



INNOVATIVE KIDSWEAR DESIGN: A STUDY ON DETACHABLE CLOTHING FOR INFANTS

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ABSTRACT

The Little Laughter Land: A Carnival-Themed Collection for Infants project investigates how contemporary infant clothes combine sustainability, practicality, and artistic design. This research presents a collection inspired by the cheerful aesthetics of carnivals in response to parents' increasing need for clothing that combines safety, comfort, and convenience. Over the course of six months, the study used a qualitative, design-based process that included customer testing, material selection, prototype fabrication, and literature evaluation. In order to improve usage and flexibility to various activities, weather conditions, and situations, the collection incorporates detachable and modular components, such as changeable collars, bibs, and sleeves, based on color psychology and sensory design concepts. Soft, eco-friendly cotton textiles are strongly preferred, according to survey results from 64 respondents, who also highlight how important ease of dressing is when designing baby clothes. The results show that by increasing garment lifespan and decreasing waste, modular baby clothes not only enhance functionality and user happiness but also support environmental sustainability. In the end, Little Laughter Land redefines baby clothing by combining amusing aesthetics with useful innovation, demonstrating the possibility of user-centered, environmentally conscientious design to satisfy the changing needs of modern families.

KEYWORDS : Carnival, Celebration, Vibrant Colors, Comfort, Playful, Easy Dressing, Detachable Design.

1. INTRODUCTION

In order to satisfy the demands of contemporary families, the infant clothes business now focuses on combining comfort, practicality, and originality. In addition to being fashionable and sustainable, parents look for clothing that guarantees their infant's safety, use, and flexibility. A creative design project called Little Laughter Land: A Carnival-Themed Collection for Infants was created to meet these expectations by offering unique, removable clothing options that draw inspiration from the cheerful spirit of carnival aesthetics.

1.1 Theme Description

This collection's main inspiration is the carnival theme, which stands for happiness, celebration, and the lively energy of children. Carnivals are renowned for their vibrant hues, vibrant patterns, whimsical designs, and joyous atmosphere—all of which capture the purity and joy of childhood. By turning common baby clothes into expressive, whimsical items that evoke the excitement and energy of a carnival, this concept gives the collection an imaginative and emotional connection. Little Laughter Land seeks to provide a happy visual and tactile experience while stimulating a baby's senses via the use of color psychology, soft textures, and imaginative patterns.

1.2 Problem Statement

Many parents still have practical difficulties while clothing their infants, despite advances in children's fashion. Tight neck holes, several buttons, and intricate fasteners are common features of traditional baby clothes, which make dressing and undressing unpleasant and time-consuming. Rigid designs may irritate or create discomfort during use and diaper changes since babies move around a lot. Detachable, user-friendly clothing that makes dressing easier while preserving softness and safety is obviously needed. By creating detachable apparel with diaper snaps and modular components like detachable collars, bibs, and sleeves, this study tackles this issue and enables parents to easily modify clothes according on activity, weather, or occasion.

1.3 Category

The initiative focuses on infants (0–12 months), a critical developmental time where functionality, safety, and comfort are paramount. Babies at this age have sensitive skin, restricted movement, and unique clothing requirements that call for materials that are soft, breathable, and non-restrictive. Little Laughter Land's detachable designs are tailored to this age range, making sure that clothes are as comfortable as possible while making it easier for caretakers to get dressed. By combining practical innovation with theme-based design, the project seeks to reimagine newborn clothes, producing items that are secure, cozy, eco-friendly, and emotionally appealing.



2. LITERATURE REVIEW

2.1 The idea of carnival has long been recognized as a cultural phenomenon symbolizing freedom, joy, and artistic expression. In modern society, the concept of the “entertainment carnival” reflects how festivals and celebratory spaces have evolved into influential cultural industries that connect people through collective enjoyment and symbolic meaning. Scholars such as Adorno and Horkheimer (as cited by Wang & Zhang, 2020) interpret the entertainment industry as both a source of creativity and a system of mass consumption. Their philosophical critique highlights how carnival culture, with its blend of spectacle and social performance, continues to influence the global creative economy, inspiring designers to integrate cultural narratives into modern aesthetics.

2.2 Cremona (2016) explored carnival costumes from Malta during the British colonial period (1800–1964), emphasizing how clothing acted as a performative medium. Her research revealed that carnival attire not only represented amusement but also became a subtle commentary on identity, power, and class distinctions. Through the evolution of these costumes, individuals expressed resistance, aspiration, and cultural belonging. This study demonstrates how costume design can reflect deeper social structures while maintaining its celebratory function—an idea relevant to children’s wear, where clothing often embodies imagination and identity.

