 2.5 million children use the same library. In a different study conducted in Istanbul, it was reported that the number of children's libraries was insufficient (Kakırman Yıldız, Yalcinkaya and Saydam, 2018). In addition, in the study conducted by Günes and Canatar (2020), it was emphasized that there are no libraries for babies, but the number will increase over time.

In this study, Seljuk Municipality KPP Children's Library provides services to children aged 4-10 years. The areas in the library are designed with age groups in mind. For example, "collective book reading areas" are designed for children aged 0-7 and "children's playgrounds" are designed for children aged 4-6 (Figure 4). The reorganization of children's libraries considering age groups is important for the physical, cognitive,

emotional, spiritual, and social development of children (Tapkı and Canbay Türkyılmaz, 2018). With this logic, it should be ensured that libraries adapted to all developmental periods of childhood are created and continuous updates are made to meet the needs of generations.



Figure 4. Collective book reading area.

In addition, in the Children's Libraries Workshop held in 2018, "reading, learning, entertainment and recreation areas", "child-oriented areas", "areas for disadvantaged groups", "activity areas for family-children", "interaction areas", activity areas that contribute to the development of creativity (Lego, DIY workshops, etc.), "nutrition areas" and "children's playgrounds in the library garden" (Polat, Yılmaz, & Kakırman Yıldız, 2018). In this study, the space of the library is designed with the "space theme" (Figure 5). This is important in terms of processing the "space theme" in the space design and creating a "new dream world" for children and being the first and only example of the city. The adoption of the thematic design, which aims to attract the attention of children and is decorated with space visuals, may be interesting for children to ensure repeated visits.



Figure 5. Game room with space visuals

In addition, the space is divided into five separate activity areas (Figure 6). In the activity areas, children between the ages of 4-10 are served in groups of 20 people. estimated groups of 20 people can be up to 40 people. Students from schools can use the place with their teachers between 10:00-12:00 and 14:00-16:00 on weekdays. On weekends, parent-student meetings are held in the same time zones.

The fact that the library consists of a single space causes more than one activity to be done together. Although the furniture in the space was used as dividers in delimiting the white activity areas, it could not clearly separate these areas from each other. Activities are planned in different places in each activity area (individual and collective book reading areas, drawing area, intelligence games area, children's playgrounds, drama-theatre-fairy tale telling and education area, digital recreation area for the visually impaired). In different activity areas, students can see and interact with each other. This can cause the child to be distracted. For example, a child who is in the field of literacy or drawing can be influenced by children in the fields of play and dance-theatre-storytelling. In order to improve this situation, the boundaries of the activity areas with equipment and equipment should be determined more clearly and the area should be customized for the activity.

In addition, care was taken to have books in all activity areas. In this way, it is aimed that the interaction of children with books is not interrupted in any activity. However, the fact that the space is not divided by certain separators causes attention to be distracted in a short time and different activities cannot be organized at the same time. The spatial areas of the libraries should be of a nature that will increase the motivation, efficiency, and bio-psycho-social development of child users.

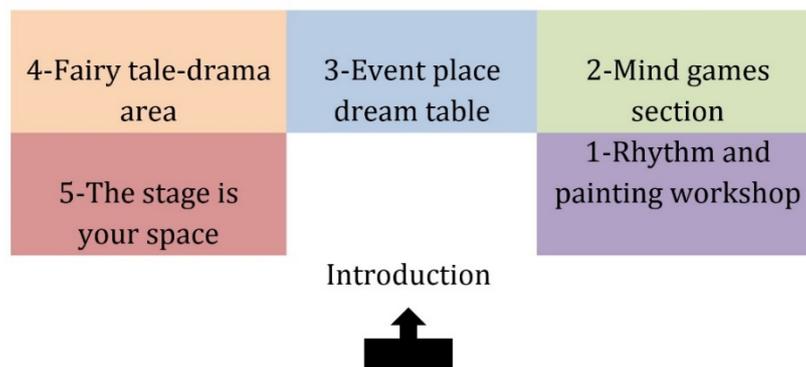


Figure 6. Five different activity areas of the library

Criterion 3. Enough space for books, newspapers, magazines, and non-print collections

