

A Social Responsibility Project Example: Sustainable Fabric Toys Project

Bir Sosyal Sorumluluk Projesi Örneği: Sürdürülebilir Bez Oyuncaklar Projesi

Selda Kozbekçi Ayrıncınar, Department of Fashion Apparel Design, Dokuz Eylül University, 0000-0003-1031-9667
Gülcan Batur, Department of Fashion Apparel Design, Dokuz Eylül University, 0000-0002-4517-4325
Sadık Tumay, Department of Photography, Dokuz Eylül University, 0000-0002-6162-375X
Pelin Dikmen, Department of Fashion Apparel Design, Dokuz Eylül University, 0000-0003-0958-480X
Mustafa Kula, Department of Fashion Apparel Design, Dokuz Eylül University, 0000-0003-4905-9102
Canan Erdönmez, Department of Fashion Apparel Design, Dokuz Eylül University, 0000-0002-9523-5106

Abstract

Sustainability has emerged as a prominent and crucial topic in various domains and societies, aiming to create a more livable world. It represents a goal of establishing an ethical, greener, and progressive society and world in all its aspects. The awareness of finite resources, environmental concerns, and the significance of intergenerational resource transfer has brought forth several challenges, including excessive use of raw materials and natural resources, harsh and labor-intensive working conditions, environmentally damaging waste generated during production, as well as the issue of rapidly depleting textile products with short lifespans and subsequent waste. In light of these pressing concerns, it is of utmost importance for designers and artists to exert efforts toward sustainability, minimizing resource consumption, and fostering awareness and focus. This study focuses on the reevaluation of surplus production or waste raw materials and accessories originating from the fashion and textile industries. The project "Sustainable Textile Product Designs of Cloth Dolls and Toys with Social Responsibility Awareness" encompasses activities that utilize these materials to promote and support social awareness and solidarity. This text, conveying the project, aims to draw attention to sustainability in textiles and toy choices for preschool children, anticipating it will contribute to awareness and recognition within the realms of environmental cycles, eco-design, and sustainability. Anchored at Dokuz Eylül University's Faculty of Fine Arts, this project, grounded in design, product development, and application, has employed an "applied" research methodology. The expectation is that the emergence of new and creative ideas focused on recycling and advanced transformation will foster a specific consciousness in society and individuals across various domains.

Keywords: Social responsibility project, fabric toys, sustainability, play, play therapy.

Academic Discipline(s)/Field(s): Textile and fashion design, art and design.

Özet

Sürdürülebilirlik, daha yaşanabilir bir dünya için birçok alanda ve toplumda öne çıkan en önemli konulardan biri haline gelmiştir. Her yönüyle daha etik, daha yeşil ve ilerici bir toplum ve dünya yaratma hedeflerinden biri olarak karşımıza çıkmaktadır. Kaynaklarımızın sınırsız olmadığına farkına varılması, çevresel kaygılar ve kaynakların gelecek nesillere aktarılmasının önemini anlaşılması nedeniyle, aşırı hammadde ve doğal kaynak kullanımı, ağır ve zorlu çalışma şartları, üretim aşamasında ortaya çıkan çevreye zararlı atıklar, hızlı tükenen, kısa ömürlü tekstil ürün ve atıkları gibi birçok sorunu beraberinde getirmiştir. Tasarımcıların ve sanatçıların tüm bu mevcut sorunları önlemek, kaynak kullanımını en aza indirmek, farkındalık ve odak oluşturmak adına sürdürülebilirlik için çaba sarf etmesi çok önemlidir. Bu çalışma, moda ve tekstil sektörlerinden kaynaklanan üretim fazlası ya da atık hammadde ve aksesuarların yeniden değerlendirilmesi üzerine odaklanmaktadır. Sosyal Sorumluluk Bilinciyle Sürdürülebilir Tekstil Ürünü Bez Bebek ve Oyuncak Tasarımları projesi, bu materyalleri kullanarak toplumsal duyarlılık ile dayanışmayı teşvik eden ve destekleyen etkinlikleri kapsamaktadır. Projenin aktarıldığı bu metnin çevresel döngü, eko tasarım, sürdürülebilirlik çerçevesinde farkındalık ve tanınırlık kat sayısına destek olacağı düşünülerek, tekstilde sürdürülebilirliğe ve okul öncesi çocukların oyuncak seçimine dikkat çekmek amaçlanmaktadır. Dokuz Eylül Üniversitesi Güzel Sanatlar Fakültesi merkezli, tasarım, ürün geliştirme ve uygulamaya dayalı söz konusu projede "uygulamalı" araştırma yöntemi kullanılmıştır. Sonuçta geri kazanım ve ileri dönüşüm odaklı yeni ve yaratıcı fikirlerin ortaya çıkmasıyla toplumun ve bireyin üzerinde farklı alanlara yönelik belirli bir bilinç oluşturacağı umulmaktadır.

