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Examination Of Child-Friendly Restaurants on The Scale of Child Needs Çocuk Dostu Restoranların Çocuk Gereksinimleri Ölçeğinde İncelenmesi

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ABSTRACT ÖZET

A child is an individual who is constantly developing and rapidly developing physically, psychologically and cognitively. As a result of meeting the needs of the child correctly, spaces can become meaningful for children. Thanks to the answers given by these spaces to children, the child can turn into a more free, self-confident and more creative individual in the space. It has been observed that there are not many child-friendly restaurants in our country compared to abroad. The preference of child-friendly restaurants abroad is increasing, as they offer activities that will contribute to both families' spending quality time and the development of children. In the study, it is aimed to examine how child-friendly restaurants are designed for children's needs and to examine how positive aspects can be gained in the development of the child in a place where children's needs are met. In this context, the study was designed in 6 steps. For the first time, child-friendly restaurants abroad, which were made in the last 10 years, were examined in the literature. And a total of 63 child-friendly restaurants were scanned and a total of "11" child-friendly restaurant structures meeting the criteria determined within the scope of the criterion sample used in the study were selected as the sample group. Selected restaurants were examined under the titles of physiological, psychological, cognitive, safety and aesthetic-perception needs of children. In the examined child-friendly restaurants, it was observed that the space designs were shaped in line with these needs of children.

Keywords: Child, Families with Children, Child Friendly Restaurants, User Need.

Çocuk, sürekli gelişen ve fiziksel, psikolojik, bilişsel yönden de hızla gelişim gösteren bir bireydir. Mekanların çocuğun ihtiyaç duyduğu gereksinimlerini doğru bir şekilde karşılanması sonucunda mekanlar çocuklar için anlamlı hale dönüşebilmektedir. Bu mekanların çocuklara verdiği yanıtlar sayesinde çocuk mekânda daha özgür, özgüvenli ve daha yaratıcı bir bireye dönüşebilmektedir. Çocuk dostu restoranların yurt dışına kıyasla ülkemizde henüz çok fazla bulunmadığı görülmüştür. Yurtdışında tasarlanan çocuk dostu restoranların ailelerin hem kaliteli zaman geçirmesine hem de çocukların gelişimine katkı sağlayacak aktiviteler sunması ile tercih edilme durumu artmaktadır. Çalışmada çocuk dostu restoranların çocuk gereksinimlerine yönelik nasıl tasarımlar yapıldığının irdelenmesi ve çocuk gereksinimlerinin karşılandığı bir mekândaki çocuğun gelişiminde nasıl artı yönler kazandırılabilirdiğinin incelenmesi amaçlanmıştır. Bu kapsamda çalışma 6 adımda kurgulanmıştır. Konuya ilişkin ilk olarak son 10 yıl içerisinde yapılmış yurt dışındaki çocuk dostu restoranlar literatürde incelenmiş ve toplam 63 çocuk dostu restoran taranarak çalışmada kullanılan ölçüt örneklemi kapsamında belirlenen kriterleri sağlayan toplam "11" adet çocuk dostu restoran yapısı örneklem grubu olarak seçilmiştir. Seçilen restoranlar, çocukların ihtiyaç duyduğu fizyolojik, psikolojik, bilişsel, güvenlik ve estetik-algı gereksinimi adı altındaki başlıklar üzerinden irdelenmiştir. İncelenen çocuk dostu restoranlarda çocukların ihtiyaç duyduğu bu gereksinimler doğrultusunda mekân tasarımlarının şekillendiği görülmüştür.

Anahtar Kelimeler: Çocuk, Çocuklu Aileler, Çocuk Dostu Restoran, Kullanıcı Gereksinimi.

1. INTRODUCTION

A child is an individual who has not reached puberty and maturity and needs the care of their parents. In studies on children, the definition of child has been made by researchers from many different disciplines. Different definitions of the concept of child and childhood have been made in the historical process. The concept of childhood began to develop concretely in the 16th century (Taşkın, 2006). All definitions and concepts of the child have changed with the advancements in the scientific field, studies on human rights and the emergence of a developmental perspective. The 20th century has manifested itself as the "Children's Century" (Gander and Gardiner, 2010; cited by Sağlam and Aral, 2016). Children show rapid development in terms of mental, physical, psychological, social and aesthetic aspects. In order for these developments to be provided in a positive way, it is important that the places where

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the children are located have an enhancing effect on their development. The issue of spatial readability for children is of particular importance because children's physiological-psychological-social developments are different from adults, it is important to understand the child-space relationship and how the child reads the space and creates an image in his mind, in terms of the design of children's spaces and understanding the legibility of the spaces where the child is located.

There are many academic studies in the literature on child development, needs and child-friendly restaurants. Among the academic studies conducted, there have been studies on child development (Blau, 1999; Yazıcı, 2004; Evans, 2006; Ahıoğlu; 2008; Şahin, 2011), child needs (Baran et., 2007; Çukur and Delice, 2011; Temel, 2019) and child space design approaches. (Öymen Gür and Zorlu, 2002; Koç, 2012; Doğan and Bakşi, 2019; Canoğlu and Geçimli, 2020). There are studies on children and restaurants (Pettersson and Fjellström, 2007; Bardwell, 2013; Tavşan et al., 2018), on child friendly cities (Koç et al., 2015, Güngör Gökso, 2018; Öktem and Akpınar, 2019; Karakuzu and Aksu, 2022; Kaygusuz Akbay, 2022), and on child-friendly tourism (Stilling Blichfeldt, 2019; Taner, 2019; Tuna et al., 2019). When the studies are examined, it is seen that child-friendly studies are concentrated in the areas of city and tourism, and there are not many studies in the field of restaurants in domestic. In addition, no comprehensive study has been found to examine what kind of design approach child-friendly restaurants follow in line with children's needs.

The aim of the study is to examine how child-friendly restaurants are designed for children's needs and to examine how positive aspects can be gained to the development of the child in a place where children's needs are met. In this context, a total of 11 child-friendly restaurants meeting the 4 criteria determined using criterion sampling were selected as the sample group. The space designs of the selected child-friendly restaurants were examined through the tables prepared in line with the child's needs under the headings of physiological, psychological, cognitive, safety and aesthetics. In the study, document analysis from qualitative research methods, one of the research methods and techniques, was used. In the study, which was constructed in 6 steps in total; examination of the domestic and international child-friendly restaurants and child needs in the literature, developing questions about child-friendly restaurants and child needs, determining the sample group based on the specified criteria, creating analysis tables, making analyzes, examining the analyzes of restaurants within the scope of child needs and giving general results is in the form.

2. LITERATURE REVIEW

Childhood, which is the most special and innocent state of human in the development process, is a special period in which scientists, thinkers, clergy, state administrators, educators and almost everyone who is interested in children from past to present try to define it by putting forward their own point of view. It is stated that, as the attitudes of people towards each other in social life differ in every society, the phenomenon of childhood also has a cultural aspect, so a general definition cannot be made to define the child (Öktem, 2012). The Convention on the Rights of the Child includes the definition of "Every person up to the age of eighteen is considered a child, with the exception of the earlier age of majority under the law applicable to the child" (U.N. General Assembly, 1989, article 1).

The child, the adult of the future, is a complete individual. They show rapid development in terms of mental, physical, psychological, social and aesthetic aspects. In order for these developments to be provided in a positive way, it is important that the places where the children are located have an enhancing effect on their development. The issue of spatial readability for children is of particular importance. Because children's physiological-psychological-social developments are different from adults, it is important to understand the child-space relationship and how the child reads the space and creates an image in his mind, in terms of the design of children's spaces and understanding the legibility of the spaces where the child is located.

The stimulants necessary for the development of the child's personality phenomenon, abilities and cognitive process are complemented by the effect of the place they are in. For this reason, space designs should be made that will support the development of the child in a positive way, and children should spend time in these spaces. By freeing the child from known patterns, the opportunity to live in consciously designed original spaces where they can question and

develop their unique abilities and recognize the sense of freedom should be provided (Doğan and Baksi, 2019).

It has been seen in studies that families with children place their children at the center of decision-making mechanisms. Parents prefer places where their children's physical-psychological-cognitive-safety and aesthetic needs are met and that will contribute to the development of their children more. For this reason, child-oriented spaces and designs are increasing in today's consumer society. Child-friendly restaurants are also increasing in number due to the demand of families with children. In child-friendly restaurants, it is expected to meet the physiological-psychological-cognitive-safety and aesthetic needs of children and to support their development and self-awareness.

The equipment of child-friendly places should be strong and durable, useful and replaceable, waterproof and paint not change colour. It should be produced from healthy materials, expand their imagination, and be unique to the child. It should be multi-option and add-on, a wide variety of colors and safe against accidents. At the same time, it should be variable and modular, functional, easy to clean and affordable. It is of great importance to install functional multi-purpose equipment that can meet all vital needs for children in interior spaces (Tavşan, 1995).

Child-friendly spaces should meet the physiological needs of children. It is the acquisition of habits that will enable the child to be self-sufficient. For this reason, in the design of the space, equipment and equipment designs should be made that are suitable for the physical dimensions of the child, provide accessibility, and children can move independently from adults. Material and equipment placements that will enable children to move freely provide ease of use (Doğan and Baksi, 2019). Since children are in a continuous developmental stage, the places they are in should meet the physiological needs of the children. Children have basic needs such as rest, eating and excretion. While participating in games and activities in the place where they are, they can get maximum efficiency in the place that meet their basic needs.

