



### Evaluation of color usage in modular children's room furniture in the last 25 years

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**ABSTRACT:** It is known that the use of furniture produced in a form and color suitable for the child's development provides positive contributions to the child's fine motor capacity and psychology. The main objective of this study is to analyze the transformations in children's room furniture design over the past 25 years. It was aimed to reveal the change in the use of color in modular wooden products over years. Data were obtained using literature research, examination of source data and comparative analysis methods. Following literature research and examinations, children's room furniture designs created in the early 2000s, and furniture designs created in 2025 were examined in terms of color use using the comparative analysis method. In total, furniture designs from six companies were evaluated using paired visuals targeting the same age group and functional purpose. It has been determined that more prominent colors such as were used extensively in the children's room furniture designs produced in the early 2000s, and in the following years, neutral colors and soft tones were used extensively in modular furniture designs, with a predominance of white.

**Keywords:** Children's room design, Modular furniture, Color use in furniture

### Modüler çocuk odası mobilyalarında son 25 yıldaki renk kullanımının değerlendirilmesi

**ÖZ:** Çocuğun gelişimine uygun olacak biçimde ve renkte üretilen mobilyaların kullanımının çocuğun ince motor kapasitesine, bireysel gelişimine ve psikolojisine olumlu katkılar sağladığı bilinmektedir. Çalışma kapsamında çocuk odası mobilya tasarımlarında yıllar içinde gerçekleşen değişimlerin analiz edilmesi ana amaç olarak belirlenmiştir. Bununla birlikte modüler ahşap ürünlerde yıllar içinde renk kullanımında gerçekleşen değişimi ortaya koymak hedeflenmiştir. Literatür araştırmaları, kaynak verilerinin incelenmesi ve karşılaştırmalı analiz yöntemleri kullanılarak veriler elde edilmiştir. Literatür araştırması ve incelemelerin ardından, 2000'li yılların başında oluşturulmuş çocuk odası mobilya tasarımları ve çalışmanın gerçekleştirildiği 2025 yılında oluşturulan mobilya tasarımları, renk kullanımı açısından karşılaştırmalı analiz yöntemi ile incelenmiştir. Toplamda 6 farklı firmanın farklı tasarımları, aynı yaş grubuna ve aynı amaca hizmet eden ikili görseller üzerinden değerlendirilmiştir. Gerçekleştirilen karşılaştırmalar doğrultusunda 2000'li yılların başında üretilen çocuk odası mobilyası tasarımlarında daha baskın renklerin (mavi, sarı, kırmızı, yeşil, turuncu, pembe, mor, lacivert gibi) yoğun olarak kullanıldığı, sonraki yıllarda ise modüler mobilya tasarımlarında beyaz ağırlıklı olmak üzere, önceki örneklerde görülmeyen, nötr renklerin ve yumuşak tonların (bej, açık gri, vizon, açık yeşil, açık mavi, açık pembe, krem gibi) yoğun olarak kullanıldığı tespit edilmiştir.

**Anahtar kelimeler:** Çocuk odası tasarımı, Modüler mobilya, Mobilyada renk kullanımı.

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## **1 Introduction**

Furniture can be defined as a universally needed product enhancing life quality by serving social, cultural, and functional human needs (Özözen, 2024). In parallel with this, furniture designs suitable for children's ergonomics are also made. Nowadays, the increase in scientific studies on child development and the more investigative attitude of parents regarding child rearing are effective in shaping the modular children's furniture sector. Previous studies on the use of color in modular children's furniture have mostly been studied with analyzes based on the current situation such as color preferences and color psychology. Uzun et al., (2017) conducted a study on the colors of youth furniture to determine what the color preferences were during the period in which the research was conducted. Zengin (2019) evaluated the design criteria in modular youth furniture and did not determine the use of color as the main issue. Jones et al., (2007), on the other hand, did not determine the color issue as the main issue while examining gender differences in modular youth and children's furniture. There is no study in the literature on the analysis of changing colors in modular children's furniture throughout the historical period.

Unlike previous studies, no analysis focusing on current preferences or trends has been conducted on this subject. Unlike previous studies, the main purpose of the study is to determine the change processes in the use of color in the production of modular children's room furniture in the last 25 years. Other purposes are to examine the effects of studies and literature research conducted in recent years on these color changes.

