

DESIGNING CHILDREN'S PARTY WEAR MADE FROM TRADITIONAL ENDEK TEXTILES

Ni Kadek Yuni Diantari¹, Ni Putu Darmara Pradnya Paramita²,
Made Tiartini Muda Rahayu³

^{1,2,3}Fashion Design, Art and Design Faculty, Indonesia Institute of The Art Denpasar, Indonesia

ABSTRACT

The children's fashion industry in Indonesia has great potential but is still dominated by imported products. This constraint is the trigger for this research that aims to explore children's clothing that is high quality, comfortable to wear and utilizes traditional Balinese fabric, Endek, as well as an effort to introduce culture from an early age. The process of making children's clothing is designed through the five main stages of the Frangipani method which consists of: idea development, research, aesthetic element analysis, design sketch, and production. Making quality children's clothing requires several criteria including safety, comfort, durability, size accuracy, and cultural sensitivity to be the main focus in design development. Endek fabric was chosen as the catalyzing idea in the design of children's party wear. Endek fabric is the most common and desirable fabric in Bali because of its motif design development. Endek fabric as part of the ikat woven fabric requires special attention in the process of processing it into clothing to maintain the quality and structure of the fabric. The addition of elements such as lining and interfacing is done to increase the comfort of the clothing. This research shows that children's fashion with Endek fabric can fulfill the criteria of modern children's fashion but is able to maintain cultural values. This research provides reference and insight for children's fashion industry players in creating products that collaborate traditional aspects and modern demands so that they can compete globally.

KEYWORDS

Children's fashion, Endek fabric, sewing techniques, Balinese Heritage, Indonesia Textile.



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Introduction

The fashion industry in Indonesia is growing rapidly but fashion in Indonesia tends to target products for adult women and men. As the fourth most populous country in the world with a population of around 269 million, around 104 million children dominate Indonesia's population pyramid or around 38% of Indonesia's population are children under 12 years old [1]. With a large market potential in Indonesia, the fashion industry for children is still less touched by local brands and is still dominated by imported products. In the children's fashion industry, the clothing production process is more complex because it has a faster cycle than adult clothing due to the development of children's body size which still undergoes significant changes until the age of 12 [2]. In

addition, children's clothing has many standards that need to be met to produce quality children's clothing, one of which is the technique of sewing children's clothing so that the resulting clothing is in accordance with the design and is comfortable and safe for children to wear.

Clothing for children tends to be simpler than adult clothing because children's activities are dominated by playing and learning. But along with the times, children's activities began to vary like adult activities, not infrequently the activities carried out in tandem with the activities of their parents. Therefore, the types of children's clothing are not only casual, play and school clothes, there are also party clothes that adjust to the occasion being attended.

With children's diverse activities, the function of clothing today is not only to protect children's bodies during activities but also as a form of expression of children's preferences, building children's personalities, and creating children's ability to adapt to tradition and culture[3]. So through fashion, the introduction of culture can be done from an early age, one of which is by applying traditional textiles. The application of traditional textiles to be accepted by children and parents needs to be adjusted to the development of trends and meet the criteria of children's clothing. Children's fashion criteria include safety, comfort, durability, size accuracy and cultural sensitivity. Party clothes allows for greater exploration of design, creative details, while maintaining a balance between traditional and modern demands. Making children's clothing by applying traditional textiles can fulfill the criteria of children's clothing if it goes through the stages of making children's clothing .

The stages of making children's clothing include the design process, material selection, pattern making, sewing techniques and proper fashion finishing. Among these stages, the sewing stage is less considered when making clothes with traditional textiles, even though this stage plays a major role in the realization of quality children's clothing so that it is in accordance with the design, comfortable and safe to wear.

In an effort to create children's clothing that is comfortable, fashionable, and adapts the cultural values of the archipelago, the process of realizing children's clothing, especially sewing techniques for children's clothing using endek traditional fabrics, will be presented. The realization of children's clothing with endek traditional textiles is expected to be a means for adults and parents to be able to introduce culture early on to children. This fashion realization process is also a reference for children's fashion brands in realizing children's clothing with traditional endek fabrics that are comfortable for children to wear.