Anahtar Sözcükler: Sosyal sorumluluk projesi, bez oyuncaklar, sürdürülebilirlik, oyun, oyun terapisi.

Akademik Disiplin(ler)/Alan(lar): Tekstil ve moda tasarımı, sanat ve tasarım.

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- Corresponding Author:** Selda Kozbekçi Ayrıncınar, Department of Fashion Apparel Design, Dokuz Eylül University
- Address:** DEÜ Tınaztepe Yerleşkesi, Adatepe Mah. Doğuş Cad. No: 209, 35390 Buca/İzmir
- E-mail:** s.kozbekci@deu.edu.tr
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1. Introduction

While questioning the unnecessary consumption of renewable and non-renewable natural resources essential for the survival of all living beings, it is imperative to act with a sense of responsibility towards humans, nature, and the future within the framework of sustainability, which also includes waste management processes. "Sustainability is a concept employed in the textile industry to achieve long-term success in environmental, social, and economic terms. This concept encompasses the efficient use of natural resources, protection of the environment, provision of social justice, and consideration of economic sustainability. Sustainability aims to meet today's needs by consuming natural resources while ensuring future generations can also meet their needs" (Batur, 2023, p. 74). Hence, it is equally important to consider sustainability from both environmental and social perspectives. Creating an environment that enhances standards such as education and healthcare throughout the life cycle is one of the social dimensions of sustainability. In addition to issues such as environmental pollution and depletion of natural resources, designers and consumers have developed and continue to develop various strategies. Issues such as product recycling, upcycling, reusability, waste reduction, and proper waste disposal have gained significance (Ayanoglu and Ağaç, 2017, p. 255).