2.3 Similarly, ethnographic research on Croatian carnival traditions (Narodna umjetnost, 2007) examined how ancient rituals, masks, and performances preserved the essence of communal celebration. The study connected carnival practices with early Christian festivals, showing how symbolic costumes and playful behavior allowed temporary liberation from societal norms. Such traditions underline the enduring connection between costume design, emotion, and social interaction—principles that continue to inspire contemporary designers to balance functionality with expressive aesthetics.

2.4 Persad et al. (2018) conducted a qualitative study on the elaborate Kings of Carnival costumes of Trinidad and Tobago, focusing on the engineering and design challenges encountered by creators. The findings revealed that traditional methods often ignored ergonomic and mechanical aspects, resulting in discomfort and instability. The authors recommended modular design frameworks and greater integration of engineering principles to improve safety and usability. This approach parallels the current movement in children’s clothing design toward modularity, adaptability, and user-friendly construction.

2.5 Overall, the reviewed literature highlights the cultural, functional, and emotional dimensions of costume and clothing design. From historical carnival studies to modern design practices, scholars emphasize creativity, performativity, and comfort as essential components. These insights inform the development of Little Laughter Land, where the playful spirit of carnival is reinterpreted through sustainable materials, detachable features, and child-centered design thinking.

3. METHODOLOGY

This study uses a design-based, qualitative research methodology to examine newborn detachable apparel with a carnival theme. To ensure methodical progress and development, the process is divided into multiple stages over a period of six months.

During the first month, a comprehensive assessment of the literature was conducted to explore the body of knowledge regarding baby clothing, detachable design, and sustainable fashion. This initial stage was essential for comprehending the state of infant wear today and pinpointing research gaps that could be filled.

Purchasing materials took up the second month, with an emphasis on choosing breathable, soft textiles suitable for babies. At the same time, the design development phase started, during which time clothing influenced by the carnival concept outlined in the project’s goals was sketched.

The third and fourth months were devoted to choosing fabrics and making clothing. This phase was crucial since it included creating prototypes using the chosen materials, which included detachable parts like bibs, collars, and sleeves to improve functionality and versatility.

The prototypes were put through extensive testing in the fifth month, which included fit and comfort tests to gauge their usefulness. Data analysis and evaluation were also included in this phase to improve the design and make sure it achieved the desired functional and comfort objectives.

In order to properly document the complete approach and results, the last month was devoted to gathering the research findings and drafting the report. A thorough investigation of the suggested design concept was made possible by this methodical approach, which allowed for a balanced focus on originality, comfort, and functionality throughout the project.



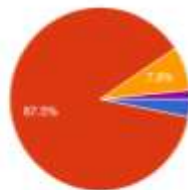
S.No	Task	Month 1	Month 2	Month 3	Month4	Month5
1	Literature Review	✓	✓			
2	Sample Preparation		✓			
3	Garments Construction			✓		
4	Consumer/Wearer Trials			✓	✓	
5	Data Analysis				✓	
6	Report Writing				✓	✓

Table 1: Structural Framework of The Study

4.RESULT AND DISCUSSION

4.1 Survey Analysis

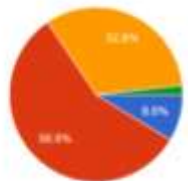
Age Group
64 responses



Gender:
64 responses



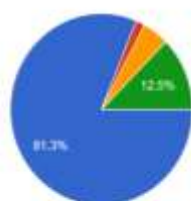
Your role or relation to infants
58 responses