Method

The realization of children's fashion with traditional textiles was carried out using the Frangipani: The Secret Steps of Art Fashion method. This method contains 10 stages of creation that can be adapted to the process of realizing children's fashion with traditional textiles. The stages of the FRANGIPANI fashion design process consist of ten steps[4]. The first stage begins with the determination of the sparking idea that will be the source of inspiration for the realized fashion, followed by the second stage with the process of researching and finding sources for valid and accountable ideas, the third stage is the process of analyzing the elements and aesthetic values in the sparking idea that can be applied to the fashion product to be created, stage four is transferring ideas or ideas into two-dimensional images, then finishing the work through making fashion patterns, and the fifth stage is the process of interpreting all the results obtained in stages one to four into the final collection in this case the collection. There are further stages, namely stages six to ten, which are the stages of promotion to fashion business. However, these stages are not applied and end at stage five, which is the final collection.

Discussion

1. Children's Clothing Criteria

In the process of making children's clothing, there are several criteria that must be considered to ensure that the clothing is safe, comfortable, and practical for the wearer. Here are some of the main criteria in making children's clothing: Safety

The majority of children's fashion designers (80%) consider safety in the making of children's clothing. [5]. Safety is an important criterion considering that children do not understand the function of some parts of clothing. In children's clothing, try to minimize the use of small parts such as beads, small decorations that can be swallowed accidentally or choking hazards. Clothing for children aged 2 to 12 years old should not have drawstrings or laces at the hood and neck. Instead, velcro, snap and button closures can be used on the hood of jackets instead of drawstrings which are easy for adults to attach but difficult for children to open. [6].

a) Comfort

Comfort criteria are associated with material selection, sewing techniques and the design. The recommended material for children's clothing is soft and easy to absorb sweat considering the higher sensitivity level of children's skin compared to adults. [5]. It is also important to choose the right sewing technique on the bad part of the fabric so as not to cause an irritating effect on the child's skin. Clothing design is also ensured to provide space for children to play activities such as running, jumping comfortably.

b) Durability

A quality garment has a good level of durability, therefore strong stitching techniques ensure that the garment is resistant to wear and tear due to the user's activities. Some parts of the garment such as the underarms and the backside need to be given additional or reinforced stitches to prevent the stitches from splitting. Durability is not only the physicality of the garment but also the durability against changing trends so that the garment does not quickly go out of fashion.

c) Size Accuracy

To make clothes that fit children's bodies, accuracy of size is needed. Children's sizes vary based on their age. Size based on age is divided into three categories namely new born, baby and child. New born is a category of newborns up to the age of 9-12 months. Baby is a group of babies aged 9-12 months to 2-3 years. Child is children of both sexes aged 3 to 12 years. Attribution of size to age categories may not be very precise and requires other references such as the child's height. [7].

d) Cultural sensitivity

Culturally inspired fashion requires an understanding of certain cultural norms and sensitivities when designing fashion to respect cultural heritage and as a form of cultural adaptation.

2. Classification of Children's Fashion

Children's fashion can be classified by age, gender and function. Classifying by age group helps adults choose appropriate sizes and styles for children. The division of children's fashion classification can be described as follows:

- a. Classification of children's clothing by age, is a grouping of children's clothing based on age, which helps determine the size standards and needs of children's clothing. [8].
- Newborn (0-2 months of age): Newborn refers to babies from birth to about two months old. During this age, babies' heads cannot yet stand properly on their necks. Newborn clothing should be selected with a full opening at the front or back of the garment. The material selected should be appropriate for the season, i.e. thick or thin to keep the baby's body temperature at a normal temperature. The selection of materials is prioritized with soft and light characteristics and even with natural materials to avoid irritation to the newborn's skin. Clothing size for newborns
- Infants (2 months - 1 year old): The classification of baby clothes is intended for babies aged 2 months to 1 year. Clothing at this age is not much different from

newborns but is more specific to differences in size and openings in clothing. Types of clothing at this age are bodysuits, jumpers, pajamas, swaddlers, blankets, hats and shoes.