Children's libraries should contain all kinds of materials suitable for children's development, including printed materials (books, magazines, comic books, brochures), media (CDs, DVDs, cassettes), toys, learning games, computers, software, and internet connection. Seljuk Municipality KPP Children's Library provided books, magazines, other printed and digital publications. In addition, all kinds of technical equipment and internet infrastructure were provided for access to digital educational

content and data banks (Seljuk Municipality KPP Children's Library, 2022). The storage of the collections of the library was done in two ways. First, the seating area in the centre of the library also serves as a book storage (Figure 4). Another storage element is designed with the function of working in circular form and storing books (Figure 7).



Figure 7: Circular study and book storage area of the library

The physical and digital resources of a children's library include tools, equipment, and a collection of resources (Polat et al., 2020). Materials should be as downloadable as possible. Library websites and digital content products must comply with WCAG 2.0 (Web Content Accessibility Guidelines). The increase in both the production and use of electronic publications has brought about many conveniences. The gradual transfer of libraries to the electronic environment and the establishment of websites in parallel have accelerated access to information (Sayer, 2007). In this direction, varied materials in the libraries can be accessed in a brief time. In a study conducted by Kakırman Yıldız, Yalçınkaya, Saydam (2018) in Istanbul, Turkey, the most successful library in terms of collection development was reported as Selimiye Children's Library. However, it is emphasized that there are 13 libraries that do not have this qualification (Kakırman Yıldız, Yalçınkaya, Saydam, 2018). To become a reading society and to raise a generation that has acquired a reading culture, the child-library interaction should be increased. In this direction, the child's connection with the library can be increased by organizing foreign language studies, concerts, conferences, debates, cinema, and art activities outside of book reading hours in libraries (Göktürk, 2010).

Criterion 4. A flexibility that allows for a variety of activities

Children of all ages need to see the library as attractive, inviting, and not creepy. Ideally, children's services need their own places that are easily recognizable (e.g., children's furniture, decoration and colours) and that differ from other parts of the library.

The space of Seljuk Municipality KPP Children's Library is designed to be divided according to different activities. Besides that, it is not divided by clear limits to allow larger multi-user events. In addition, determining the concept of space as a theme in the design process and supporting this concept from the reinforcements and visuals in the activity areas in the space to the lighting used on the ceiling is an interesting and exciting choice both for design integrity and for the users. Although the concept

of space is an interesting and entertaining choice for users of this age, the harmony of the colours used in the article and its interaction with this theme are also important. The colours in the space have the task of giving a sense of freedom and attracting the attention of children. In some areas, vibrant colours are used to direct a child's attention to books or activities.

In the study by Edwards and Fisher (2002), ten criteria proposed by Harry Faulkner-Brown for designing a successful library are mentioned. These criteria are flexible, compact, accessible, extendible, varied, organized, comfortable, constant in environment, secure, economical. Edwards and Fisher (2002) added sustainability and uplifting to the spirit criteria. In order to attract more child users, the engines should develop their collections according to the needs and expectations of the children, make their spaces comfortable and fun so that the children feel themselves in the moth, organize and announce many activities.

Criterion 5. Appropriate navigation signs

Navigation is when individuals can find the path to their goals without experiencing delay and unwarranted anxiety. Sometimes it is as ordinary and easy as moving from one place to another; sometimes it can become a situation that causes fear and distress to the individual who loses his way (Erçevik Sönmez, Erinsel Önder, 2015). As in all areas, navigation signs are important in children's libraries. The location, size, shape, colour, character, legibility distance, content, lighting of the signs is important. In the study conducted by Erçevik Sönmez and Erinsel Önder (2015), visual access to spatial clues, architectural differentiations, use of sign systems and plan formation were reported as variables affecting the experience of navigation. In this study, Seljuk Municipality KPP Children's Library consists of a single space and all areas can be seen at the entrance. There are no signs of navigation in the library or inside the space.