This study aims to examine the changes in color usage in modular children's room furniture over the past 25 years. It also aims to identify the relationship between these changes and developments in child-centered design approaches. Additionally, it seeks to evaluate how shifting aesthetic trends have changed furniture color choices.

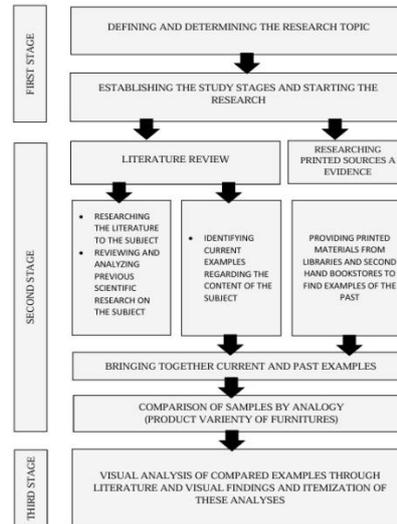
## **2 Materials and Methods**

Conducting research is essential to advance scientific knowledge and ensure evidence-based understanding. Research constitutes a systematic and thorough investigation aimed at generating new knowledge and understanding of a phenomenon (Ahuja, 2001). This study was prepared considering the research concept as a basis. In this study, literature review, source analysis and comparative analysis methods were used to examine the changes in color use in children's furniture over the years. In the first stage, existing literature, academic articles, sector reports and relevant publications on color use in children's furniture design were meticulously scanned to create basic information and historical perspective on the subject.

The data obtained from the literature review were systematically analyzed with the support of reliable databases and academic archives. Both past and present sources were examined; This approach enabled comparisons of color palettes, design trends, and applications across distinct time periods in children's furniture. The reliability of the study was ensured by comprehensive scanning of the sources.

The method used at this stage is the comparative analysis method, which was first developed by Ragin (1987) and found in the literature. Qualitative comparative analysis is a technique that allows the systematic analysis of similarities and differences between situations and cases (Ragin, 1987). The same researcher has published many articles on the subject over the years. To define the method in general; to apply qualitative comparative analysis to literature collected requires the act of reviewing each work with the goal to distinguish which

causes are necessary and sufficient. This process is a systematic set of steps that should situate attributes of findings into common categories, thereby yielding a typology (Onwuegbuzie, Weinbaum, 2017). Broadly, qualitative comparative analysis is used as a theory-building approach, wherein the analyst makes connections among categories that have been identified previously, as well as to test and to develop these categories further (Miles & Weitzman, 1994).



**Figure 1.** Methodology of the research

The findings obtained were evaluated using the comparative analysis table. With this analysis method, direct comparisons were made between the color preferences applied in the past and current applications; Color intensity, distribution and trends are clearly demonstrated (Figure 1). Thus, by systematically revealing the process of change and evolution over time, objective results have been reached regarding the development of the use of color in children's furniture. Early 2000s and current children's room furniture designs were visually compared by age group and consistent functional modules like cribs, wardrobes, beds, desks, and bookcases to ensure standardized evaluation criteria. Thus, the study systematically compared changes in the use of color in children's room furniture designs over the past 25 years were compared by obtaining more consistent results through furniture designs of the same company, appealing to the same age group and containing the same functional modules. In short, it may be possible to question the aims of the study in this direction:

- How has the use of color in modular children's bedroom furniture changed over the last 25 years?
- How do the color trends that dominated children's furniture in the early 2000s compare to 2025?
- Which trends are seen in color selection among large companies producing modular children's furniture?

## 2.1 Furniture and user relationship

In interior design, the most important of user requirements are physical conditions. The user's anthropometric measurements are the primary factor shaping the furniture. Then, color

and material follow. Although furniture is not a vital necessity, it has always been important for humanity in the place where it is used (Boyla, 2012).

Furniture constitutes an integral part of everyday human life. When viewed in terms of adapting to daily life, it is necessary to understand the furniture in terms of the social life, technology and art environment of the region and time it belongs to (Boyla, 2012). Innovations have been seen in furniture design, especially in recent centuries. One of the main reasons for this is the development of technology. However, durability, usability and functionality have been important criteria for furniture. Meeting the needs of the user is considered to be one of the important factors.

User needs, user-centered design is not only related to the functionality of the products. The perception of any product by the user, the user's product experience and the spiritual bond he will establish with the product are also included in this (McDonagh-Philp and Lebbon, 2000). User-centered design takes into consideration important issues such as age, gender, social status, educational background, professional background and factors affecting product usage expectations and demands. What is important for some people may be unimportant for others. User-centered design includes a comprehensive research process on users' expectations, from users' interaction with the product to their views on the product's function and design (Zengin, 2019).