- **Toddlers (1-3 years old):** Toddlers are babies aged 1 year to 3 years old. At this age children are just learning to do movements such as crawling, walking, running so they need clothes that do not interfere with their movements. Children's skin at this age is also still very delicate so use soft and flexible materials such as t-shirts. For the design of children's clothing at this age, is a simple design and does not use a lot of details because children at this age still want to put objects in their mouths so that they can endanger themselves. Types of clothing for children at this age are t-shirts, tops, pants, dresses, skirts, jackets, sweaters.
- **Pre-school children (3-5 years old):** Pre-school children usually do a lot of exploratory movements so that they sweat a lot. Therefore, the right choice of clothes for children of this age is clothes that use materials that absorb sweat. The right design for toddlers is a simple design that tends to be longkar with materials that tend to be flexible so that it allows movement. Because pre-school children have high activity, the clothes used must be strong in terms of material and stitch quality so that in making clothes, the right sewing techniques must be considered. Types of clothing for children at this age are t-shirts, jeans, school uniforms, formal wear.
- **School children (6-12 years old):** At school age, children have started to have a variety of activities so that the use of clothing has been adapted to the occasion. With so many activities and active movements, children's clothing must also pay attention to comfort and strength by choosing clothes with strong stitches and choosing sweat-absorbing materials such as cotton. It is recommended to reduce the use of polyester material because it tends not to absorb sweat. Fashion designs for school children are more colorful and patterned as children at this age have started to express themselves. Types of clothing for children at this age include t-shirts, jeans, school uniforms, casual wear, formal wear

Berikut merupakan table ukuran tubuh anak berdasarkan usia :

Tabel 1. Ukuran Pakaian Anak Baru Lahir - 2 tahun
[Source : Rayhan Fairuz [9]]

Size	NB	3M	9M	12M	18M	24M/2/2T
Height	52-56 cm	57-61 cm	62-72,4	74-77	78-81 cm	82,6-90 cm
Weight	2,5-3,9	4-5,5 kg	5,7-8,6 kg	8,9-9,8	10-11 kg	11,1-12,7 kg
Chest	41-42 cm	42-43 cm	44,5-45,7	47-48	49,5-51	52-53 cm

Waist	43-44,5	44,5-46	47-48 cm	48-49,5	49,5-51	51-52 cm
Hips	42-43 cm	43-44,5	45,7-47	47-48	49,5-51	52-53 cm

Table 2: Clothing sizes for children 3 years old - 7 years old

[Source : Rayhan Fairuz [9]]

Size	3/3T	4/4T	5/5T	6	6X/7
Height	91,4-98	99-105	105-109	114-118	119-123
Weight	13-14,5	14,8-16,8	16,6-18,6	19,3-21,4	21,6-24,5
Chest	55-56 cm	57-58 cm	59,7-61	62-63,5	64,8-66
Waist	52-53 cm	53-55 cm	55-57 cm	56-57 cm	57-58 cm
Hips	55-56 cm	57-58 cm	59,7-61	62-63,5	64,8-66

b. Classification by gender, this classification provides an overview of clothing suitable for female and male children to wear and their sizes due to differences in body shape.

- Girls' clothing is children's clothing intended for girls with bright colors, floral patterns, animated characters or geometric motifs. Girls' clothing also tends to have a variety of designs with the addition of sparkling embellishments, ruffles or lace.
- Boys' clothing is clothing intended for boys. Boys' clothing is simpler than girls' clothing with fewer details or embellishments. Common colors in boys' clothing include blue, green, red or neutral colors such as gray and white. While patterns on boys' clothing can be stripes, plaid, fauna motifs, vehicles or popular cartoon characters.