Child-friendly restaurants should be responsive to the psychological needs of children, such as sense of belonging, privacy and personal space. Arousing the sense of belonging and familiarity of the place will make it easier for the child to establish a relationship with his environment. In order for the child to develop in a healthy way, he should have privacy and his own sovereignty. Having an area of his own will help the child develop his personality and strengthen his self-confidence (Öymen Gür and Zorlu, 2002).

Cognitive need is defined as the reason, curiosity, knowing-recognition need that pushes people to examine objects. When a person grasps the quality of an object, he satisfies an interest or motive. In order to accelerate the perceptual and cognitive development of the child, environments with many stimulants should be designed. The fact that the child is free to choose the activity of his own interest creates internal discipline and self-control in the child. In this way, the internal motivation of the child is provided (Gutek, 2004; Güral, 2015). Also, giving children freedom of choice makes them responsible for the learning process. Taking responsibility also supports the child to create a positive self-perception (Kartal, 2008; Güral, 2015). At the same time, children should be given the opportunity to explore and experiment with their environment. In line with these needs, children enjoy building blocks of different sizes and creating shapes by combining various toys. Materials such as plastic or cardboard boxes of various sizes, play dough, clay, mud develop children's perception of shape. Colorful beads, balls, cubes with pictures, colored reels improve color perception. Boxes that can be stacked one on top of another and one inside the other improve the perception of shape and size, while toys that can be disassembled, colored plastic nail and nail board sets improve the ability to establish relationships between objects (Baykoç Dönmez vd. 1997; Kılıç, 2004). Since child-friendly restaurants serve children from different age groups, they should also offer games suitable for the development of each age group. It should be ensured that they experience rich stimuli in different forms, colors and textures in the space. For example, the use of soil, sand and water (water and sandbox) in playgrounds increases the possibilities of experience and exploration (Yavuzer, 2003). At the same time, creating areas at different heights in the arrangement of the space enables the development of perspective perceptions by the differentiation of the shapes that children see by looking at these areas from different places (Çukur ve Delice, 2011).

As a safety need, equipment suitable for children's sizes, selection of appropriate materials to protect them from accidents and injuries, and additional measures for circulation areas such as stairs that may pose a danger to children can be considered. Space equipment should be designed in accordance with children's dimensions. Designing the designed furniture with a round form or with rounded corners reduces the accidents in the space. It makes it easier for children to perceive the space by making appropriate arrangements at eye level. "The equipment selected in suitable sizes for children allows children to discover their talents early, to use their environment easily, and thus to reinforce their self-confidence" (Öymen Gür and Zorlu, 2002). Very large and/or high spaces may cause fear and anxiety in children.

As an aesthetic and perception need, children's spending time in places with a rich perception environment also contributes to the increase of their creativity ability. The fact that the spaces have harmonious color and texture arrangements positively affects the formation of children's aesthetic sense. The use of color for children's rich visual memories strengthens visual perception and has a stimulating effect on the development and education of the child (Çukur & Delice, 2011). Considering the physiological and psychological effects of colors (affecting brain waves, nervous system functions, hormonal activities; stimulating emotional and aesthetic values, providing stimulation of other senses; Güller, 2007), it has an important place in the perception of space. Determining the colors of the space according to the activities offered to the children in the space ensures high efficiency from the activities. For example, while warm colors give a stimulating effect, cold colors are suitable for works that require attention and concentration under the opposite conditions (Güler, 2007). Cold colors have a calming effect, while warm colors have an exciting-energizing effect (Çukur and Delice, 2011). In the light of this information, the functional, aesthetic and symbolic use of colors has gained importance. The use of various textures together in spaces gains importance in terms of the perceptual development of children. It is known that children can recognize substances by touch and the circle of perception expands. Another phenomenon that develops aesthetic and visual perception in children is form. The use of forms in different colors or sizes in the space improves children's visual perception memories (Çukur ve Delice, 2011).

An evaluation table was created with the main headings of the needs examined in the literature, physiological, psychological, cognitive, safety and aesthetic-perception needs (Figure-1).

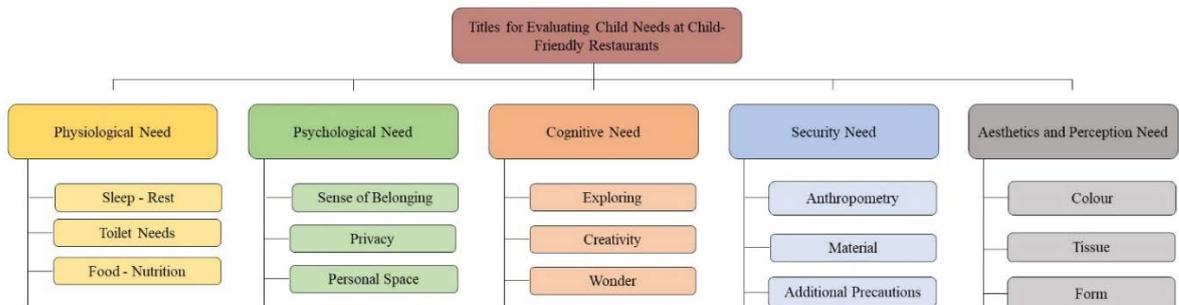


Figure 1. Child needs assessment headings in child-friendly restaurants (The table was created by the authors using the studies of Maslow Needs Pyramid, Çukur and Delice, 2011, Yıldırım Erniş, 2012, and Baran et al., 2017.)

3. METHODOLOGY

In the study, "What are the design approaches of child-friendly restaurants?" and "What are the child needs in child-friendly restaurants?" based on the questions, it is aimed to examine the designs made for child-friendly restaurants for child needs. For this purpose, document analysis, one of the qualitative research methods, was used as a research method. In the study, the concepts of child-friendly, family-friendly or children's restaurants were searched through literature and the internet. A total of 63 child-friendly restaurants obtained as a result of the scanning and 27 child-friendly restaurants with written and visual information from these restaurants were examined according to the following criteria. These criteria are;

- It should be designed as a child/family friendly restaurant.
- It must have been designed between 2012-2022.
- It should have aesthetic value in interior design.
- The playground should contain additional activities.

In the study, a total of 11 child-friendly restaurants with the criteria determined by criterion sampling were selected as the sample group. The selected sample group is given in the table below. (Table 1).

Table 1. Sample group

Restaurant Name	Designer	Year of construction	Country	Concept
1.Fii Fun House	Íris Cantante	2014	Argentina	A light and warm place
2.Kukumuku	Plazma Architecture	2014	Lithuania	Joy, calmness, comfort
3.Tymianek Family	Mod: Lina Architekci	2016	Poland	A frank place
4.Origami	Alan Chan	2017	China	Origami
5.PIM	Some Sevit	2017	S. Korea	Infinity
6.Polikarbonat Neverland – Aranya	Wutopia Lab	2018	China	Illusion
7.Lolly- Laputan	Wutopia Lab	2019	China	A world between reality and fantasy
8.Vitaland	Golucci Interior Arc.	2019	China	Tree house
9.White+The Bear	Sneha Divias Atelier	2019	UAE	Minimalist, neutral, warm
10.Yooyumi	X + Living Arch.	2019	China	Fairy tale land
11.Meland Clup	X + Living Arch.	2020	China	Fairy tale world

The working structure is structured in six steps. In the first step, data were obtained by examining the domestic and international literature about child-friendly restaurants, and the need topics were determined in which the analyzes of child-friendly restaurants for children's needs will be examined. In the second step, the sample group of the study was formed. In the third, fourth and fifth steps of the study, tables were created to examine the physiological, psychological, cognitive, safety and aesthetic needs of the selected child-friendly restaurants, and the solutions of each restaurant for these topics were examined on the table. As a result of the analyzes made in the last step of the study, the general results of what child-friendly restaurants do for children's needs and how they create spaces are presented (Figure 2).

Step	The studies done	Method
1	Examination of child-friendly restaurants and children's needs in the literature at home and abroad	Data collecting
2	Determination and selection of 11 restaurants depending on the criteria of a total of 63 child-friendly restaurants between 2012-2022	Determination
3	Creating analysis tables in line with the needs of children	<i>Preliminary</i>
4	Examination of restaurants within the scope of children's physiological, psychological, cognitive, safety and aesthetic needs	Analysis
5	Examination of the solutions made within the scope of the children's needs of the restaurants	<i>Scrutiny</i>
6	Giving general results about what restaurants do in line with children's needs	Conclusion

Figure 2. Study structure

4. RESEARCH FINDINGS

Under this title, what is done in the space design of each child-friendly restaurant according to the physiological, psychological, cognitive, safety and aesthetic-perception needs of children who are child-friendly restaurant users has been examined in line with the findings.

4.1. Fii Fun House / Íris Cantante / Buenos Aires / Argentina

The Fii Fun House restaurant was designed by designer Íris Cantante and is located in Buenos Aires, Argentina. The designer architect wanted to contribute to the development of children in this restaurant and to have children play a role as the main protagonist of the place. Special

areas are designed for children to play. At the same time, pocket swings are designed where children can both play by swinging and sleep in the swings when they are tired or want to rest. With these pocket swings, the designer tried to respond to the physiological needs of children, which are sleep-resting needs. However, there is no children's toilet in the restaurant where children can fulfill their toilet needs on their own. At the same time, there is no special children's menu and dinnerware in the restaurant. These are seen as lacking for physiological needs in the restaurant.