The textile and fashion industries are not only one of the oldest industries in the world but also one of the largest in terms of production capacity and workforce. "In the past 40 years, the fashion and textile industries have grown 60 times worldwide" (Can and Ayvaz 2017, p. 113). However, it is also one of the industries that cause the most harm to the environment due to factors such as excessive water and raw material consumption, chemicals used at various stages of production, and non-biodegradable and non-recyclable waste. Like in any other sector, sustainability is of utmost importance for the textile and fashion industries as well (Can and Ayvaz, 2017, p. 113). The concepts of fashion and sustainability are contradictory to each other. While the fashion industry offers consumers constantly renewing and fast consumption, the concept of sustainability has developed based on a slow and enduring consumption habit (Özgün and Ayvaz, 2017, p. 3). The recycling of waste, reduced consumption, eco-development, and maintaining quality in recycling are important aspects in addressing one of the world's biggest problems (Braungart and McDonough, 2002). Creating an environment that emphasizes education and health standards in the social aspect within the scope of sustainability throughout the life cycle is valuable. The efforts of designers and artists in raising awareness and focusing on minimizing resource usage are highly valuable in preventing existing problems. Through these works in the field of art and design, they aim to draw attention to the fact that the problems of sustainable ecosystems are not limited to specific regions or countries but are collective and universal issues of the world. Considering the abundance of waste in the production and consumption areas of the fashion industry, options such as reducing consumer usage, extending the product's lifespan, or reclaiming and reusing used items are considered. The establishment of the concept of sustainability in the textile and fashion industry will be achieved through changing the behaviors of consumers, producers, and designers. In this regard, designers such as Thom Browne, Erika Cavallini, Greg Lauren, and Chitos Abe, who have been exemplifying the aesthetic power of recycling, can be cited as examples of designers who strive to overcome the consumption speed brought by fast fashion. Many discarded clothing items that are considered as waste have been brought together by combining different parts to create a single garment, regardless of whether it is woven or knitted, suitable for summer or winter, a jacket or a sweater. Turkish artist Deniz Sağdıç produces unique pieces from waste fabric or worn-out clothing items for various reasons. In her Ready ReMade collection, she utilizes all the accessories in denim products to achieve the desired appearance by utilizing the entire waste material. Thus, through the power of art and design, the recycling of textile products considered as waste or excess is reintroduced with different perspectives, creating awareness of our responsibility to protect the planet. In this context, it is expected that universities provide direct support to solving social problems through various activities, especially through social responsibility projects, increasing awareness, and contributing to the development and transformation of society in all aspects. Implementing social responsibility projects that will attract the attention of large audiences holds an important place. Particularly in the field of education, social responsibility should go beyond mere implementation of activities. It is the social responsibility of educational institutions to cultivate a new generation that will engage in activities carrying social responsibility in the future and be sensitive to social events (Selvi and Şentürk, 2016, p.145).

1.1. Sustainable Fabric Toys Project

The transformation of society's social fabric, behavior patterns, and overall development and sustainability depend on individuals and institutions being aware of their social responsibilities and undertaking the necessary actions (Benuğur, 2014, p. 206). Social responsibility projects involving art and various disciplines aim to increase social awareness, consciousness, and solidarity, ultimately contributing to social benefits. Within this context, universities have significant responsibilities. In line with these responsibilities, the project titled "Sustainable Fabric Doll and Toy Designs with Social Responsibility Awareness" was conducted with the support of the Scientific Research Projects Coordination Unit of Dokuz Eylül University, led by the Faculty of Fine Arts, and involving internal stakeholders such as the Oncology Institute of Dokuz Eylül University Faculty of Medicine and external stakeholder Akar Textile company. The project aims to evaluate textile raw materials and accessories, considered as production and usage excess, with a focus on social responsibility awareness and to propose a solution through the design and production of fabric toys by considering recycling and upcycling processes. Play contributes to a child's physical, social, cognitive, and language development. It is also important for their mental well-being and finding solutions to psychological problems (Teke and Avşaroğlu, 2020, p. 1078), indicating that play therapy can be an effective treatment method for children (Abdollahian et al., 2013). Play, which is also used as a means of communication in the world of children, is recognized as a rapidly developing field, with efforts to encourage research and yielding positive results in identifying and resolving emotional and behavioral problems (Teke and Avşaroğlu, 2020, p. 1083). The importance of play and toys in a child's life has been increasingly emphasized, and efforts to promote research and activities in these areas are well-known. With this project, which was prepared considering this framework, it is believed that contributions will be made not only from a formational or psychological perspective but also from the viewpoint of designers and artists. The project, in collaboration with the DEU Faculty of Medicine, Child Oncology Institute (internal stakeholder), and Akar Textile (external stakeholder), which prioritizes sustainability in every stage, from material selection to energy consumption, from the preservation of natural resources to the valorization of waste, aims to contribute to the most valuable concept of our time, sustainability, by evolving the "recycling" process into the "upcycling" process. During the project process, toys are designed and implemented not only to be educational and entertaining but also to be safe and compliant with health conditions. Initially, these toys are provided to children hospitalized in the DEU Faculty of Medicine, Child Oncology service, and later the project is expanded to reach children of disadvantaged families living in economically challenged areas. The project aims to deliver toys that are not only enjoyable but also safe and appropriate for children's health.