Table 3. Clothing sizes for boys aged 8 years - 14 years

[Source : Rayhan Fairuz [9]]

Age	Height (cm)	Chest (cm)	Waist (cm)	Hips (cm)
8–9 years old	134	61-71	61-63	71-74
9–10 years old	140	63-66	63-66	74-77
10–11 years old	146	66-68	66-68	77-81
11–12 years old	152	68-70	68-70	81-85
12–13 years old	158	70-73	70-73	85-91
13–14 years old	164	73-75	73-75	89-91
Above 14 years old	170	73-75	75-77	91-93

Table 4. Clothing sizes for girls aged 8 years - 14 years

[Source : Rayhan Fairuz [9]]

Age	Height (cm)	Chest (cm)	Waist (cm)	Hips (cm)
8-9 years old	134	68-70	60-62	73-77
9-10 years old	140	70-73	62-64	77-80

10-11 years old	146	73-77	64-65	80-84
11-12 years old	152	77-78	65-66	84-86
12-13 years old	158	80-82	66-67	86-88
13-14 years old	164	82-85	67-68	88-90
Above 14 years old	170	85-87	68-70	90-92

c. Classification by occasion, categorizes clothing selection according to the purpose and occasion for which the clothing is worn. This categorization helps parents choose appropriate clothing for different events and activities taking into account the comfort, style and specific requirements for each occasion to ensure that the child feels confident and happy in what they are wearing. [7]. Based on the occasion of wearing clothes, children's clothing can be classified into:

- Play wear is clothing worn by children for play activities or daily activities carried out in the home environment. It is also often called casual and home fashion. The choice of play clothes model should be loose, comfortable to wear, easy to put on and easy to take off. Materials that can be used for play clothes for children are materials that absorb sweat, do not cause irritation and are easy to maintain.
- School uniform is clothing used for school occasions. In general, in Indonesia, school clothes worn by children are clothes that have been determined by their respective schools called school uniforms. School fashion models have a formal impression but are still practical to wear in the form of skirts, pants, and slippery-sleeved blouses with shiller collars or shirt collars. Monochromatic color combinations are widely used for uniform clothing.
- Party wear is clothing worn by children to attend party events as adults socialize with the surrounding environment. In addition to playing and going to school, party events are a form of socialization activities carried out by children. However, it is not only birthday parties that can be attended by children, wedding parties that invite parents are also often attended by children. Unlike other types of clothing, party clothing has its own characteristics, namely the type of shiny material with sparkling patterns and decorations to display a luxurious and festive impression.

3. Stages of Making Children's Clothing with Endek Traditional Fabric

Children's clothing that meets the criteria requires systematic stages of making children's clothing. The stages that become the reference in making this children's fashion use five stages. The first stage is the stage of determining the source of ideas, this stage has been carried out and described in the introduction. The second stage, namely research and source finding, has also been carried out and described regarding the criteria and classification of children's clothing discussed in the previous subsection.

Stage three is the process of analyzing the elements and aesthetic values of the sparking idea. The main trigger idea in this work is the traditional Balinese textile, endek woven fabric, which will be used as the material for creating children's party wear. Endek fabric is the most commonly found traditional fabric in Bali. Endek is a fabric whose production process is the most developed and advanced in terms of technique and design. The pattern-making technique known as endek belongs to the weaving fabric with ikat process that is widely practiced throughout Indonesia. [10]. Ikat (Indonesian: "bundle," "binding") is an intricate and time-consuming yarn dyeing technique in which undyed yarns are attached to a frame in bundles according to a pattern and tied in places with ropes of banana peels or plastic strips. During the dyeing process, the tied areas resist dye absorption and remain undyed; repeated tying and dyeing can result in multi-colored patterns of great complexity. The patterns or motifs resulting from the yarn tying process are applied to the warp yarns alone (warp ikat) or to the weft yarns (weft ikat)-or to both yarn systems at once so that the patterns on each yarn complement each other (double warp ikat). [11].

Once the prerogative of noble families, endek has now become a popular garment and an important symbol of cultural identity for Balinese men and women of all social classes. However, endek woven fabric is rarely found in children's clothing, therefore it is necessary to utilize endek fabric in children's clothing to introduce traditional textile heritage.