For the psychological needs of children, the fact that children will feel dominant, protect their privacy and have private areas in the space strengthens the child's belonging to the place. House blocks, an image recognized by children, were designed in the Fii Fun House restaurant. The space was divided by these house blocks and special areas were obtained for children and their families. These private areas have also responded to the need for privacy. In the restaurant, swings are designed at regular intervals so that children can be alone or create their personal space whenever they want.

It has been observed that there are not many applications for the cognitive needs of children in the restaurant. It can only be thought that choosing a swing instead of a chair in space design will help children feel more comfortable and free, encourage them and support their sense of curiosity.

It has been seen that the equipment preferred in the restaurant in order to meet the safety needs of children in the restaurant is suitable for children's anthropometry. Wooden material, which is considered healthy as a material, dominates most of the space.

It has been observed that there is not much variety in color and texture in order to meet the aesthetic-perception needs of children in the restaurant, but different forms are preferred in terms of form, especially toys and accessories. Images of all these explanations are given in Figure 3 (Figure 3).



Figure 3. (a) Fii Fun House Restaurant reading and rest pockets (b) House blocks and swings of different shapes (c) Playground and toys for children (d) Different forms of furniture (Fii Fun House, 2021)

The table of needs for the Fii Fun House restaurant is as follows (Table 2).

Table 2. Solutions for the needs of children in Fii Fun House child-friendly restaurant

Fii Fun House Restaurants	
What Has Been Done Within the Scope of Children's Physiological Needs?	
Sleep- Rest	Pocket swings
Toilet Needs	There is no children's toilet.
Food- Nutrition	There is no dinnerware.
What Has Been Done Within the Scope of Children's Psychological Needs?	
Sense of Belonging	House blocks
Privacy	The need for privacy was met by designing separate cabins.
Personal Space	Certain interval swings are designed.
What Has Been Done Within the Scope of Children's Cognitive Needs?	
Exploring	There are no designs for children to explore.
Creativity	Their imagination and creativity were supported by the swing design instead of a chair.

Wonder	No designs intended to arouse wonder have been seen.
What Has Been Done Within the Scope of Children's Security Needs?	
Anthropometry	Child-sized furniture, toys
Material	Wooden material is mainly used.
Additional precautions	There are no additional measures.
What Has Been Done Within the Scope of Children's Aesthetic and Perception Needs?	
Colour	Wood tones
Tissue	A single texture dominates the space
Form	Toys and furnitures in different shapes

4.2. Kukumuku Restaurant / Plazma Architecture Studio / Vilnius / Lithuania

Kukumuku restaurant was designed by Plasma Architecture Studio and is located in Vilnius, Lithuania. The restaurant has been designed with families with children in mind. Throughout the entire process of designing the Kukumuku restaurant, the main goal was to give full attention to what the children wanted.

In order to supply with the physiological needs of children in the restaurant, niches of different sizes and animal shapes were opened on the wall surfaces. These niches are designed both for children to use while playing and for parents to follow their children while they are eating. These niches can also be used for children to rest when desired. Children's toilets are designed so that children can meet their toilet needs on their own. Just like the need for excretion, the need for nutrition is also important for children, especially since they are in the age of growth and development. While children are playing, sometimes they do not want to eat and sometimes they want to eat on their own. The restaurant uses children's dinner sets so that children can eat on their own.

In order to supply with the psychological needs of the children in the restaurant, the object or objects that the children will feel belonging to when they see them are designed in the restaurant. In the Kukumuku restaurant, the lightings were designed in the form of a house and small-scale private areas were created in the form of a house, trying to give the children a sense of home and belonging. In order for children to create their own personal spaces, children's equipment is preferred as mobile and light. In this way, children will be able to create their own personal spaces by moving the equipment as they want in the space.

In order to supply with the cognitive needs of the children in the restaurant, abstract drawings were made on the focal wall of the restaurant to remind them of different living things, and some of these drawings served as lighting. These drawings and reminders can trigger children's sense of curiosity. Presenting the events in the daily life of the children in their own dimensions in the restaurant can increase the creativity of the children together with the game.

In order to supply with the safety needs of children in the restaurant, it has been observed that the equipment in the special areas for children has been designed in accordance with the size of the children. At the same time, the edges of almost all wooden equipment in the space have been rounded, reducing the possibility of children being injured in any accident. Round geometric shape is preferred in the openings opened on the wall surface. Other fabric reinforcements, on the other hand, will be filled with soft sponge fillings, which will reduce injuries in the event of an accident.

In order to supply with the aesthetic and perception needs of children in the restaurant, different colors were preferred in the dining and playground areas. In this way, it is ensured that children perceive the places where different functions such as eating and playing will be done with color. Equipment and areas with different textures are designed for children's touch needs. In this way, it was possible for children to recognize by touch and to develop their perception circle. Again, as a form, lightings in different forms and shapes were preferred in the space. Images of all these explanations are given in Figure 4 (Figure 4).



Figure 4. (a) Furnitures and openings with rounded edges in Kukumuku Restaurant (b) Lighting in house form (c) Drawings of abstract objects and living things (d) Furnitures in different forms and movable (Kukumuku Restaurant, 2021)

The needs table for Kukumuku restaurant is as follows (Table 3).

Table 3. Solutions for the needs of children in Kukumuku child-friendly restaurant

Kukumuku Restaurant	
What Has Been Done Within the Scope of Children's Physiological Needs?	
Sleep- Rest	Wall niches for children
Toilet Needs	There is a children's toilet.
Food- Nutrition	There is dinnerware.
What Has Been Done Within the Scope of Children's Psychological Needs?	
Sense of Belonging	House forms and child size specific fields
Privacy	The need for privacy was met by designing separate cabins.
Personal Space	Moving furniture is preferred.
What Has Been Done Within the Scope of Children's Cognitive Needs?	
Exploring	Conversion of abstract graphic drawings on the wall into lighting, lighting elements with house figures
Creativity	By giving the events in daily life as games in places suitable for their own dimensions, it was ensured that the child's play-creative power was increased.
Wonder	With the use of abstract graphic expressions, wall openings in different shapes and the use of different equipment, children's sense of curiosity is increased.
What Has Been Done Within the Scope of Children's Security Needs?	
Anthropometry	Child-sized furniture, toys, and size-appropriate spaces
Material	Wooden furniture with rounded edges and velvet fabrics with sponge filling
Additional precautions	There are no additional measures.
What Has Been Done Within the Scope of Children's Aesthetic and Perception Needs?	
Colour	Different colors in the dining and playground areas
Tissue	Different tissue materials in sitting and playing areas
Form	Different shape lightings and wall shapes

4.3. Lolly-Laputan Educational Restaurant / Wutopia Lab / Dalian / China

Lolly-Laputan Educational restaurant was designed by Wutopia Lab and is located in Dalian, China. Lolly-Laputan restaurant is a family-child restaurant designed for children to learn while having fun.

In order to supply with the physiological needs of children in the restaurant, wooden houses suitable for children's use have been placed in the restaurant. In these houses, children can play games with each other or with their parents. Likewise, in these houses, children can rest or play alone if they want. A children's toilet is also designed for the toilet needs of children.

In order to supply with the psychological needs of children in the restaurant, subconscious images were tried to be reflected in the space. Waves reminiscent of the sea, houses designed according to child-size can be said. In order to protect or create the personal space of children, eating and sitting areas where children can move flexibly are designed. In these areas, children will be able to spend time alone or with their parents. In order to supply with the cognitive needs of children in the restaurant, a space between real dreams is designed to trigger the

urge to explore. The ceiling and floor coverings resembling sea waves are used in the space, giving the feeling of children playing in an ocean. Carousels, which look like an amusement park, also encourage children to explore and arouse curiosity. Air-flowing ball games placed in the space, the light forest created with neon tubes, tree houses hidden in different parts of the space, ball pools and slides allow children to learn, explore and increase their creativity skills.

In order to supply with the safety needs of children in the restaurant, it has been observed that the equipment in the special areas for children has been designed in accordance with the size of the children. At the same time, the edges of the equipment in the space are rounded, reducing the possibility of children being injured in any accident. For any accident caused by the metal perforated surface, round sponges are placed on each side along the height up to the child size. Other fabric reinforcements, on the other hand, will be filled with soft sponge fillings, which will reduce injuries in the event of an accident. As an additional precaution, rope nets were used to prevent children from falling while climbing the trampoline or slide.

In order to supply with the aesthetic and perception needs of children in the restaurant, neutral colors are dominant in the space, and the use of bright colors and materials such as metal and neon light, and the use of different forms and textures while reflecting a similar space from the outside world as an imaginary one can attract children. Images of all these explanations are given in Figure 5 (Figure 5).