"The Sustainable Fabric Toys Project: An Example of a Social Responsibility Project" has been updated and developed based on the project outputs within the specified timeframe. The project's fundamental philosophy has proven its flexibility in response to unexpected situations, thereby demonstrating the sustainability of the project. The activities of the project team in the field, within the framework of social responsibility, following the earthquakes centered in Kahramanmaraş on February 6, 2023, are crucial indicators of the project's functionality.

As part of the project, the planned toy-making workshop (Container) itself has been transformed into a work of art. Some of the designed toys have been drawn and painted onto different surfaces of the container. As a result, the context of the space has been altered, and a performance showcasing the communicative aspect of the interaction regarding the realization of the project has been presented. The mobility of emotions and thoughts related to the project has been facilitated.

1.2. Material and Methods

The project, centered at Dokuz Eylül University Faculty of Fine Arts, utilized an applied research method that focused on design, product development, and practical implementation. In order to achieve diversity and a high number of variations in toy design and applications, a project team consisting of experts with a background in art and design education was formed. Based on design principles, fabric doll and toy designs were created, taking into consideration color, texture, and form values. Alternative color schemes and patterns were also developed. The toys, with over 30 different characters designs, were categorized according to their specific features. Based on this categorization, two- or multi-part molds were created, considering the suitability of the production process for mass production, and toy prototypes were produced (Figure 1).



Image 1. Toy production mold trial samples (Project archive, 2022).

In addition to baby and animal-themed toys, educational toys such as puzzles and fabric stacking rings were also produced within the scope of the project. Puzzles required assembling pieces to form a complete picture. Various animal images were used in the puzzle toys produced as part of the project. Through these puzzles, children not only develop their problem-solving skills and hand-eye coordination but also enhance their ability to focus. Moreover, children learn about shapes, colors, patterns, and object relationships through these puzzles. The fabric stacking rings, on the other hand, are toys used to improve children's hand-eye coordination and fine motor skills. By stacking the fabric rings of different colors and patterns to form a tower, children develop their skills in object sequencing, organization, and manual dexterity (Figure 2). After the production of samples, more than 1000 toys were made from 84 kg of knitted fabric by the researchers in the project design team, which were intended to be gifted to children during planned or unplanned project activities.



Image 2. Examples of trial molds for educational toy production (Project archive, 2022).

The fabrics used in toy production, which were donated by the external stakeholder Akar Textil, are certified with the Organic Content Standard (OCS) and the Global Organic Textile Standard (GOTS), which have international validity for all non-food products containing 100% organic materials and for the use of fibers obtained from organic farming in production conditions. These knitted fabrics, which have this certification for tracking and verifying the organically grown content in finished products, form the main material of the project toys. These fabrics include two-ply, three-ply, carded, combed, and interlock knits. Unique and special designs of garments were sewn and knitted to give identity to the toys, with the majority of them being clothes for cloth dolls and animal figures. In the application of these garments, 100% cotton woven fabrics and 100% cotton yarns were used for hand-knitted garments. Instead of materials such as buttons, beads, and paint that could endanger children's health, an embroidery machine, which was purchased from the project budget by DEÜ Scientific Research Projects Coordination Unit, was used or appliqué were applied for decoration. Furthermore, a container named "Toy Workshop" was designed and used for toy production (Figure 3). The Toy Workshop container was transformed into an activity area where toys were created, depicting, and painted with characters that would engage children's interest.



Image 3. Visual design of the toy workshop (Project archive, 2022).

1.3. Outcomes

Workshop activities were planned and organized to reduce the impact of stress on children who are ill or have experienced any trauma. In line with this goal, the Toy Workshop, created within the scope of the project, was relocated to Adiyaman Eğriçay 7th Tent City after a major earthquake in Kahramanmaraş.