Criterion 6. Space for childcare, including breastfeeding and diaper changing

There is no care room for babies or children in the library examined within the scope of this study.

Criterion 7. Family friendly and toilet for all genders

One of the important criteria of IFLA is that there are male and female toilets that can be used by students, parents and library staff. The toilets and sinks in the library in this study are suitable for the use of children (Figure 8). It is suitable for children's height, sink floors are so that they do not slip. But parents can't find a different toilet to use.



Figure 8. Children's washbasin

In multi-storey public libraries, it is more convenient to have toilets on each floor. The materials used for toilets must be of excellent quality. Ventilation and windows in toilets should be adequate. Iron railings should be installed on the windows. Criterion 8. Noise factors by age range

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In today's libraries, where the number of users is increasing rapidly, noise is among the biggest problems. Especially for children who are distracted very quickly, there is a need for sound insulation in libraries. Covering the dividing walls on the exterior and interior with sound insulation materials will prevent the noise coming from the outside from entering the interior and unwanted sounds in the computer and project rooms from reaching the side sections. In addition, noise in libraries can be controlled by sound-absorbing materials and furniture. In addition, in areas where plumbing pipes are located, noise in the building can be reduced to a minimum level by using sound-absorbing materials. The volume in the open reading areas should be 40-45 decibels (Onat, 1989).

In this study, the noise level in the Seljuk Municipality KPP Children's Library was made by phone and sound level measurement using the Decibel application. The volume was measured separately in each section. In the sound level measurements made in the reading rooms, the noise level was measured as 50 decibels. The noise level in the reading rooms is higher than it should be. The fact that the KPP Children's Library is in the city center and on a noisy street had a negative impact on the noise level. At the same time, the air conditioning units in the library increased the noise in the reading rooms. In the observations made, it was seen that acoustic control and noise-cancelling measures were not taken in the library. While carpets should be used as sound-absorbing materials in places, sound control could not be achieved by using laminate flooring in some sections (Figure 9). In the study conducted by Kuru and Canbay Türkyılmaz (2019), 55% of the users evaluated the noise level of the

library moderately, 20% evaluated it well, and 15% evaluated it very well. It is emphasized that the evaluations of the users and the data obtained because of the measurements are similar. The results of this study and the study conducted by Kuru, Canbaz Türkyılmaz (2019) are me. In this direction, different sound insulation solutions are required for each section of libraries.



Figure 9. Use of laminate flooring

Criterion 9. Suitable and sufficient natural or artificial light

Lighting is one of the important elements of the interior spaces. Lighting, which has both functional and aesthetic properties, is divided into natural and artificial in libraries. Natural lighting is usually done through windows on the walls or skylights. Libraries should mostly provide a natural bright environment. However, artificial lighting should also be used in cases where natural lighting is insufficient or not at all (Kuru, Canbay Türkyılmaz, 2019). In the literature, the use of both natural and artificial lighting in libraries is recommended (Arat and Parlak, 2020; Temel and Canbay Türkyılmaz, 2018; Yılmaz and Ekici, 2011).

One of the places that should be bright in libraries is the reading rooms. In these sections, light that does not tire the eye should be used and both general and local lighting should be done. For lighting to be efficient, the ceiling, walls and floor must be designed from light colours (Zahoor, 1960). In areas where library users are located, the lighting measurement should be at least 400 lux (Faulkner-Brown, 1999). In the study conducted by Delice Güler and Bilbay (2016), it was reported that the windows should be arranged to the east and the reading area, play and activity areas to the south for the effective use of daylight. Windows for children should be 50 cm high, access to the window handles should be blocked. In addition to natural light, it is also important to provide adequate lighting in every area where you can read books.