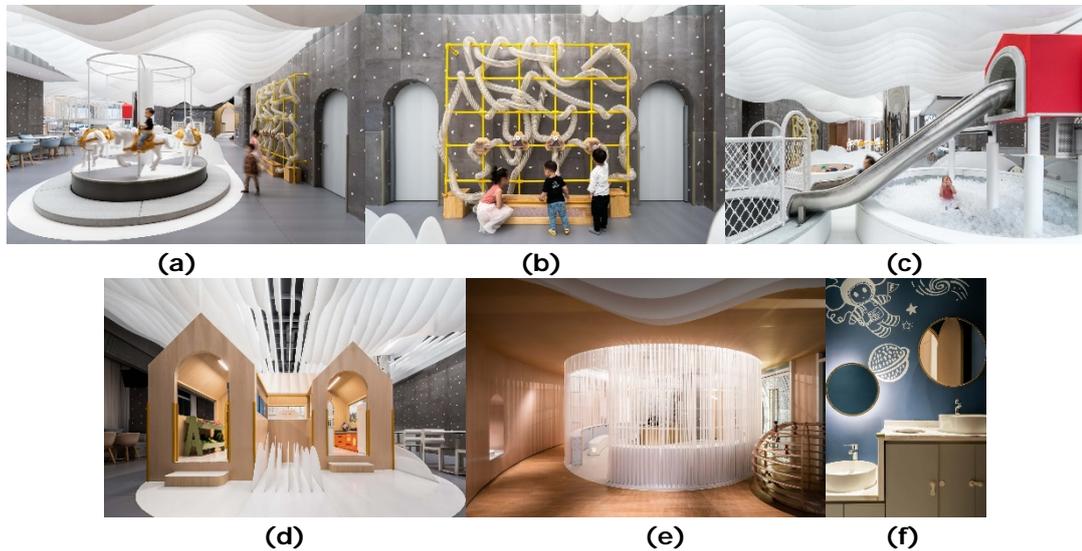


Figure 5. (a) Lolly- Laputan restaurant carousel (b) Airflow ball game in the restaurant (c) Playgrounds in the restaurant (d) Wooden houses of different sizes (e) Light forest covered with neon tubes (f) Children's toilet for children (Lolly-Laputan, 2021)

The table of needs for the Lolly-Laputan Educational restaurant is as follows (Table 4).

Table 4. Solutions for the needs of children in Lolly-Laputan Educational child-friendly restaurant

Lolly-Laputan Educational Restaurant	
What Has Been Done Within the Scope of Children's Physiological Needs?	
Sleep- Rest	Child-sized tiny houses
Toilet Needs	There is a children's toilet.
Food- Nutrition	There is no dinnerware.
What Has Been Done Within the Scope of Children's Psychological Needs?	
Sense of Belonging	Waves reminiscent of the sea, kid-sized houses, and from daily life reenactments
Privacy	The need for privacy was met by designing separate cabins.
Personal Space	Special areas have been designed where children can dine alone or with their families.
What Has Been Done Within the Scope of Children's Cognitive Needs?	

Exploring	Ceiling and floor coverings resembling sea waves, carousels that look like amusement parks
Creativity	With many different interactive space designs, it is aimed to increase children's perceptions and creativity skills.
Wonder	The waveform applied from the facade to the interior of the restaurant arouses curiosity from the entrance.
What Has Been Done Within the Scope of Children's Security Needs?	
Anthropometry	Child-sized furniture, toys, and size-appropriate spaces
Material	Furniture and wall edges with rounded edges, sponge-filled materials in the playground
Additional precautions	Rope nets are used at the exit and sides of the trampoline/slides.
What Has Been Done Within the Scope of Children's Aesthetic and Perception Needs?	
Colour	Neutral colors and neon lights dominate
Tissue	Perforated steel, concrete, wood, glossy smooth floor
Form	Effectively in ceiling design

4.4. Meland Club Restaurant / X+Living Architecture / Shenzhen / China

Meland Club restaurant was designed by X+Living Architecture and is located in Shenzhen, China. The designer has designed this children's-family restaurant with the idea of creating a fairy tale kingdom for children and opening the door to an unimaginable world.

In order to supply with the physiological needs of children in the restaurant, areas for children's use are designed inside the restaurant. While the lower part of the object responds to the sitting action by placing a huge object in the middle of the space, the gallery floor designed on the upper part is designed for children's access only. In this way, a place where only children can create a personal space for themselves or play has been created in the space. For the toilet needs of children, washbasins in sizes suitable for children's anthropometry have been designed for the general toilet.

In order to supply with the psychological needs of children, an environment similar to a land that children listen to in fairy tales is designed in the restaurant. The children were asked to feel themselves in a fairy tale world and to feel a sense of belonging in the space by matching with every image in their subconscious. Existing objects that they see around him appear in front of children in different sizes..

In order to supply with the cognitive needs of children in the restaurant, many receivers are designed to trigger the urge to explore. Objects that make children feel psychological belonging also cognitively support children's creativity and exploration impulse. In order to increase the children's desire to explore, the designer has brought objects such as flowers in daily life to children with different functions such as lighting. In the same way, the sense of curiosity was supported by analogy with the visuals in the fairy tale books.

In order to supply with the safety needs of children in the restaurant, it has been observed that the equipment in the special areas for children has been designed in accordance with the size of the children. At the same time, the edges of the equipment, stairs and playgrounds in the space are rounded, reducing the possibility of children being injured in any accident. In other equipment, plastic-based materials are used and these materials will be filled with soft sponge fillings, which will reduce injuries in the event of an accident. As an additional precaution, the stair railings and top are covered with glass or a thick mica-like material.

In order to supply with the aesthetic and perception needs of children in the restaurant, vivid bright colors are used predominantly. In terms of texture, there are no different textures as a single material and texture dominates the entire space. As a form, there are amorphous shaped reinforcements, ceiling and floor coverings. Images of all these explanations are given in Figure 6 (Figure 6).



Figure 6. (a) Meland Club Restaurant venue and gallery floor specially designed for children (b) Giant flower analogy (c) Seating areas (d) Washbasin design suitable for child size (Meland Club, 2021)

The table of needs for the Meland Club restaurant is as follows (Table 5).

Table 5. Solutions for the needs of children in Meland Club child-friendly restaurant

Meland Club Restaurant	
What Has Been Done Within the Scope of Children's Physiological Needs?	
Sleep- Rest	Seating niches for children
Toilet Needs	There is a children's toilet.
Food- Nutrition	The information about the special dinner set for children could not be reached.
What Has Been Done Within the Scope of Children's Psychological Needs?	
Sense of Belonging	Dreamland, giant flowers, flower lightings
Privacy	The need for privacy was met by designing separate cabins.
Personal Space	A gallery floor has been designed, suitable for children's size and where children can spend time as they wish.
What Has Been Done Within the Scope of Children's Cognitive Needs?	
Exploring	Fairytale-like space design, giant flower analogy, flower lighting
Creativity	It is aimed to express the tendency of creativity with the subconscious information with places similar to the visuals in the fairy tales.
Wonder	Different colors, textures, materials and space designs were used to support children's sense of curiosity.
What Has Been Done Within the Scope of Children's Security Needs?	
Anthropometry	Child-sized seats, playgrounds
Material	Sponge filled rounded corner furniture, stairs and playgrounds. Round-edged walls
Additional precautions	Stair railings are designed entirely in glass throughout the child.
What Has Been Done Within the Scope of Children's Aesthetic and Perception Needs?	
Colour	Use of vibrant color
Tissue	Glossy plastic-based material mainly
Form	Different materials on reinforcement and surfaces

4.5. Origami Kids Restaurant / Alan Chan / Hong Kong / China

The Origami Kids restaurant was designed by Alan Chan and is located in Hong Kong, China. In order to supply with the physiological needs of children in the restaurant, special resting and playground areas were designed for children and a place dominated by children was designed. For the toilet needs of children, a toilet in sizes suitable for children's anthropometry has been designed for the general toilet. By using animal figures on toilet entrances and mirrors, it is aimed to appeal to children and attract attention. At the same time, because children do not want to eat while playing or are picky, the restaurant serves special food for children and these foods are served on plates with figures specially designed for children.

In order to supply with the psychological needs of the children in the restaurant, small-scale houses and tents were placed in the place to meet the sense of belonging of the children. In addition, houses and tents for 2-3 people are designed in case the children respond to their personal space needs or the children want to play with their own group of friends.

In order to supply with the cognitive needs of children in the restaurant, many receivers are designed to trigger the impulse of discovery and curiosity. Play planes in the form of home abstraction and child-sized space openings are designed on the wall surfaces of the space. Areas designed with the child dimension in mind can be more creative and exploratory as they increase the child's sense of self-confidence.

In order to supply the safety needs of children in the restaurant, it has been observed that the equipment in the special areas for children has been designed in accordance with the size of the children. At the same time, wooden materials are generally preferred for the equipment in the space. The plastic materials that are preferred in addition to the wooden materials are among the ones that are easy to clean. There are no additional measures.

Wooden, pastel and transparent materials are used in the restaurant to supply with the aesthetic and perception needs of the children. As a texture, different textures were preferred in the interactive game surfaces. It is thought that the reason for this is to increase the creativity of children while playing and to support this with different textures. Different geometric shape openings are seen in the cabinets in the activity/workshop areas. Images of all these explanations are given in Figure 7 (Figure 7).