Observations indicated that children in the tent city were initially hesitant and had limited communication with the volunteer academics who interacted with them. Based on these observations, the children were taken to the Container Toy Workshop, where the workshop was introduced to them. They sang songs, played games, and every child was encouraged to actively participate in the process. It was observed that through introductions and conversations, the children felt more comfortable and engaged in communication as the activities progressed. In the Adiyaman Eğriçay tent city, four separate workshop sessions, each lasting for seven days, were conducted. Approximately 200 children, particularly in this region, participated in toy-making activities as part of the project. In addition to toy-making, various activities such as coloring the coloring book containing drawings of project toys and drawing their own toy pictures were carried out. As a result, many benefits were achieved, including contributing to the children's imaginative world through play with the toys they made, self-expression, increased awareness, reduction of stress with psychological origins after trauma, strengthening social relationships among the children, and fostering a sense of cooperation between older and younger children who were specifically included together in the toy workshop. It was observed that the workshop activities conducted with children within the framework of this socially responsible project provided support in terms of their participation in teamwork, communication with each other during the toy-making process, problem-solving skills, adapting to group work, and taking responsibility. During this process, there was an opportunity for observation and interviews, enabling a realistic and comprehensive understanding of the perspectives and the overall process within their own environment. In conversations with the children during these activities, they expressed their love for making their own toys, experiencing such an activity for the first time, and having a lot of fun. When taking their toys with them, some children mentioned using their toy as a pillow to sleep and having beautiful dreams, some considered their toy as their closest friend, and some expressed their intention to love their toy like a sibling. In interviews with the parents of children participating in the toy workshop activity in this disadvantaged region, they conveyed their happiness in supporting their children to move away from the psychological breakdown they experienced after the devastating earthquake. They expressed that their children or grandchildren were having fun playing, entering a new environment created a sense of novelty for the children, and seeing their smiles and sparkling eyes made them happy despite the significant destruction and losses they had endured.

It is expected that the observation of toys and games being able to provide companionship to children can also help alleviate the anxieties of children in hospital settings. Care has been taken to ensure that the fabric toys in the project are washable, thus posing no health or safety hazards. Additionally, it has been observed that cloth dolls and toys serve as both sleep and play companions, helping children feel good about themselves. The design of different characters also encourages imaginative play, supporting their creativity and imagination.

1.4. Project Process

The 'Sustainable Textile Product Cloth Doll and Toy Designs with Social Responsibility Awareness' project, initiated by Dokuz Eylül University with the aim of making a positive impact on people's lives within the scope of social responsibility, was realized through the collaboration of Dokuz Eylül University's Faculty of Fine Arts, DEÜ Institute of Oncology, and Akar Textile. The handmade fabric toys produced for the project were first introduced to children receiving treatment in the Pediatric Oncology Department of Dokuz Eylül University Medical Faculty Hospital on April 27, 2022 (Figure 4). Considering their sensitivity to hygiene and limited access to organic toys, the handmade toys were gifted to them as part of the April 23 National Sovereignty and Children's Day celebration.

The Project, supported by Dokuz Eylül University, which continues its academic and scientific activities with a sense of community service, was introduced to the audience and national media through an organized exhibition. The Sustainable Stories Exhibition with Toys took place in the foyer area of Dokuz Eylül University's Cultural Heritage Rectorate Building from June 20, 2022, to July 4, 2022 (Figure 5). The fabric toys, produced by expert academics within the project, were designed in different characters by five project team members who are faculty members of DEU Faculty of Fine Arts Fashion Design Department. The exhibition aimed to raise awareness of conscious consumption of limited resources for future generations and featured 64 upcycled fabric toys. Plastic toys, which contribute to global warming and are made of toxic materials and chemicals, are difficult to recycle.



Image 4. Visit to deu children's hospital institute of oncology on April 27, 2022 (Project archive, 2022).