## **2.2 Stages of childhood**

Like every period of life, childhood is one of the unchanging and natural parts of the life cycle (Akyüz, 2000). All individuals in childhood are protected by the United Nations Declaration of the Rights of the Child. For the purposes of this Convention, child means any human being under the age of eighteen unless the age of majority is earlier under the law applicable to the child (Unicef, 1989). The definition of childhood is based on the 'United Nations Convention on the Rights of the Child (UNCRC)', which defines a child as any human being under the age of 18. This framework was used to categorize the design comparisons according to developmental stages (0–6: early childhood, 7–12: middle childhood, 13–18: late childhood/adolescence) (Unicef, 1989).

In parallel with the United Nations' demographic classification of children; target markets for modular furniture are grouped into three basic groups. These are preschool child (baby) furniture (0-6 years old), youth room (7+ years old) furniture and parent furniture. However, all this furniture can also be grouped under the title of "residential furniture" (Burdurlu et al, 2004). Children's bedrooms require ergonomically distinct furniture, reflecting personal identity and developmental needs within individualized spatial and functional arrangements. By 16–24 months, children begin exploring surroundings via walking and climbing, requiring safe environments despite limited independent play capabilities (Campos, 2009). Between ages 3–16, children evolve from solitary play to complex socialization and autonomy, prompting significant shifts in spatial, emotional, and cognitive needs aligned with developmental and educational transitions (Campos, 2009). Since each age period has its own characteristics from birth onwards, different needs arise not only in terms of social relations and development, but also in terms of spatial structures. Regardless of these change processes, spatial designs, objects, and furniture should be suitable for childhood in total. Correct definitions and designs should be applied for these needs, which are different from those of adults.

### **2.3 Children's furniture**

Every object or space that children come into contact with from infancy makes a significant contribution to their development. For this reason, children's furniture should be designed as specially designed objects or units that form a specific space (Salihoğlu Aydın et al., 2018). The child's-built environment and furniture can provide children with some values such as confidence, courage, success, belonging, freedom, usage or alternative thinking. Together with these values, the child can discover himself and form his personality and identity. For example, the use of color in the space sharpens the child's gender preferences, ergonomic sizing gives the child a sense of freedom, and play spaces based on adventure and creativity and containing rich stimuli allow children to discover their potential and boundaries and define themselves (Salihoğlu Aydın et al., 2018). The domestic studies on the color design of children's furniture indicate that the color of children's furniture usually tends to be lively and light warm colors (Lin & Yuriiovych, 2024). Having soft tones of furniture in the spaces used by children increases their focus and creativity. For this reason, the use of soft tones contributes positively to the development of children (Iliev, 2021).

There are many product groups that children can use at home, outdoors or in educational institutions. Modular children's furniture used in residences is the most basic product of children's furniture requirements. Due to the diversification of these products and the variability of forms, it can meet the growth needs of children for sustainable use. In particular, modular design production as a systematic design method can shorten the product design cycle, thus reaching more users. However, when examining the existing modular children's furniture in the market, it was found that most of the products are only functional and ignore the emotional needs of users such as intelligence and interest satisfaction during interaction with the products. For this reason, conducting research in the field of modular children's furniture will benefit children's development. This can also be considered as a social and community contribution. Conducting research and studies on the design of modular children's furniture can also further improve product satisfaction. Apart from this, it can also offer a new and effective discovery for modular children's furniture design (Ye et al., 2021). Children's room furniture must anthropometrically support physical development, autonomy, and safe spatial interaction during early childhood's formative home experiences. Children's rooms should include accessible, modular, and mobile storage units and essential furniture to support autonomy, self-care, and developmental needs during early childhood's dynamic growth period (Demirarslan, 2019).

### **2.4 Modular children's room furniture in the last 25 years**

Comparative visuals were created to reveal the changes in color usage in children's room furniture designs in the last 25 years. Since the design approaches of the companies may differ from each other, the visuals used in the comparison were selected from the children's room designs created by the same company in different years. Although the requirement to have served in the modular children's furniture sector for at least 25 years reduced the number of samples examined due to the comparison made on the same company, the limitations of the study were not changed in order to obtain reliable data. The comparison was made on a total of 20 children's room designs from 6 different companies. The children's room designs offered for sale by the companies since the early 2000s were compared with the designs currently sold by the same companies in 2025.