In this study, natural lighting is provided by large floor-to-ceiling windows (Figures 10 and 11). As the space moved away from the window, the need for artificial lighting increased (Figure 10). Although

there are building elements in the space to control the sun, it is not enough. The inner walls of the building are painted in white and light colour is preferred on the floor. In this way, it is ensured that the space is brighter and more spacious.



Figure 10. Natural lighting

Artificial lighting in the library is provided by fluorescent lamps in the reading rooms, in the sections where the bookcases are located and in the staff office. Fluorescent lamp is the right form of lighting for library lighting. However, the worktables are not arranged in accordance with the lighting elements. In library buildings, both general and local lighting allows readers to work more comfortably.

There are no local lighting elements on the desks in the library. In the observations made, it is seen that the daylight entering the place is uncontrolled during the daylight hours. Reading in an area where there is too much light becomes tiring and can cause a loss of interest in the child. For this reason, an efficient lighting design is needed in all areas where the child can read.



Figure 11. Natural and artificial lighting

Criterion 10. Suitable room temperature to ensure good working conditions throughout the year

The average temperature in the libraries is 18-20°C. In the study conducted by Onat (1989), it was reported that every 5°C increase in the

temperature inside the library doubled the deterioration in books. For this reason, it is emphasized that daily temperature changes should not exceed 1 °C.



Figure 12. Saloon type split air conditioner

Criterion 11. Child-safe space and furniture

To ensure comfort in libraries, the dimensions of the spaces that make up the library, the limits of use, and the dimensions of the equipment in the space should be designed in line with anthropometric data (Kuru, Canbay Türkyılmaz, 2019). When the planning of the library is examined in this study, the main entrance is spacious enough for the preparation of children and parents. At the entrance of the library, sufficient space is left for parents and children to prepare, square cabinets and hangers are designed where children can leave their belongings. In the entrance areas of the libraries, there are no complex corridors and places with elevation differences. Considering the pandemic conditions, masks, disinfectants, and galoshes are kept in the entrance area and sufficient warnings are positioned for the children entering the interior to comply with the social distance rules. Immediately after the entrance, there is a tendency to the left side. Near the entrance there is awaiting area where parents and staff can observe the children. There is no information and lending area at the entrance. In the library, tables and chairs are in the middle of the space and shelves are against the wall. Although the tables and chairs are designed to suit children's ergonomics, they are not intended for parents. The distance between the two tables and between the tables and bookcases should be at least 600x900 mm (Kuru, Canbay Türkyılmaz, 2019). The distance that must be required for the passage of a person is at least 60 cm, and for the passage of two ki shins is at least 120 cm. In this study, the distance between tables and bookcases, the distance between two tables and the transition distances in the circulation areas were solved in accordance with the standard measurements. The design of the space should be made considering the anthropometric measurements of children, parents, and employees. As a result of the

measurements made in the library, it was determined that the dimensions of the libraries were in accordance with the ergonomic criteria for the child.

The purpose of ergonomics in children's libraries is to ensure that the environment is arranged according to child users. In the design of children's libraries according to ergonomic conditions, it is ensured that productivity is increased by creating areas suitable for children's ages, anthropometric characteristics (Erten Bilgiç and Surur, 2016), perceptions and thought structures. Areas designed by considering ergonomics criteria support the physical, mental, and social development of the individual on the one hand and play a vital role in the formation of positive health behaviours and the reduction of the risk of accidents on the other hand. In this study, when the bookcases are examined, it is seen that the depth of the single-sided shelves is between 25 and 35 cm and the depth decrease as the shelves in the middle of the bookshelves are moved to the tops due to the design. The depths of the other double-sided shelves ranged from 55 to 65. It was determined that the transition distances between the libraries varied between 90 and 100 cm. It was determined that the inter-library measurements were suitable for the anthropometric data. The attractive design of the bookcases will allow children to interact more with the books and increase their desire and motivation to learn (Figures 13).