However, these fabric toys, produced by utilizing waste materials in line with the project's objectives, not only secure our children's present but also their future. Unlike toys made of plastic that poison our planet and disrupt the balance of natural life, these handmade toys are crafted from renewable, biodegradable, and recyclable materials. Each toy is unique with its own distinct decorations and details.



Image 5. Sustainable stories exhibition with toys (Project archive, 2022).

Additionally, all the photographs of the toys, documented by the project researcher and Associate Professor Dr. Sadık Tumay from the Department of Photography at Dokuz Eylül University, were exhibited during the same dates under the title "Recycled Toys" at the foyer of Dokuz Eylül University Rectorate Building (Figure 6). The photographs were taken at the DEÜ Photography Studio.



Image 6. Exhibition photographs of recycled toys (Project archive, 2022).

The captured photographs and videos have been shared for the visibility and recognition of institutions such as Dokuz Eylül University, Faculty of Fine Arts, Children's Oncology Institute, and the project and stakeholder organizations (Figure 7).

The photographs of the toys produced in the project have also served as a means of preserving the project's memory. As part of the social responsibility and project requirements, the toys are distributed, and only the photographs remain. The photographs have become a creative source of data for the design of new toys, ensuring the preservation and development of originality to avoid repetition in the realization of the imagined. Due to the interdisciplinary nature of the project, the photographs are used as a supportive media in which all stakeholders can benefit, serving as a mediated form of the generated knowledge. Furthermore, the production process of the fabric toys, the use of recycled materials, the handcrafted nature, and adherence to sustainability principles have been documented through photographs. In the future development of the project, the photographs can be utilized as ready-made resources to support entrepreneurial positioning and marketing strategies.



Image 7. Exhibition photographs of upcycled toys (Project archive, 2022).

Workshop activities were conducted in collaboration with students from the Fashion Design Department of the Faculty of Fine Arts, taking into account design and artistic approaches, in addition to training on the use of sewing machines acquired from the project budget for toy production purposes (Figure 8).



Image 8. Workshop activities conducted within the scope of the project (Project archive, 2022).

Following the devastating earthquake disaster that deeply affected Kahramanmaraş and 11 other provinces, causing nationwide mourning in Turkey, Dokuz Eylül University contributed to the psychosocial activities by sending aid and support teams to the earthquake-stricken areas. As part of the efforts to provide support and morale to the children in these regions, the "Toy Workshop" of the project was relocated to Adıyaman with the support of the University's Faculty of Fine Arts faculty members and volunteer students (Figure 9). Supported by the University's own resources within the framework of Dokuz Eylül University Scientific Research Projects (BAP), the Toy Workshop was established in the earthquake zone 7 area in Adıyaman, where children had the opportunity to create toys using non-toxic and antibacterial fabrics. The design of the Toy Workshop was entirely child-oriented, creating a pleasant and comfortable environment for them. In the aftermath of the major disaster, our volunteer academicians aimed to support the children by providing them with our handmade fabric toys, helping them overcome their pains and fears and bringing a little smile and happiness to their faces. Hundreds of children affected by the earthquake have participated in the production of fabric toys as part of the workshop activities and have received these toys (Figure 9).



Image 9. Adıyaman eğriçay park, 7earthquake zone (Project archive, 2022).

In addition to engaging in fun activities such as toy making, playgroups, handicrafts, and storytelling workshops, children also showcased their artistic skills through a coloring book consisting of drawings of toys designed specifically for them (Figure 10). Along with providing children with enjoyable pastimes, the coloring book also supported the development of their attention, focus, cognitive abilities, and visual intelligence. It offered them the opportunity to explore colors and unleash their creative potential.