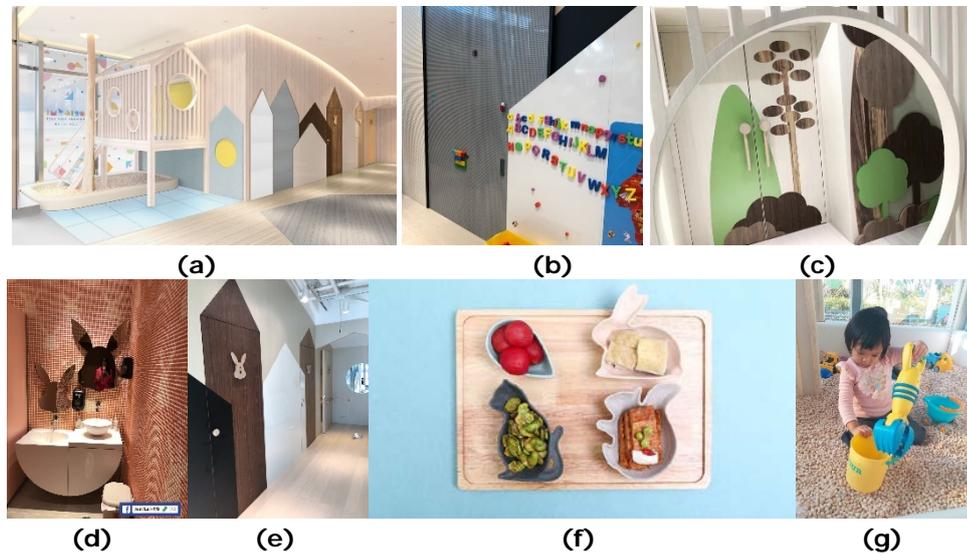


Figure 7. (a) Origami Kids Restaurant space and children's playground (b) Game interactive walls (c) Wall openings and forest simulation (d) Child-size washbasin design (e) Home-analogy corridor wall (f) Children's food and figure-dinnerware (g) Compressed sawdust balls playground (Origami, 2021)

The needs table for the Origami Kids restaurant is as follows (Table 6).

Table 6. Solutions for the needs of children in Origami Kids child-friendly restaurant

Origami Kids Restaurant	
What Has Been Done Within the Scope of Children's Physiological Needs?	
Sleep- Rest	Children's relaxation area
Toilet Needs	There is a children's toilet.
Food- Nutrition	The information about the special dinner set for children could not be reached.
What Has Been Done Within the Scope of Children's Psychological Needs?	
Sense of Belonging	Small houses, tents
Privacy	Children's sized spaces are designed.
Personal Space	Houses and tents for 2-3 people are designed for children to play.
What Has Been Done Within the Scope of Children's Cognitive Needs?	
Exploring	Applications of different textures to areas with simple home abstractions on wall surfaces, tiny child-sized wall openings
Creativity	Interactive wall surface designs were made to support children's creativity skills.

Wonder	Thanks to the various playgrounds offered, children's sense of curiosity is developed.
What Has Been Done Within the Scope of Children's Security Needs?	
Anthropometry	Playgrounds designed on wall surfaces and indoors are suitable for children's sizes.
Material	Wooden materials and easy-to-clean plastic materials are used.
Additional precautions	There are no additional measures.
What Has Been Done Within the Scope of Children's Aesthetic and Perception Needs?	
Colour	Wood and pastel colors
Tissue	Interactive playgrounds with different textures on wall surfaces
Form	Playground openings in different geometric shapes

4.6. Play in Museum (PIM) Restaurant / Some Sevit / Seoul / South Korea

PIM restaurant was designed by Some Sevit and is located in Seoul, Korea. The restaurant is designed with the aim of allowing children to have fun, observe and use their senses more effectively.

Unfortunately, it was not possible to reach the information whether special resting areas were designed for children in the restaurant in order to meet the physiological needs of the children. Likewise, there are no children's toilets designed for children to meet their toilet needs on their own. Parents should help their children with their toilet needs. There are no special dinner sets for children to eat. Presentation and dinnerware are used in the same way for all guests.

In order to meet the psychological needs of children in the restaurant, there are no designs for children's belonging, privacy or personal space needs. The venue has been designed with the idea of an event space where children and families can have fun and play games together.

It aimed to appeal to children's imaginations in order to meet the cognitive needs of children in the restaurant. A large ball pool was designed to remind the sea. They also wanted to support their creativity in the activities and games offered. In the restaurant, children are allowed to unleash their creativity by building their own buildings using building blocks of different sizes. With art workshops, it is ensured that they are directed to different fields and discover themselves by forcing themselves.

In order to meet the safety needs of children in the restaurant, it has been observed that the equipment in the special areas for children has been designed in accordance with the size of the children. At the same time, the edges of the equipment, stairs and playgrounds in the space are rounded, reducing the possibility of children being injured in any accident. In other equipment, plastic-based materials are used and these materials will be filled with soft sponge fillings, which will reduce injuries in the event of an accident. There are no additional measures.

Contrast and vibrant colors are used in the restaurant to meet the aesthetic and perception needs of children. As a texture, different textures such as transparent-matte, rough-smooth were preferred on the playing surfaces. With the use of these contrast textures, children learn about contrasting textures. Images of all these explanations are given in Figure 8 (Figure 8).



(a)

(b)

(c)



Figure 8. (a) Restaurant space playground (b) Airflow ball game (c) Building blocks (d) Large ball pool reminiscent of the sea (e) Art workshop (PIM, 2021)

The requirements table for the PIM restaurant is as follows (Table 7).

Table 7. Solutions for the needs of children in PIM child-friendly restaurant

PIM Restaurant	
What Has Been Done Within the Scope of Children's Physiological Needs?	
Sleep- Rest	Information about the area designed for children to rest in the space could not be reached.
Toilet Needs	Information about the area designed for children to rest in the space could not be reached.
Food- Nutrition	There is no dinnerware.
What Has Been Done Within the Scope of Children's Psychological Needs?	
Sense of Belonging	Designs for sense of belonging needs are not seen.
Privacy	Designs for privacy needs are not seen.
Personal Space	Designs for personal space needs are not seen.
What Has Been Done Within the Scope of Children's Cognitive Needs?	
Exploring	A large ball pool resembling the sea
Creativity	With building blocks of different sizes, children's imagination and creativity can design their own buildings or spaces.
Wonder	Different play and art areas have been created where children can turn to according to their curiosity and interests.
What Has Been Done Within the Scope of Children's Security Needs?	
Anthropometry	Child-sized furniture
Material	Plastic-based and sponge-filled floor, wall and flooring materials and soft floor carpets
Additional precautions	There are no additional measures.
What Has Been Done Within the Scope of Children's Aesthetic and Perception Needs?	
Colour	Often contrast and vibrant colors
Tissue	Translucent-matte, rough-smooth playing surfaces
Form	Geometric shaped building blocks

4.7. Polycarbonat Neverland -Aranya Kid Restaurant / Wutopia Lab / China

Polycarbonat Neverland -Aranya Kid restaurant was designed by Wutopia Lab and located in China. The restaurant is designed with the aim of allowing children to have fun, observe and use their senses more effectively. Architects wanted to lose the texture of materials and their orientation in space. For this purpose, they used polycarbonate material with light to create the experience of losing the sense of material, dimension and texture.

In order to meet the physiological needs of children in the restaurant, there is a special resting place for children, etc. areas are provided with designed wall niches and cushions. A children's toilet is designed for children to meet their toilet needs on their own. There are no special dinner sets for children to eat.

In order to meet the psychological needs of the children in the restaurant, the designers wanted the children to feel a sense of belonging to the place by making designs that would create familiarity for the children. For this reason, they preferred balloon and tree-shaped

lightings in the space. Special areas for small children have been designed for children's privacy needs. Similarly, large PVC transparent balls that can be used both for playing games and for creating their own spaces have been designed for the personal space needs of children.

In order to meet the cognitive needs of children in the restaurant, the designers included items that would surprise the children in the playgrounds they designed. In the playground located on the ground floor, different magic mirrors were used to enable children to doubt the reality of the space in their minds and to fall into illusions by experiencing the feeling that time does not pass. Likewise, the designers wanted to reveal the rich imagination of children with exaggerated artistic space arrangements. Children were asked to participate in new perspectives and perceptions by presenting the truth with illusions without losing the truth.

In order to meet the safety needs of children in the restaurant, it has been observed that the equipment in the special areas for children has been designed in accordance with the size of the children. At the same time, soft sponge-filled materials, plexi stained glass windows, wooden bars and panels were preferred in the equipment and stairs in the space. As additional measures, measures were taken with rope nets in places specially designed for children.

In order to meet the aesthetic and perception needs of the children in the restaurant, various textures and colors were preferred in the space, and it was desired to diversify the visual memory richness of the children. Illusions made with materials have turned into tactile areas that give the feeling of slippery and glass in the space. Images of all these explanations are given in Figure 9 (Figure 9).

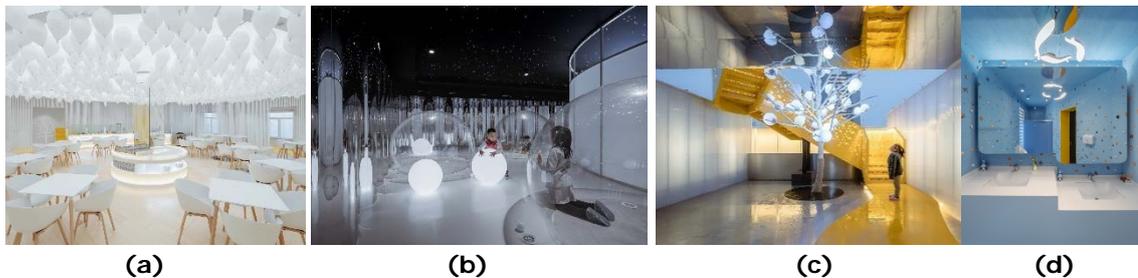


Figure 9. (a) Restaurant dining area and balloon lighting (b) Playground with magic mirror and PVC transparent balls with a slippery surface feel (c) Guidance to the stairs with color, and tree lighting (d) Children's toilet (Polycarbonat, 2021)

The table of needs for the Polycarbonat Neverland-Aranya Kid restaurant is as follows (Table 8).