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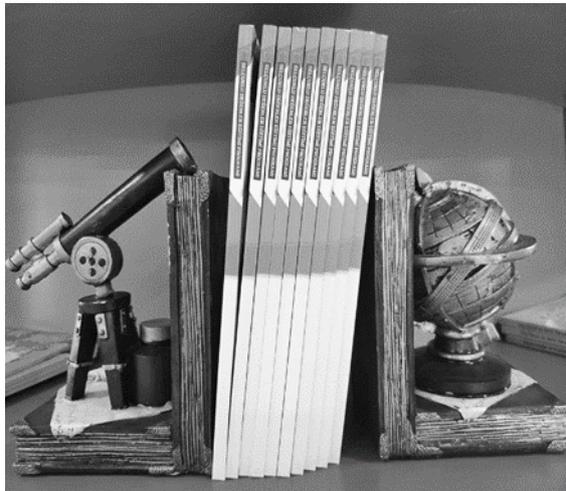


Figure 13. Different shelf design for children

Staff work office spaces do not meet the standards that should be in size and usage limits. The working area per librarian should be between 10 and 20 m² (Neufert, 2008). However, one study office is designed in the entrance section for individuals working in the KPP Children's Library. The average area of three people in the working office is 20 m². When we evaluate the suitability of three people, it is again an insufficient area. If the staff makes a meeting during the observations, the fact that their guests are in this office space shows that they are insufficient to meet this need.

The furniture used in the library is designed in accordance with the norms suitable for fire and accidents. Tables and bookcases are laminated

veneer. Although wood is positive in terms of human psychology, wood is a dangerous material in terms of fire. Thanks to the laminate coating used in the furniture, both the feeling of wood is created in the psychology of people and the accidents that may occur in case of fire are reduced. Transparent protectors are not placed on the surface of the tables, which can prevent injuries that may occur in accidents (Figure 14). In addition, some details in the library, such as cabinet doors and hangers, are made of unnecessary designed and poor-quality materials.



Figure 14. Event place, dream table.

In addition, IFLA (2018) states that space and furniture should be made considering child safety regulations in the design of spaces (IFLA, 2018). The children's library should be a safe place and staff should be aware of local legislation regarding health and safety. In this context, there is a first aid kit in the library, the stairwells are suitable for children, the stair railings are suitable for children, the stair treads are not slippery, the necessary notifications have been taken for door and glass mouldings to prevent possible accidents, there is a smoke-fire and water detection system, the material edges are not sharp, there are emergency assembly centres, the heaters are in areas where children cannot reach, the electrical outlets are closed, There is an automatic fire extinguishing system.

The implementation of measures related to the COVID 19 pandemic in the recent period is among the issues that need particular attention. Social distancing, masks and cleanliness are to be considered by library staff. It is recommended to create areas where children are allowed to live away from each other.

CONCLUSION

This study, which aims to analyse the spatial design of library structures through the Seljuk Municipality KPP Children's Library in line with IFLA (2018) recommendations, reveals the inadequacies in the library structure thanks to the multidimensional approach to space

(physical (user age ranges, lighting, colour, noise, comfort, signage and directions, accessibility), ergonomics, security and health) and addresses them. As a result of the study, the design of the building as a municipal building and its subsequent conversion into a library caused some parameters proposed by IFLA (2018) to not be adequately met.

- The fact that the library is located on the third floor has limited its relationship with the environment. Although it is also important to give the idea that the book can be read anywhere in the book-space relationship, the fact that it is not on the ground floor has caused the child's relationship with the external environment to be broken. Considering that it has an impact on child psychology, it is recommended that the libraries be located on the ground floor during the design phase.

- The location of the library in the centre of the city and on a noisy street adversely affects the noise level. At the same time, the air conditioning units in the library increase the noise in the reading rooms. In the observations made, it was seen that acoustic control and noise-cancelling measures were not taken in the library. While carpet should be used as a sound-absorbing material in places, sound control could not be provided by using laminate flooring in some sections. It is recommended to use reinforcements and elements that reduce sound.