While determining the companies that will form the sample within the scope of the study, two main criteria were taken into consideration. It was taken into consideration that the

companies were large-scale companies operating in more than one country and that they had been producing in the same field and with the same product groups since the beginning of the 2000s in order to be able to make comparisons between furniture designs. In addition, in order to be able to make comparisons through visuals, it was another important factor that was effective in determining the samples that the documents of the furniture designs of the companies were accessible in the early 2000s. In this comparison, the company names were kept confidential and the companies were expressed by coding them with letters. In the images, those marked with the letter a show the designs between the years 2000-2010, and those marked with the letter b show the product designs of the year 2025.



**Figure 2.** Examples of color usage in the baby room set of company A (a: Tasarım Publisher; b: URL 1, 2025)

Baby room furniture also includes parental use, especially since the child does not have the opportunity to use it in early infancy. In the modular children's furniture example shown in Figure 2, it is seen that the company produces the furniture with functionally the same parts, but there is a radical change in the use of color .



**Figure 3.** Examples of color usage in the children's room set of company A (a: Tasarım Publisher; b: URL 2, 2025)

In children's room furniture, it is not ergonomically possible to use the furniture used for the baby in later years. In this direction, different modules are produced for the 6+ age group in the modular furniture production. For example, the protected small bed is replaced by a single bed in the production for this age group (Figure 3). Bunk bed children's room designs, which are frequently used in children's rooms for use by more than one child, increase space usage performance (Figure 4).



**Figure 4.** Color usage examples of bunk bed children's room set of company A (a: Tasarım Publisher; b: URL 3, 2025)



**Figure 5.** Examples of color usage in the children's room set of company A (a: Tasarım Publisher; b: URL 4, 2025)

Examples of side-protected beds or corners with soft, circular forms are mostly produced for early childhood periods (Figure 5).



**Figure 6.** Color usage examples of bunk bed children's room set of company A (a: Tasarım Publisher; b: URL 5, 2025)

These models, which increase space utilization, can also be produced in stacked models and with narrow stairs (Figure 6).



**Figure 7.** Examples of color usage in the children's room set of company A (a: Tasarım Publisher; b: URL 6, 2025)

There are no examples of the use of red, which is a very active color, in recent years. However, the use of this active color is seen in the 2000s. In modular furniture, this type of color use is seen in most of the examples where it is determined that it remains fixed with elements such as covers or headboards and is not used on the body (Figure 7).

As previously stated in the literature research, early children's need for their own indoor space is a necessity for creativity and expression. Although there are great changes in the colors of the furniture, the modular production of low bunk beds (high beds) for early childhood did not show significant differences in terms of functionality (Figure 8).



**Figure 8.** Color usage examples for the high bed children's room set of company A (a: Tasarım Publisher; b: URL 7, 2025)



**Figure 9.** Examples of color usage in the children's room set of company A (a: Great Ideas for Kids Rooms, Parragon Publishing; b: URL 8, 2025)

While modular youth rooms with the same functions and parts were produced with a clearly sexist approach in the early 2000s, today's examples do not have any sexist colors or models (Figure 9).



**Figure 10.** Examples of color usage in the baby room set of company B (a: Tasarım Publisher; b: URL 9, 2025)

Crowning protected beds with a mosquito net in baby room furniture is one of the few design elements that does not change (Figure 10).



**Figure 11.** Examples of color usage in the children's room set of company B (a: Tasarım Publisher; b: URL 10, 2025)

Although the use of white color was almost never seen in the 2000s, the most dominant color in recent years is white in many examples (Figure 11).



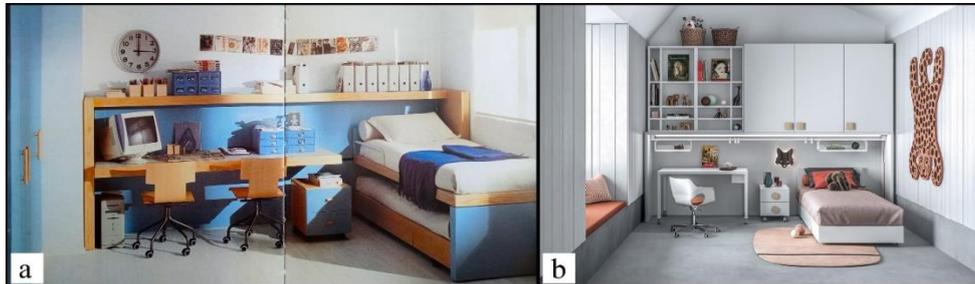
**Figure 12.** Examples of color usage in the children's room set of company B (a: Tasarım Publisher; b: URL 11, 2025)

The striking colour use of late childhood furniture in the 2000s has given way to simplicity in today's furniture, as in other examples. It is seen that this situation is not limited to furniture, and even the colours used in wall paints are preferred in more neutral and pastel tones today (Figure 12).