Table 8. Solutions for the needs of children in Polycarbonat Neverland-Aranya Kids child-friendly restaurant

Polycarbonat Neverland-Aranya Kids Restaurant	
What Has Been Done Within the Scope of Children's Physiological Needs?	
Sleep- Rest	Cushioned rest area and wall niches for children
Toilet Needs	There is a children's toilet.
Food- Nutrition	The information about the special dinner set for children could not be reached.
What Has Been Done Within the Scope of Children's Psychological Needs?	
Sense of Belonging	Balloon, tree shaped lightings, starry sky lighting
Privacy	Special areas are designed for children.
Personal Space	Single PVC balls are designed.
What Has Been Done Within the Scope of Children's Cognitive Needs?	
Exploring	With transparent PVC balls, there are mirrored room designs with different limits, floor and ceiling perception and perspective.
Creativity	With the illusion created in the space, it is aimed that children gain imagination and creative thinking skills with a different space than they knew before.
Wonder	By losing the sense of texture, scale and direction created in the design of the space, it was ensured that the interest of the children in the space was increased.
What Has Been Done Within the Scope of Children's Security Needs?	

Anthropometry	Child-sized furniture
Material	Polymer carbonate material, PVC balls, glass fiber cloth, plastic balls
Additional precautions	Stairs are indicated with a different color from the colors of the space.
What Has Been Done Within the Scope of Children's Aesthetic and Perception Needs?	
Colour	White tones, bright lighting, yellow and red perforated aluminum panels
Tissue	Tactile areas that feel slippery and glassy
Form	Different forms of the circle

4.8. Tymianek Family Restaurant / Mod: Lina Architekci / Poznań / Poland

Tymianek Family restaurant was designed by Mod:Lina Architekci and is located in Poznan, Poland. The designers' aim in designing the restaurant was to create a comfortable and friendly environment for children.

In order to supply with the physiological needs of children in the restaurant, there is a special resting place for children, etc. The areas are provided with wall niches designed. There are no children's toilets designed for children to meet their toilet needs on their own. Parents should help their children with their toilet needs. The information about the availability of special dinnerware for children for children to eat could not be reached.

In order to supply with the psychological needs of the children in the restaurant, the designers designed house-shaped wall openings to create familiarity in the space. At the same time, through these openings, it is ensured that parents and children can follow each other continuously. In addition, children were allowed to bring their own toys from their homes and play with them so that they would feel at home in the venue. A completely empty children's area was designed to meet the need for personal space. In this area, the child is allowed to set up his own personal space by carrying the toy or equipment he wants.

In order to supply with the cognitive needs of the children in the restaurant, the designers designed the real-life spaces according to the child's size and wanted the children to produce games more freely in these familiar spaces, to trigger their sense of curiosity and to use their imagination. In the same way, designers who use lego games in the space increase children's exploration and creativity opportunities with new shapes that children will create from units of different colors and sizes.

In order to supply with the safety needs of children in the restaurant, it has been observed that the equipment in the special areas for children has been designed in accordance with the size of the children. At the same time, wooden coatings were preferred on the walls and dividers in the space. At the same time, these wooden coverings are covered with flooring that functions as an acoustic panel. Tables have rounded edges in case children bump into them. There are no additional measures.

Since the main concept in the restaurant is to create an intimate environment in order to meet the aesthetic and perception needs of the children, there is a wooden color-dominated space design among the space colors. There are not many texture and form elements to support children's aesthetic perception. Usually a single texture dominates. Images of all these explanations are given in Figure 10 (Figure 10).

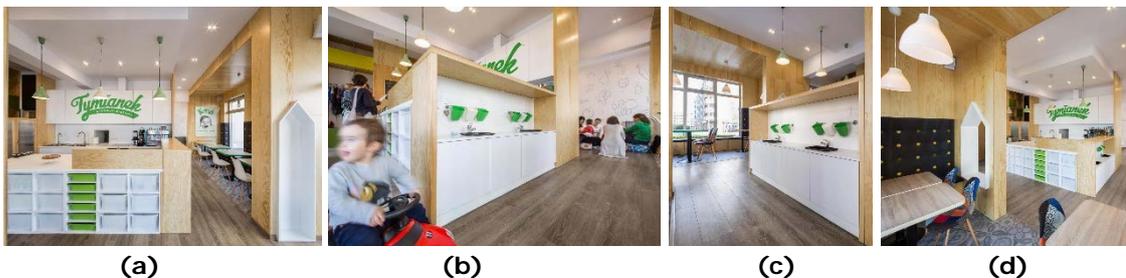


Figure 10. (a) Restaurant toy boxes and house forms on the walls (b) Playground for children and an area where they can play with their families (c) Small scale kitchen (d) Restaurant space and house form openings in the wall (Tymianek, 2021)

The needs table for the Tymianek Family restaurant is as follows (Table 9).

Table 9. Solutions for the needs of children in Tymianek Family child-friendly restaurant

Tymianek Family Restaurant	
What Has Been Done Within the Scope of Children's Physiological Needs?	
Sleep- Rest	Wall niches for children
Toilet Needs	There is no children's toilet.
Food- Nutrition	The information about the special dinner set for children could not be reached.
What Has Been Done Within the Scope of Children's Psychological Needs?	
Sense of Belonging	Areas where children can bring their toys from home and play, house-shaped openings
Privacy	Openings have been designed to enable families to monitor continuously.
Personal Space	Space spaces have been created.
What Has Been Done Within the Scope of Children's Cognitive Needs?	
Exploring	House-shaped openings in the wall
Creativity	Children were presented with logo pieces classified in boxes and activities that would increase their creativity.
Wonder	Wall openings and playgrounds, which will increase the curiosity of children, have increased the interest of the place.
What Has Been Done Within the Scope of Children's Security Needs?	
Anthropometry	Child-sized furniture, playgrounds
Material	Wood-clad walls and tables with rounded edges
Additional precautions	There are no additional measures.
What Has Been Done Within the Scope of Children's Aesthetic and Perception Needs?	
Colour	Wood, gray, yellow and green color palette
Tissue	A single texture dominates the space
Form	Different openings to the wall surface

4.9. Vitaland Kid Restaurant / Golucci Interior Architecture / Chaoyang / China

The Vitaland Kid restaurant was designed by Golucci Interior Architecture and is located in Chaoyang, China. Serving the purpose of including children's playgrounds in the restaurant, the restaurant creates an environment for children to connect with their parents.

In order to supply with the physiological needs of children in the restaurant, special resting and sleeping areas have been designed for children to play, as well as rest or sleep when they are tired or sleepy. In this way, children who become restless when they are sleepy will be able to sleep comfortably in their sleeping rooms and then play games again. There is a children's toilet designed for children to meet their toilet needs on their own. The information about the availability of special dinnerware for children for children to eat could not be reached.

In order to supply with the psychological needs of the children in the restaurant, the designers brought the objects, fruits and vegetables familiar to the children in different sizes and functions to the children. Broccoli, which is one of these vegetables of different sizes, is thought to help children love this vegetable, which children do not like much, by showing it in a more beautiful and fun way. Only children's dining and playgrounds have been designed in the space to meet the privacy and personal space needs of children. Parents have to bend down to enter these areas, which are 1.5 m high, and this helps to create a sense of confidence in children. Children can feel more active.

In order to supply with the cognitive needs of children in the restaurant, the designers preferred abstract lighting at different heights for the lighting of the space. When children make analogies to these lightings, a dream impression has been created for them. Various and different forms of toys were presented in the playground, and they were asked to reveal their creativity. By designing a ball pool in the venue, children's exploration experience opportunities were also increased.

In order to supply with the safety needs of children in the restaurant, it has been seen that the equipment and playgrounds in the special areas for children are designed in accordance with the size of the children. At the same time, a wood-based space has been designed to give the

space a homely warmth. Plastic materials that are easy to clean are preferred for plastic-based materials that are preferred next to wood. Soft-filled plastic-based materials are preferred for the floor of children's playgrounds. The stairs in the children's playground are completely filled with sponge and the railings are covered with the material on the stair steps to prevent children from falling. The S slide is also designed as a closed top, preventing children from falling while sliding. Additional measures were taken with rope nets in playgrounds specially designed for children. Since the children's dining areas are located on a high place such as the mezzanine floor, they are designed in a completely closed area considering the possibility of children falling.

Since the main concept in the restaurant is to create an intimate environment in order to supply with the aesthetic and perception needs of the children, there is a space design consisting of wooden and gray colors and colored plexiglass windows. There are not many tissue elements to support children's aesthetic perception. Usually a single texture dominates. In terms of form, different forms were preferred in the lightings designed at different heights. At the same time, children's sense of perspective was supported with playgrounds of different heights and forms. Images of all these explanations are given in Figure 11 (Figure 11).