- The natural lighting of the library is used uncontrollably. Building elements (light shelves, prismatic panels of photochromic glasses, etc.) that will provide control of the sun have not been used in the space. As the space moves away from the window, the need for artificial lighting has increased. An efficient lighting design is needed in all areas for the children atypical.

- Uncontrolled sunlight in the library during daylight hours causes the temperature to increase. It is difficult to provide a comfortable climate environment as the space is tried to be cooled with two hall-type split air conditioners. Too much heat can cause distraction from users and employees. It is recommended to increase the building elements that will provide control of the sun in the space.

- In the library, interior design was realized by considering the anthropometric characteristics of the child, parents and working staff. It has been determined that transitions are appropriate in the distances between the bookcases, between the books and the desks and in the circulation areas. It is necessary to rearrange the equipment (bookshelves) in the space in accordance with the body measurements and standards of the children.

- The fact that the library consists of a single space has led to the disregard of the need for navigation signs. The lack of markings, especially for disadvantaged children, is a big shortcoming.

- There is no care room for infants or children in the library examined within the scope of this study.

- When the library is evaluated in terms of pandemic measures, it has been observed that no other measures have been taken apart from

measures such as user capacity and time limit. It is recommended to pay attention to the social distance rules in terms of space.

REFERENCES

- Akkaya, M.A., & Odabaş, H. (2019). Children's libraries as the cradle of the library experience. In: Information Centers. Libraries-Archives-Museums, (pp. 82-125). Mkyas Mkyas Publishing and Maatbacılık. Istanbul.
- Al Şensoy, S., Midilli Sarı, R. (2020). New generation academic library concept and it's reflection on architecture. Turkish Online Journal of Design Art and Communication, 10(3), 285-310.
- Altay, A. (2020). Evaluation of Library Services for Preschool Children of Families in Temporary Protection Status: The Example of Istanbul Metropolitan Municipality Libraries and Museums Directorate. In Preschool Period in Children's Libraries A. Kakırman Yıldız (Ed.). Istanbul: Hyperbroadcast. pp. 107-133.
- Arat, Y., & Parlak, S. (2020). Spatial experience/architectonics in terms of ergonomics: The cases of Karabük baby library and Ankara Ali Dayı children's library. Ergonomics, 3(3), 138-155. <https://doi.org/10.33439/ergonomi.651088>
- Baran, M., Yılmaz, A., & Yıldırım, M. (2007). The importance of the preschool education and the user requirements in the preschool structures case study of Diyarbakir huzurevleri preschool. Dicle University Journal of Ziya Gökalp Faculty of Education, 8, 27-44 .
- Chmiliar, I. (2010). Multiple-case designs. In A. J. Mills, G. Eurepas & E. Wiebe (Eds.), Encyclopedia of case study research (pp. 582-583). USA: SAGE Publications.
- Delice Güller, E., & Bilbay, P. (2016). Investigation of interactive spaces for preschool children in library buildings. The Journal of Turkish Librarianship, 30(3), 398-414.
- Dewe, M. (2016). Planing public library buildings: Concept and issues for librarian. London: Loutledge.
- Erçevik Sönmez, B., & Erinsel Önder, D. (2015). The concept of wayfinding as a criterion of design: definitions and debates. Megaron, 10(3), 355-364. <https://doi.org/10.5505/MEGARON.2015.89421>.
- Erten Bilgiç, D., & Surur, A.S. (2016). The effect of the education systems applied in pre-school educational institutions on the place formation and essays on the place design provided by reggio emilia education system. Megaron, 11(1), 162-176. <https://doi.org/10.5505/MEGARON.2016.03016>.
- Edwards, B., & Fisher, B. (2002). Libraries and Learning Resource Centres. Architectural Press. Oxford.
- Göktürk, S. (2010). Children's libraries. Turkish Librarianship, 24 (3), 551-552.
- Gönen, M., Temiz, N., & Akbaş, S.C. (2015). The role and importance of children's libraries in early childhood: a library program sample. National Education, 208, 76-89.
- Güneş, A. & Canatar, M. (2020). Services for baby users in public libraries. The Journal of Information and Documentation Studies, 13, 55-80. <https://doi.org/10.26650/bba.2020.13.03>
- International Federation of Library Associations and Institutions (IFLA). 2018. IFLA guidelines for library services to children aged 0-18. https://www.ifla.org/files/assets/libraries-for-children-andya/publications/ifla-guidelines-for-library-services-to-children_aged-0-18.pdf.