**Figure 13.** Examples of color usage in the children's room set of company C (a: Tasarım Publisher; b: URL 12, 2025)

Movable modules and intricate design examples can be encountered in children's room furniture designed in the 2000s. In contrast, in furniture created today, simplicity is preferred in terms of functionality as well as in the use of color (Figure 13).



**Figure 14.** Examples of color usage in the children's room set of company C (a: Tasarım Publisher; b: URL 13, 2025)

Design examples where the headboard is evaluated as a whole with units serving different purposes such as tables, cabinets and shelves can be seen today, as they were in the 2000s. However, despite the design similarities, there has been a major change in the use of color (Figure 14).



**Figure 15.** Examples of color usage in the children's room set of company D (a: Tasarım Publisher; b: URL 14, 2025)

Examples of children's room furniture designs, where the room interior is used more systematically and define more private space for children, can be seen today, as they were in the 2000s. However, in terms of color usage, it is seen that simpler colors such as white, beige, and cream are preferred instead of vibrant primary colors (Figure 15).



**Figure 16.** Examples of color usage in the children's room set of company D (a: Tasarım Publisher; b: URL 15, 2025)

In children's room furniture designed in the 2000s, examples of more than one primary color being used together in the same module can be seen. In today's designs, it is seen that pastel tones of colors are preferred even if a second color is used next to a neutral color (Figure 16).



**Figure 17.** Examples of color usage in the children's room set of company D (a: Tasarım Publisher; b: URL 16, 2025)

In our children's room furniture designs, examples are seen where wood texture is included in the design as well as neutral and pastel tones. However, it is seen that the wood colors used here are preferred in light soft tones rather than dark tones (Figure 17). Today, Montessori beds, which are produced as an alternative to cribs, are widely used in baby room furniture designs. These beds also allow children to use their beds on their own in later years. The simplification in colors is striking (Figure 18).



**Figure 18.** Examples of color usage in the baby room set of company E (a: Tasarım Publisher; b: URL 17, 2025)



**Figure 19.** Examples of color usage in the children's room set of company E (a: Tasarım Publisher; b: URL 18, 2025)

While primary colors were used extensively in late childhood children's room furniture designs in the 2000s, neutral colors are preferred in today's designs in order to appeal to more general taste criteria (Figure 19).



**Figure 20.** Examples of color usage in the children's room set of company F (a: Tasarım Publisher; b: URL 19, 2025)

In the designs created in the late childhood children's room furniture in the 2000s, it is seen that wood texture with dominant tones was used as well as vibrant tones. In today's furniture designs, it is seen that completely plain neutral colors are preferred (Figure 20).



**Figure 21.** Examples of color usage in the children's room set of company F (a: Tasarım Publisher; b: URL 20, 2025)

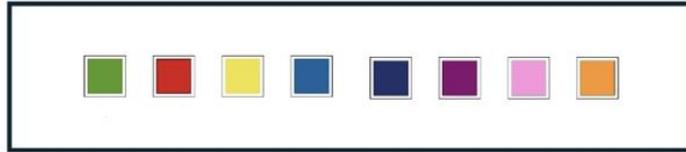
Although the desks and bookcases, which are the working units in children's room furniture, have not changed in terms of functionality, there are differences between the designs of the 2000s and today in terms of the use of color. Today, the preferred colors as alternatives to white are beige, cream, light gray (Figure 21).

### 3 Findings and Discussion

Within the scope of the research, modular children's room furniture produced in the early 2000s and modular children's room furniture currently in production in 2025, when the study was conducted, were compared based on user-oriented models, primarily in terms of color use. The companies included in the research were selected from companies operating in Turkey and different countries of the world. In order to obtain reliable data as a result of the comparison, the visual of the children's room set offered for sale by the same company since the early 2000s and the visual of the children's room set on sale in 2025 were used. No comparisons were made between different companies. In the study where a total of 6 companies' children's room furniture designs were evaluated within themselves, 8 designs belonging to company A, 3 designs belonging to company B, 2 designs belonging to company C, 3 designs belonging to company D, 2 designs belonging to company E and 2 designs belonging to company F were compared. The children's room designs of the companies between 2000-2010 and the children's room designs in 2025 were compared in the form of binary images by obtaining 20 shapes from a total of 40 images.