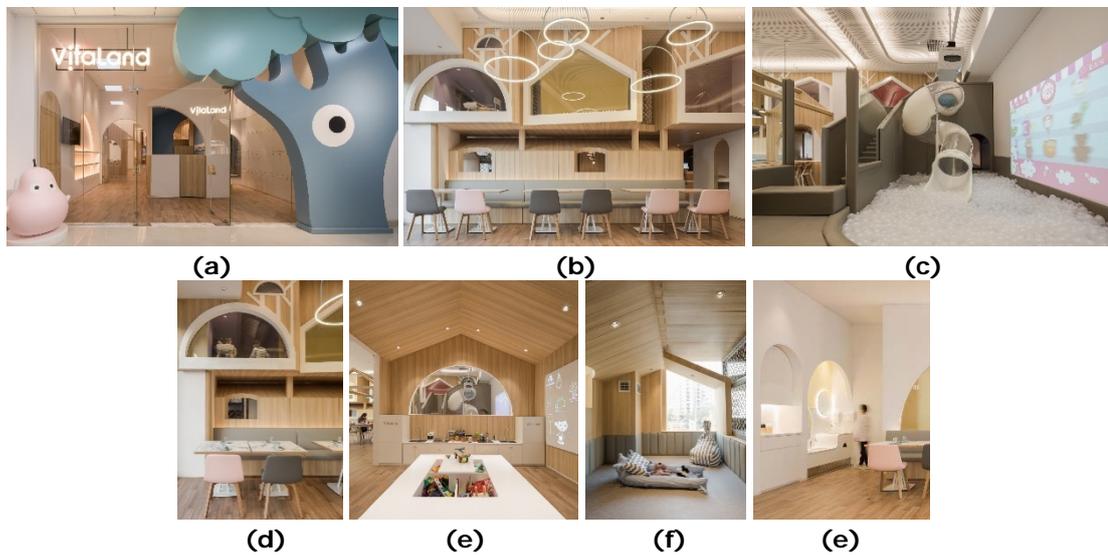


Figure 11. (a) Different colors and sizes of fruit and vegetables at the entrance of the restaurant (b) Indoor children's playgrounds on the upper floor and the dining area on the lower floor (c) Ball pool playground for children (d) Restaurant space and house-form openings in the wall (Vitaland, 2021)

The table of needs for the Vitaland Kid restaurant is as follows (Table 10).

Table 10. Solutions for the needs of children in Vitaland Kid child-friendly restaurant

Vitaland Kid Restaurant	
What Has Been Done Within the Scope of Children's Physiological Needs?	
Sleep- Rest	Rest and sleep room for children
Toilet Needs	There is a children's toilet.
Food- Nutrition	The information about the special dinner set for children could not be reached.
What Has Been Done Within the Scope of Children's Psychological Needs?	
Sense of Belonging	Subconsciously familiar images and homelike spaces
Privacy	Special areas are designed for children.
Personal Space	Cabins with separate tables and chairs are designed for children.
What Has Been Done Within the Scope of Children's Cognitive Needs?	
Exploring	Circular lights floating on the ceiling create a dream impression for children.
Creativity	By offering toys in different forms, colors and textures, an environment suitable for children to explore their creativity has been prepared.

Wonder	The appearance of vegetables and other objects in their lives in different colors and sizes has increased the sense of curiosity in children.
What Has Been Done Within the Scope of Children's Security Needs?	
Anthropometry	Child-sized furniture, toys, and size-appropriate spaces
Material	Plexi stained glass windows, wooden bars and panels, sponge-filled stairs and furniture
Additional precautions	Precautions have been taken with rope nets in places specially designed for children.
What Has Been Done Within the Scope of Children's Aesthetic and Perception Needs?	
Colour	Wood and gray tones, colored plexi windows
Tissue	A single texture dominates the space
Form	Different geometric shapes in the openings and skylights in the space

4.10. White + The Bear Restaurant / Sneha Divias Atelier / Dubai / UAE

White + The Bear restaurant was designed by Sneha Civias Atelier and is located in Dubai, United Arab Emirates. The designers wanted it to have neutrals, pastels and other calming tones, as opposed to the usual main color-based theme that kids would see in most spaces. In the space, children are invited to a clean and minimalist space with warm textures and tones.

In order to supply with the physiological needs of children in the restaurant, reading and resting pockets are designed for children to read or relax. There is a children's toilet designed for children to meet their toilet needs on their own. There are special dinner sets for children to eat, and special meals are offered for children to increase their desire to eat.

In order to supply with the psychological needs of the children in the restaurant, the designers designed separate aprons for each child so that the children could capture the sense of belonging in the space, and the children were allowed to use these aprons as they wished. In the separate cabins designed, children will be able to play games with their parents or on their own. In order to supply with the need for personal space, single or double pocket areas are designed on the wall surfaces.

In order to supply with the cognitive needs of children in the restaurant, familiar images in the space are presented with new forms and functions. For example, by using bear-like furniture and seagull-like lighting elements, children's sense of discovery can be created. Art workshops were organized to increase creativity.

In order to supply with the safety needs of children in the restaurant, it has been seen that the equipment and playgrounds in the special areas for children are designed in accordance with the size of the children. At the same time, a wood-based space has been designed to give the space a homely warmth. Plastic materials that are easy to clean are preferred for plastic-based materials that are preferred next to wood. There are no additional measures.

In order to supply with the aesthetic and perception needs of children in the restaurant, there is a space design dominated by white and wooden tones. There are not many tissue elements to support children's aesthetic perception. Usually a single texture dominates. In terms of form, it was seen that different illustrations were used on the wall surfaces. Images of all these explanations are given in Figure 12 (Figure 12).





Figure 12. (a) Restaurant space (b) Child-size tables and chairs (c) Children's dining tables (d) Bird-shaped lightings (e) Reading and resting pocket (f) Activity workshop (g) Children's toilet (h) Special food presentation and dinnerware for children (White+The Bear, 2021)

The table of needs for the White+The Bear restaurant is as follows (Table 11).

Table 11. Solutions for the needs of children in White + The Bear child-friendly restaurant

White + The Bear Restaurant	
What Has Been Done Within the Scope of Children's Physiological Needs?	
Sleep- Rest	Wall niches for children
Toilet Needs	There is a children's toilet.
Food- Nutrition	There is a dinnerware.
What Has Been Done Within the Scope of Children's Psychological Needs?	
Sense of Belonging	Aprons specially designed for children
Privacy	The need for privacy was met by designing separate cabins.
Personal Space	Single or double seating areas are designed on the wall surfaces.
What Has Been Done Within the Scope of Children's Cognitive Needs?	
Exploring	Bear-like furniture and seagull-like lighting elements
Creativity	Art workshops were organized to increase the power of creative thinking.
Wonder	Unlike the colors that children will see in most areas, it is thought that neutral color tones will trigger their children's curiosity.
What Has Been Done Within the Scope of Children's Security Needs?	
Anthropometry	Child-sized furniture, playgrounds
Material	Wooden materials and easy-to-clean plastic materials
Additional precautions	There are no additional measures.
What Has Been Done Within the Scope of Children's Aesthetic and Perception Needs?	
Colour	White and wood tones
Tissue	A single texture dominates the space
Form	Illustrations used on the wall surface

4.11. Yooyumi Kid Restaurant / X+Living Architecture / Beijing / China

Yooyumi Kid restaurant was designed by X+Living Architecture and is located in Beijing, China. The designers carefully observed the psychological difference between parents and children, and at the same time paid attention to the ritual emotions that adults need and the entertainment facilities necessary for children in the same space.

In order to supply with the physiological needs of children in the restaurant, special resting and sleeping areas have been designed for children to play, as well as rest or sleep when they are tired or sleepy. There is a children's toilet designed for children to meet their toilet needs on their own. It was not possible to obtain information about the availability of special dinnerware for children so that children can eat on their own.

In order to supply with the psychological needs of the children in the restaurant, the designers abstracted the images that the children knew or saw in the environment and used them in the space, and the children were made to liken this with the information in their subconscious. For example, the circular form covering the tables in the middle of the space is reminiscent of a carousel in an amusement park. For the need of privacy, playgrounds are located in areas where children are thought to feel good for their visual privacy. In response to the children's

desire to create a personal space with their parents or to eat together, some dining areas are designed as pockets.

In order to supply with the cognitive needs of children in the restaurant, familiar images in the space are presented with new forms and functions. For example, a carousel-like abstraction can bring out children's sense of discovery. In addition to the use of different textures and colors in the design of the space, the creative thinking skills of the children have been increased with the furniture used for purposes other than the known. Different colors, textures and materials were used to support children's sense of curiosity.

In order to supply with the safety needs of children in the restaurant, it has been seen that the equipment and playgrounds in the special areas for children are designed in accordance with the size of the children. When we look at the materials used in the space, plastic-based flooring materials are used and materials of different textures and colors are used on the reinforcements and floors. Sponge-filled plastic-based materials are used in playgrounds, reducing the possibility of injury to children when they fall. As additional precautions, mica-like plastics were used on the railings and tops of the stairs in the playground.

In order to supply with the aesthetic and perception needs of children in the restaurant, vibrant colors are used in the space. In terms of texture and pattern, fabric coverings in various patterns continued, and the color on the walls and floors continued. Different sizes of circular and different form openings are used in playgrounds and abstract designs. Images of all these explanations are given in Figure 13 (Figure 13).



Figure 13. (a) Restaurant space (b) Carousel-like abstraction and dining areas (c) Ball pool for children (d) Playground for children (e) Small-sized kitchen for children and toys that fit their size (f) Child-size washbasin (Yooyumi, 2021)

The needs table for Yooyumi Kid restaurant is as follows (Table 12).

Table 12. Solutions for the needs of children in Yooyumi Kid child-friendly restaurant

Yooyumi Kid Restaurant	
What Has Been Done Within the Scope of Children's Physiological Needs?	
Sleep- Rest	Rest and sleep room for children
Toilet Needs	There is a children's toilet.
Food- Nutrition	The information about the special dinner set for children could not be reached.
What Has Been Done Within the Scope of Children's Psychological Needs?	
Sense of Belonging	Aprons specially designed for children
Privacy	Playgrounds are designed as areas where it is thought that children will feel better by considering their visual privacy needs.