Which types of clothes are most practical and cute for infants?
64 responses

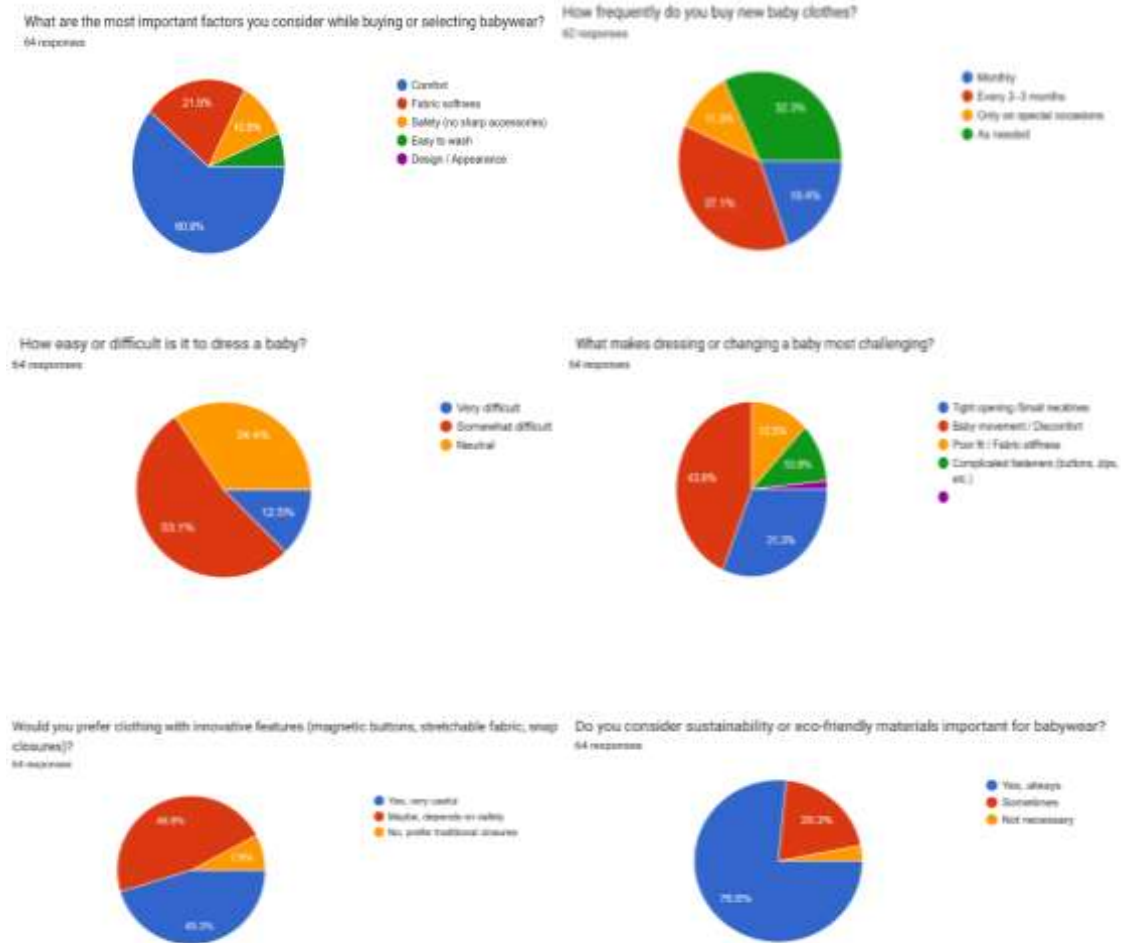


Which types of fabrics do you find most suitable for infants?
64 responses



What kind of prints or patterns do you think suit the carnival theme for babies?
64 responses





In order to uncover important customer requests and operational pain points in the context of infant clothes, a market survey of 64 respondents mostly young gift-givers (87.5% aged 18–25) was carried out. The market clearly demands safe, sustainable cotton-based materials, as evidenced by the results (81.3% preference for cotton, 96.9% considering sustainability crucial). Functional qualities are highly valued by buyers, particularly comfort (60.9%) and fabric softness (21.9%). The most popular garment style for practicality is the shorts and t-shirt combo (39.1%). Crucially, this study reveals a significant usability problem: 65.6% of respondents report having trouble dressing a baby, with tight openings (31.3%) and baby movement/discomfort (43.8%) being the main problems. Safety is the primary need for adoption, even though there is a significant willingness to accept innovative closures (92.2%). In general, product development should concentrate on safe, incredibly comfortable materials and use design ideas that immediately reduce the friction involved in dressing a mobile newborn, such as bigger openings and proven novel closures.



4.2 Design Development



4.3 Flat Sketch



FLAT SKETCH



FLAT SKETCH





5. CONCLUSION

The Little Laughter Land project serves as an example of how to incorporate sustainability, practical innovation, and creative design thinking into baby clothing. It presents a novel strategy that prioritizes flexibility, comfort, and convenience of dressing while upholding safety by integrating removable and modular parts like collars, bibs, and sleeves. The emphasis on tactile and color psychology strengthens the sensory interaction between the clothing and its user, while the carnival-inspired concept captures the delight of early infancy. The importance of user-centered design in newborn wear is shown by market survey results that show rising customer desire for eco-friendly and practical textiles. By increasing garment utility and lowering textile waste, the detachable features support sustainable design by addressing the difficulties parents encounter while clothing babies and controlling temperature. This study emphasizes the need for future baby clothes design to balance environmental awareness, creativity, and practicality. This balance is demonstrated by the Little Laughter Land project, which offers a clothing solution that satisfies contemporary families' utilitarian and emotional demands. To improve the idea for commercial application, further research may look into scalability, sophisticated closure mechanisms, and user feedback.

6. REFERENCES

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