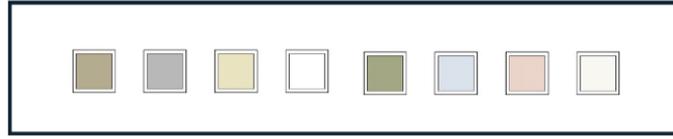
When the children's room furniture designs were examined in terms of color use in the 20 comparisons made on the companies, it was seen that the companies used colors such as red, blue, yellow, pink, orange, green, purple, and navy blue intensively in their designs in the early 2000s. It is also striking that the colors were used not with their subtone but with their main tones (Figure 22). In contrast, it is seen that colors were used quite a lot, not as eye-catching design elements in small sections of the furniture, but rather in a way that covered the vast majority of the furniture surfaces. In fact, this multi-colorfulness is not limited to furniture alone, but also appears on the walls of the rooms, auxiliary elements, and accessories.

Another striking issue in the comparison is that colors were used with a sexist approach in some of the children's room furniture designs made in the early 2000s. While blue and yellow colors are predominantly used in furniture designed for boys, pink, purple, and red colors are predominantly used in furniture produced for girls.



**Figure 22.** Colors used in children's room furniture in the early 2000s, obtained from company catalog images

When the use of colors in children's room furniture designs that companies will continue to produce and sell in 2025 is examined, it is seen that the use of colors such as red, blue, yellow, pink, orange, green, and purple in main tones has decreased to almost zero. It is striking that the vast majority of furniture is designed in more neutral colors such as white, cream, beige, light gray, and mink. When we look at the colors used in some designs, it is seen that softer pastel tones are preferred, and the dominance of colors and the intensity of use are reduced (Figure 23).



**Figure 23.** Colors used in children's room furniture in 2025, obtained from company catalog images

It is seen that dominant colors are used as design elements in small sections of furniture, in auxiliary elements and accessories, and thus a visual balance is achieved. It is also noteworthy that the gendered approach to color usage in today's children's room designs has decreased and colors are not separated according to girls and boys.

In order to examine the colors, sample sets were selected from similar products and designs. Although this selection created a very limited area of examination, a study was conducted in which the color, not the form, was examined. Within the similarities in the design form, the transformation in the context of color and aesthetics was interpreted together with the functional continuity of modular children's furniture.

- It was determined that the colors used in furniture produced in the early 2000s and the colors used in furniture produced in 2025 differed significantly. The factors affecting this difference are periodic changes in design approaches, technological changes based on production, and pedagogical approaches carried out on children. Approaches in the literature have also differed in the last 25 years regarding the psychological effects of colors on children.

- When the findings obtained as a result of the study were examined, it was seen that in the children's room furniture designs produced in the early 2000s, colors such as blue, red, yellow, green, orange, pink, purple, and navy blue were used intensively in their main tones.

- When the children's room furniture designs produced in 2025 were examined, it was seen that colors such as white, cream, beige, light gray, and mink were used intensively in the furniture. It is noteworthy that in furniture where colors are used, colors are used in softer tones rather than dominant tones.

- In the early 2000s, examples of modular children's furniture that were clearly separated as girls and boys not only in terms of color but also in terms of form with a gendered approach have completely disappeared. Instead, in today's examples, examples that do not contain any gender expression are used in both color and form. In addition, this also facilitates streamlined production processes for manufacturers.

- Transition from Aesthetics to Function: It has been determined that the use of color is no longer just an aesthetic element, but has become a functional component that supports child development.

- Continuity of the Modular Structure: Despite the change in colors, it has been observed that the formal differences in modular furniture forms (bunk beds, high beds, etc.) are limited and the functional structure is preserved.

- Evolution of User Preferences: The findings show that users (especially parents) care more about criteria such as aesthetic simplicity, timelessness and genderlessness.

- Consistency with Literature: The findings are directly related to the increasing research focused on pedagogical design, attention management and child psychology in recent years.