The next stage, which is the fourth stage, is to transfer ideas into two-dimensional images that produce sketches of children's fashion designs that have been adjusted to the criteria and classification of party clothes for children aged 3-5 years. Party fashion was chosen to explore more models and details of children's clothing while still maintaining the main criteria of children's clothing, which is comfortable and safe to wear. Party clothes allows for greater exploration of design, creative details, such as the intricate motifs of Endek, while maintaining a balance between traditional and contemporary styles

To give a cheerful and girly impression, pink color was used with ruffles and ruffle details. The luxurious impression that suits the party occasion is expressed through pearl details.

The design sketch was realized in the fifth stage by making children's fashion patterns, cutting materials, sewing and giving fashion decoration. In the cutting process, the endek fabric needs to be given special treatment because the fiber structure of the fabric is not as strong and the fabric is woven by machine. Before cutting endek and other fabrics, it is recommended to do a washing process to avoid fabric color fading and fabric fiber shrinkage. The placement of the pattern on the endek fabric needs to be well calculated to maintain the integrity of the endek motif when sewing the fabric pieces into clothing. After the sewing process, the finishing process is carried out to strengthen the quality of the clothing stitches. As the last touch of the outfit, sequins were added to give a festive and luxurious impression to the party outfit.



Figure 1. Children's Party Dress with endek fabric
[Source: Paramita, 2024]

4. Tips for Processing Traditional Textiles for Children's Clothing

Sewing clothes with traditional textile materials, especially endek, requires proper tips for processing short textiles to avoid fabric fibers from being damaged when sewn, producing clothes that are safe and have good durability. Here are the things that need to be considered in sewing endek fabrics for children's clothing:

- a. Understand the fibers and structure of the endek fabric, this is necessary to determine the right machine needle size in sewing so that the stitches are strong without damaging the fibers. The sewing needle used for endek is a 13/85 size machine needle. Machine needles with size 13/85 are commonly used for sewing medium weight fabrics or fabrics with medium thickness that are commonly used, such as cotton, linen, flannel and stretch fabrics.

- b. Pay attention to endek motifs, endek fabric motifs are very diverse from Balinese ornaments to agency logo motifs. Endek fabrics usually have symmetrical repetition of motifs, therefore cutting the fabric must be precise to maintain the integrity of the endek motif, in the opening part of the outfit and the broken part of the pattern, the fabric with the motif is tried to connect. Fabric cutting will be easier if the fabric is ironed first to reduce folds in the fabric.
- c. Addition of lining and interfacing, lining is an additional layer on the inside of the garment that is usually made of lightweight, soft and slippery material. Its function is to improve the comfort, aesthetics, and durability of the garment.[12]. The addition of this lining will prevent friction between the main material and the skin so that it is safe to be applied to children's clothing. Interfacing and interlining are two types of lining materials used in making clothes to add structure, stability, or comfort. The addition of interfacing to clothing serves to strengthen the fibers and structure of the fabric, such as on the collar cuffs, or buttons. [13]. The application of interfacing is highly recommended in endek fabrics in addition to strengthening the fibers by increasing fiber density, interlining is also able to prevent endek from wrinkling easily. The installation of interfacing is done by attaching the interfacing to the main material by ironing.

Conclusion

Children's fashion in Indonesia is still underutilized by local brands even though the market potential is large, as imported products still dominate the market. On the other hand, children's clothing has a faster production cycle than adult clothing, so it requires special production techniques, including in the sewing process. Local brands of children's fashion to be able to compete globally need to improve quality by fulfilling the main criteria of children's fashion which include safety, comfort, durability, accuracy of size, and cultural sensitivity. Children's fashion is classified based on age, gender, and occasion of use, such as play fashion, school fashion, and party fashion. The utilization of traditional fabrics will certainly be a uniqueness for local brands of children's fashion, as well as a form of early cultural introduction and adaptation. One of the traditional fabrics that can be utilized is Endek fabric. Endek fabric as a Balinese cultural heritage is unique in terms of motifs and weaving techniques. The use of endek fabric in children's fashion faces challenges in pattern cutting techniques that maintain the integrity of the motif as well as the use of interfacing and lining to increase the comfort and durability of clothing, especially for sensitive children's skin. This research is integrating traditional Balinese Endek textiles into children's fashion by offering an unique approach to preserving cultural heritage while meeting modern demands.

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