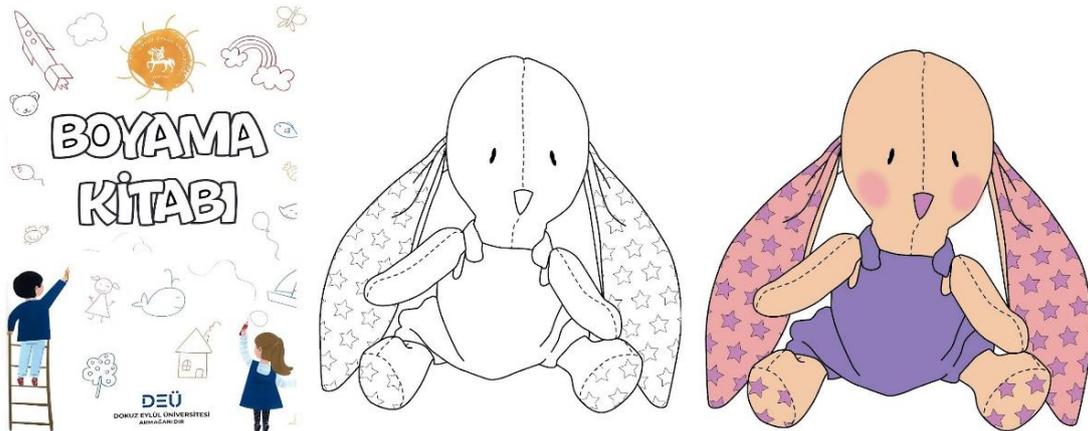


Image 10. Coloring book (Project archive, 2022).

During the activity, children had the opportunity to meet beloved national characters such as Nasreddin Hodja and Keloğlan through the fabric toys. Stories and anecdotes related to these characters were told, and children enjoyed playing with their toys and coloring the drawings in the coloring book according to their own imagination. These activities not only introduced children to important figures in our national culture but also provided them with a chance to express their artistic creativity (Figure 11).



Image 11. Application of Nasreddin Hodja and Keloğlan fabric toy (Project archive, 2022).

Conclusion

The issue of waste generated by the textile industry and the environmental harm caused by non-recyclable materials has been criticized by artists and designers, who interpret it through contemporary art movements. These activities also contribute to the emergence of innovative and creative products in the fashion and textile sectors. All fabric and accessory waste, which are open to evaluation by artists and designers in terms of texture, composition, and color tones, find a place in contemporary art pieces and creative design applications. Manufacturers, designers, and environmentally conscious consumers who are involved in the fashion industry are actively seeking solutions to reduce waste by promoting recycling and reuse of textile waste and increasing awareness. The versatility of recycled fabrics, which can be used in different functions and provide inputs for various sectors, not only benefits the textile industry but also creates innovative working areas for designers and can be used for decorative purposes.

Within the scope of the project, the design and production of fabric dolls and toys have been undertaken to support the emotional, cognitive, psychological, and physical needs of children, particularly leukemia patients and disadvantaged groups with varying diagnosis and treatment types, whose quality of life is affected in physical, emotional, psychological, and social dimensions. The aim is to both utilize waste and excess fabric and provide support to play therapies for children through sustainable fabric toys. Through workshop activities, children not only experience the excitement of producing their own toys but also engage in activities that enhance creativity, enrich their imagination, improve cognitive and motor skills, and bring innovation and structure to their physical activities, thereby supporting them in spending positive and quality time. It is believed that these activities enable children in hospitals or disadvantaged groups to play, relax, free their minds from negative influences, and cope with the adverse conditions and anxiety they are facing.

As part of the project, synonymous with the project scope, the utilization of excess production fabric as waste materials aims to draw attention to and increase awareness about the reuse and transformation of waste materials generated after production and consumption. In this regard, recycling and waste reduction processes can be considered as a solution proposal. Additionally, it is possible to contribute to resource conservation, waste reduction, environmentally friendly production and consumption practices, and the maturation of a circular design approach by developing and combining excess production and post-consumer waste materials through traditional methods or technological support, employing different techniques suitable for the field. Reusing these materials can help reduce the pollution caused by the production processes of the textile and fashion industry to some extent. Furthermore, it is expected that the emergence of new and creative ideas focused on recycling and upcycling will foster a certain level of awareness in both individuals and society, targeting different areas.

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