- **Commercial Compliance and Mass Production:** Increasing color standardization reduces production costs for manufacturers and can make it easier for products to appeal to a wide range of users.
- **Potential for Interdisciplinary Contributions:** This research points out that in the design of children's room furniture, collaboration should be made not only with architecture and design but also with fields such as child development, psychology and educational sciences.
- **Compliance with Pedagogical Data:** This transformation in color choices coincides with current scientific research that supports children's attention, emotion and behavioral development.

#### 4 Conclusion

- In 25 years, children's furniture colors shifted from vibrant primaries to neutral tones, reflecting evolving aesthetic, scientific, and pedagogical perspectives on child development.
- One of the important changes, the use of color, was tried to be determined by keeping other factors constant in the modular children's furniture that constitutes the subject of the study. The following results were obtained in this study conducted on the use of colors in children's room furniture designs in the last 25 years.
- Another factor affecting this preference is the flexible space concept that can be updated over time. Since children change rapidly in a short time, their needs and taste criteria change over time. It is easier to add new modules to a children's room furniture created in colors such as white, cream, beige, gray in line with the needs over time, without disrupting the aesthetics. In addition, a children's room where these colors are preferred ensures that the products can be used for many more years in terms of still being able to respond to the changing taste criteria of the child over time. It can be stated that this color approach that supports sustainability has shown positive changes in modular children's furniture in recent years with scientific research and user preferences. However, when looked at as a whole, the research concluded that, due to all the reasons mentioned, children's room furniture designs using neutral colors are produced more and preferred by users more today.
- In conclusion, the change in color usage observed in modular children's furniture is not only an aesthetic transformation; it is also a holistic reflection of pedagogical, cultural and functional factors. These findings point to the importance of prioritizing child development-centered, sensory-balanced and sustainable approaches in future furniture designs.

#### Authors' Contribution

**Gizem Özer Baş:** Conceptualization (development of research idea and aims), conducting research, resources, drafting an article, writing an article, reviewing and editing. **Eymen Tatlıhayat:** Conducting research, conducting analyses, data curation, visualization, writing article.

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#### Conflict of Interest Statement

The authors declare no conflict of interest.

## References

- Ahuja, R., (2001). *Research Methods*, Jaipur, India: Rawat Publications.
- Akyüz, E., (2000). *Ulusal ve uluslararası hukukta çocuğun haklarının ve güvenliğinin korunması*, Ankara: Milli Eğitim Basımevi.
- Boyla, O., (2012). *Mobilya Tarihi*, İstanbul: Eronus Publications.
- Burdurlu, E., Kılıç, Y., İlçe, A.C., Elibol, G.C., ve Yener, G., (2004). Okul öncesi çocuk mobilyaları ile ilgili ebeveyn görüşleri ve öngörülen mobilya tasarım ölçütleri, *Teknoloji Dergisi* , 7(1), 139-149.
- Campos, C, (2009), *Great Ideas For Kids Rooms*, Parragon Books, ISBN:978-1-4075-5274-3.
- Demirarslan, D., (2019). 0-6 Yaş grubu çocuğun dünyasında mobilya tasarımı, *Researcher*, 7(2), 64–76.
- Iliev, B., (2021). *Furniture design in facilities for preschool education as a basis for healthy children's growth and development*, Master of Science, Faculty of Forestry and Wood Tec., University Of Zagreb.
- Jones, R. M., Taylor, D. E., Dick, A. J., Singh, A., and Cook, J. L., (2007). Bedroom design and decoration: gender differences in preference and activity, *Adolescence*, 42(167): 539–554, DOI: <https://doi.org/10.1177/110330880701600103>
- Lin, Z. , and Yuriiovich, K.D., (2024). Research hotspots and trends in children’s furniture design: literature review using citespace, *TPD*, 34, 447–457. DOI:10.32782/2415-8151.2024.34.49
- McDonagh-Philp, D., and Lebbon, C., (2000). The emotional domain in product design, *The Design Journal*, 3(1), 31-43.
- Miles, M. B., and Weitzman, E. A., (1994). *Choosing computer programs for qualitative data analysis*. In M. B. Miles & M. Huberman (Eds.), *Qualitative data analysis: An expanded sourcebook* (2nd ed., pp. 311–317). Thousand Oaks, CA: Sage.
- Onwuegbuzie, A. J., and Weinbaum, R. K., (2017). A framework for using qualitative comparative analysis for the review of the literature. *The Qualitative Report*, 22(2), 359-372. DOI: <https://nsuworks.nova.edu/tqr/vol22/iss2/>
- Özözen, S., (2024). Türkiye’nin mobilya sektöründe uluslararası rekabet gücü: Seçilmiş ülkeler ile karşılaştırmalı analiz. *Mobilya ve Ahşap Malzeme Araştırmaları Dergisi*, 7(1), 107-120, DOI: [10.33725/mamad.1483546](https://doi.org/10.33725/mamad.1483546)
- Ragin, C. C., (1987). *The comparative method: Moving beyond qualitative and quantitative strategies*. Berkeley, CA: University of California Press.
- Salihoğlu Aydın, N. ve Aydemir, I., (2018), Çocuk mobilyası üzerine bir değerlendirme, *Yakın Mimarlık Dergisi*, 2(1), 31-42.
- Tasarım Publisher, Anonymous author, (2003). *Baby & children rooms*, ISBN:975-8051-334.
- Unicef, (1989). Convention on the rights of the child adopted and opened for signature, ratification and accession by general assembly resolution, United Nations, 44/25 of 20 November 1989. [https://www.ohchr.org/en/instruments\\_mechanisms/instruments/convention-rights-child](https://www.ohchr.org/en/instruments_mechanisms/instruments/convention-rights-child)