Personal Space	The dining areas are designed in the form of pockets, with the thought of staying in their personal space with their family.
What Has Been Done Within the Scope of Children's Cognitive Needs?	
Exploring	Carousel-like space design
Creativity	In addition to the use of different textures and colors in the design of the space, the creative thinking skills of the children have been increased with the furniture used for purposes other than the known.
Wonder	Different colors, textures and materials were used to support children's sense of curiosity.
What Has Been Done Within the Scope of Children's Security Needs?	
Anthropometry	Child-sized furniture, playgrounds
Material	Plastic-based flooring materials, materials of different colors and textures on the floor, leather furniture coverings
Additional precautions	Mica-like plastics are used on the railing and upper parts of the stairs in the playground.
What Has Been Done Within the Scope of Children's Aesthetic and Perception Needs?	
Colour	Glossy and matte color palette
Tissue	Soft-hard tissue area
Form	Differently shaped surface openings on the playing field surface

5. CONCLUSION

The child needs to supply certain needs throughout his development. Of these needs, physiological needs are essential needs. Other requirements contribute to its development. The fact that children are in places that meet all their needs helps to establish many personalities and selves. Child-friendly restaurants also help children by supporting their development. When we look at the child-friendly restaurants examined, they has been seen that although there are some deficiencies in the restaurants, most of the needs are tried to be answered.

Pocket areas or niches have been created in most of the analyzes regarding the physiological needs of these restaurants, which are related to the need for sleep and rest. In the Fii Fun House restaurant, a different design decision has been made to meet this need with swing designs. But Vitaland restaurant has been the only restaurant to design a special area for sleep and rest. With the swing solution of the Fii Fun House restaurant, children's curiosity, imagination, etc. It is thought that it will also contribute to the support of cognitive development. However, Vitaland restaurant has designed a space for a basic need. In case of a child-friendly restaurant having children's toilets, 8 out of 11 restaurants have children's toilets, and from the remaining 3 restaurants, not information about whether the PIM restaurant has a children's toilet or not. And unfortunately, there are no children's toilets in the Tymianek and Fii Fun House restaurants. In terms of the aesthetic design of children's toilets and their attractiveness for children, the children's toilets of Yooyumi, Polycarbonate and Lolly-Loputan restaurants are designed according to a certain concept and design. There is a food menu in every restaurant in response to eating needs, but it is thought that there should be dinner sets that will allow children to eat on their own. In addition to having dinner sets, restaurants such as Origami and White+The Bear prefer fun children's dinner sets, while healthy foods are served with fun presentations for children. In this way, children's interest in food increases and even the food they do not like can be tasted.

The designs to be made for psychological needs in child-friendly restaurants are important for the adaptation of children to the space and for them to benefit from the space in the most efficient way. They should be given the opportunity to be free from their parents. In this respect, in all of the restaurants examined, except for the PIM restaurant, the child was given the opportunity to create his own personal space in the design of the spaces and playgrounds, and they were able to fulfill his own private needs on his own. In addition, the images that exist in the memory of the children were placed in the restaurant, and designs were made to allow the children to adopt the space and to experience the feeling of belonging there. In this respect, familiar places such as houses, tents, fairy tales have been created in restaurants.

The solutions that child-friendly restaurants will offer for the cognitive development of children have gained importance for the development of children's creativity, discovery and curiosity. For this reason, in addition to creating playgrounds, places or objects that will enable children to explore and wonder are used in child-friendly restaurants. Among the restaurants examined, Polycarbonate Neverland – Aranya children's restaurant was the most stimulating for the cognitive development of children. The playgrounds in the restaurant are completely different from the playgrounds that children are familiar with. In the restaurant, designs were made that will contribute to the intellectual development of children. Restaurants White+The Bear, Vitaland and Lolly-Laputan also have rich stimuli for children's cognitive development. Fii Fun House restaurant, on the other hand, was seen as the restaurant with the most deficiencies in terms of responding to cognitive developments. In restaurants that support cognitive development, interactive surfaces, space animations with different illusions, theater-like scenes that will support the development of their own imaginations, and experiences that will increase their creativity by showing the children they play are presented. In addition, children's sense of curiosity was supported by designing many objects they know in different sizes and shapes in the space.

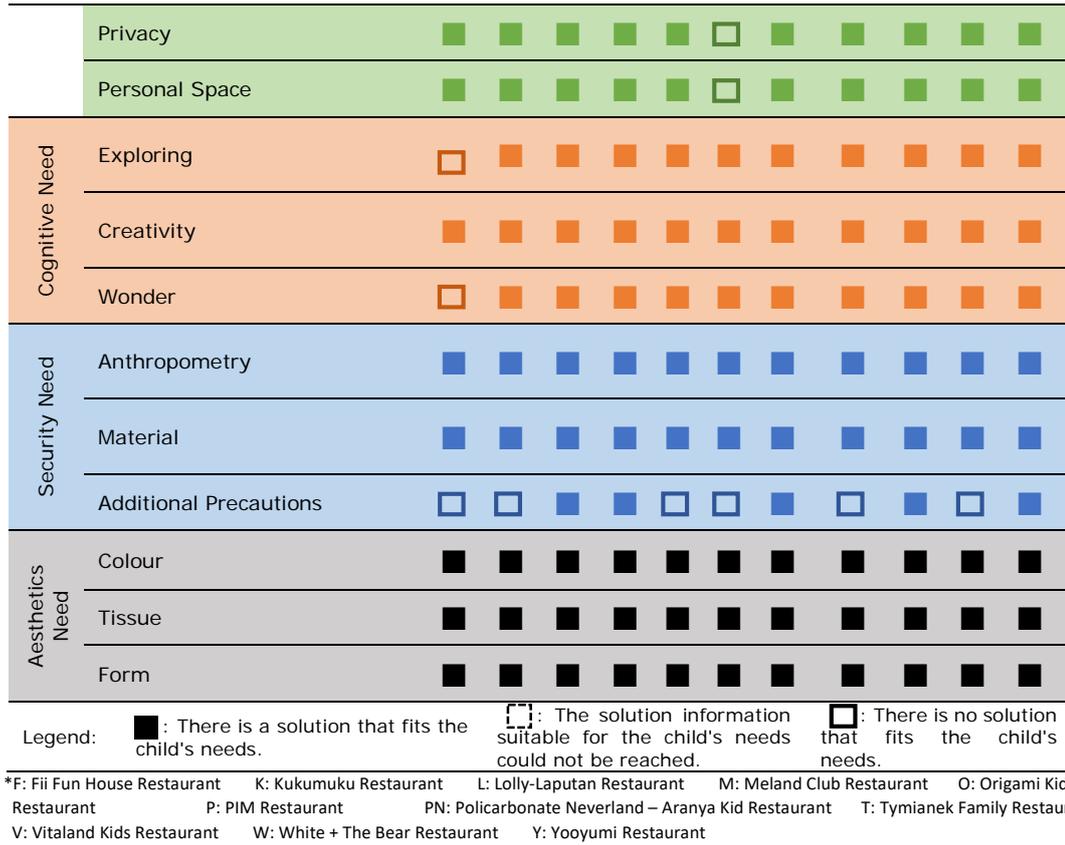
The aesthetic and perception requirement in child-friendly restaurants has been to support the formation of aesthetic perception of children at an early age. A visual perception can be gained by children's color, texture and shape differences. A child is a creature that can take anything and record it in his mind. For this reason, rich interactive spaces support the physical, cognitive and emotional development of children. The time children spend in these restaurants also contributes positively to the development of children, as they provide the opportunity to meet almost all their needs. In restaurants, it has been seen that many colors, rich textures and coatings and different forms are used together. A harmony has been achieved in these diversity without creating confusion. In Yooyumi restaurant, unique texture, color and form are used in a controlled way with the concern of creating a rich aesthetic perception in children. In the playgrounds in the PIM restaurant, contrasting textures (matte-transparent, rough-smooth, etc.) were used to leave a mark on the texture in the memory of the children.

Lolly-Laputan restaurant contains items that respond to all needs with the space design that all restaurants have made consciously or unconsciously according to the needs of children, while PIM and Fii Fun House restaurants have deficiencies in responding to the needs compared to other restaurants. The fact that child-friendly restaurants offer solutions that meet the needs of children has a positive effect on the development of children. It contributes to the act of communication and quality time between the child and the parents. Parents are more comfortable with the attention of children with healthy foods offered with special presentations for children. At the same time, the child can eat independently of his parents, thanks to the special dinnerware. With the increase in the number of such restaurants in our country, families with children leaving the restaurants they prefer to socialize more satisfied and having many activities and places that contribute to the development of their children will increase the rate of preference. At the same time, parents prefer these places more because the game, which is one of the factors that most affect the development of children in such places, is presented not only as a game, but also with many elements that will trigger the child's creativity, discovery and curiosity.

A result table was created regarding whether the child-friendly restaurants examined in the study provide solutions to children's needs or not (Table 7).

Table 7. Evaluation of solutions to child needs of child-friendly restaurants

Child Friendly Restaurant Assessment		F	K	L	M	O	P	PN	T	V	W	Y
Physiological Need	Sleep-Rest	■	■	■	■	■	□	■	■	■	□	■
	Toilet Needs	□	■	■	■	■	□	■	□	■	■	■
	Food-Nutrition	□	■	■	□	■	■	□	□	□	■	□
Psyc	Sense of Belonging	■	■	■	■	■	□	■	■	■	■	■



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