- Public Libraries Regulation. (2012). T.R. Official Gazette, 28170, 11 January 2012.
- Hashempour, L., Taghizadeh Sapchi, A. (2015). Color Effects on the Interior Design of Libraries Libraries from Content to Architecture in the Electronic Age. Hacettepe University, Ankara. pp. 79-86.
- Kakırman Yıldız, A., Yalçınkaya, B., & Saydam, V. (2018). An evaluation of the eligibility of public libraries in İstanbul for pre-school period children. *DTCF Journal*, 58(2), 1811-1836. <https://doi.org/10.33171/dtcjournal.2018.58.2.30>.
- Kuru, R., & Canbay Türkyılmaz, Ç. (2019). Evaluation of library building space organization in terms of ergonomic criterias: a case study Bahcesehir University library building. *Ergonomics*, 2(3), 153-166. <https://doi.org/10.33439/ergonomi.481138>.
- Küçükcan, B. (2015). Place designing in school libraries. *National Education*, 208, 219-232.
- Ministry of National Education of the Republic of Turkey (MNERT). (2009). Strengthening the Vocational Education and Training System Project (SVET). Child Development and Education. Ankara.
- Neuman, S.B., Molan, N., & Celano, D. (2017). Bringing literacy home: an evaluation of the every child ready to read program. American Library Association, Association for Library Service to Children. Chicago. USA.
- Onat, Z. (1989). Spatial Organization of Public Libraries. Unpublished Master's Thesis, Hacettepe University, Ankara.
- Polat C., Yılmaz E., Kakırman Yıldız A. (2018). Children's Libraries Workshop. Ministry of Culture and Tourism. Ankara.
- Polat, C., Eroğlu, E. B., Çuhadar, S., Kavak, A., & Tan, B. (2020). IFLA Guide to Library Services for Children 0-18 Years 2018 (Ed. Carolynn Rankin). 2nd Edition.
- Sayer, R. C. (2007). Use and Dissemination of Electronic Publications in Children's Libraries. Ankara University Institute of Social Sciences, Department of Information and Document Management. Unpublished Master Thesis, Ankara.
- Seljuk Municipality KPP Children's Library (2022). <https://selcukludegerleregitemi.com/cocuk-kutuphanesi/>
- Tapkı, S., & Canbay Türkyılmaz, Ç. (2018). Investigation of ergonomic concepts in primary educational building: comparison of two primary schools with different design approach. *Journal of Engineering Sciences and Design*, 6(Ergonomics 2017), 220-233. <https://doi.org/10.21923/jesd.360651>.
- Temel, S. C., & Canbay Türkyılmaz, Ç. (2018). The evaluation of ergonomic design factors in traditional Safranbolu house's functional transformation: case of curtlar house. *Ergonomics*, 1(3), 163-175. <https://doi.org/10.33439/ergonomi.481130>.
- Yavuz Öden, H. (2021). Multifunctional use of furniture in children's library interior design. *Online Journal of Art and Design*, 9(3), 92-103.
- Turkish Statistical Institute (TSI). 2022. Child with Statistics 2021. <https://data.tuik.gov.tr/Kategori/GetKategori?p=Nufus-ve-Demografi-109>
- Yılmaz, B., & Ekici, S. (2011). Guidelines for Children's Libraries Services. *Turkish Librarianship*, 25, 4, 545-552.
- Yin, R. (1984). Case study research: design and methods. (3. Basım). California: Sage Publication.



Resume

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