- Unknown author, (2004). *Kids rooms, great ideas for kids' rooms*, Parragon Publishing, ISBN: 978-1-4075-5274-3, United Kingdom.
- Uzun, O., Sarıkahya, M., and Küreli, İ., (2017). Farklı biçim (form) ve renklerin genç odası mobilyası tercihine etkisi, *İleri Teknoloji Bilimleri Dergisi*, 6(3), 692-697.
- URL 1. (2025). <https://cilek.com/collections/baby-mino> Date of access: 02.03.2025
- URL 2. (2025). <https://cilek.com/collections/montes> Date of access: 02.03.2025
- URL 3. (2025). <https://cilek.com/collections/studyo-ranza> Date of access: 02.03.2025
- URL 4. (2025). <https://cilek.com/collections/baby-cotton> Date of access: 02.03.2025
- URL 5. (2025). <https://cilek.com/collections/white> Date of access: 03.03.2025
- URL 6. (2025). <https://cilek.com/collections/white> Date of access: 03.03.2025
- URL 7. (2025). <https://cilek.com/collections/montes> Date of access: 03.03.2025
- URL 8. (2025). <https://cilek.com/collections/modera> Date of access: 03.03.2025
- URL 9. (2025). <https://www.huelsta.com/produkte/> Date of access: 08.03.2025
- URL 10. (2025). <https://www.huelsta.com/produktlinie/now-by> Date of access: 08.03.2025
- URL 11. (2025). <https://www.huelsta.com/produktlinie/now-by> Date of access: 08.03.2025
- URL 12. (2025). <https://erbamobili.com/download/> Date of access: 15.03.2025
- URL 13. (2025). <https://erbamobili.com/en/kids-bedroom> Date of access: 15.03.2025
- URL 14. (2025). <https://www.siloma.it/en/project/set-k23/> Date of access: 15.03.2025
- URL 15. (2025). <https://www.siloma.it/en/project/set-k18/> Date of access: 16.03.2025
- URL 16. (2025). <https://www.siloma.it/en/project/set-k11/> Date of access: 16.03.2025
- URL 17. (2025). <https://alfemo.com.tr/monica-genc-odasi> Date of access: 22.03.2025
- URL 18. (2025). <https://alfemo.com.tr/blanco-genc-odasi> Date of access: 22.03.2025
- URL 19. (2025). <https://www.kelebek.com/angelic-genc> Date of access: 22.03.2025
- URL 20. (2025). <https://www.kelebek.com/martha-home-ofis> Date of access: 22.03.2025
- Ye, J., Li, W., and Yang, C., (2021). Research on modular design of children's furniture based on scene theory. in: kurosu, m. (eds) human-computer interaction, design and user experience case studies. HCII 2021. lecture notes in computer science,12764. Springer, Cham. DOI: [10.1007/978-3-030-78468-3\\_11](https://doi.org/10.1007/978-3-030-78468-3_11)
- Zengin, G., (2019). Kullanıcı beklentileri doğrultusunda genç odası tasarım kriterlerinin belirlenmesi, *Sanat ve Tasarım Dergisi*, 24, 401-427.