






Sustainable Fashion—Positioning a Baby Clothing Brand

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Abstract. The fashion industry is one of the most polluting sectors worldwide, impacting negatively not only the planet but also human health. In this sense, consumers have shown greater interest in more sustainable alternatives, and brands have used sustainability as a factor of differentiation. This attribute alone does not guarantee an irresistible brand, which raises the research question: “How to position, in the fashion market, a sustainable baby clothing brand (0–24 months), which does not use toxic substances in the manufacture of its products?”. To answer this question and determine the main characteristics of a sustainable baby clothing brand, qualitative research was carried out. This work seeks, through the analysis of fourteen baby clothing brands within the premises of sustainability to create guidelines for the development of an appealing brand. The work highlights that rather than focusing on materials, finishing processes or innovative technologies, these brands should focus on aligning their business strategies with marketing strategies, and in promoting an emotional relationship with their consumers. These results can help entrepreneurs who want to position themselves in the sustainable children’s fashion market.

Keywords: Sustainability · Baby clothing · Branding · Sustainable brand · Fashion market

1 Introduction

The fashion industry is one of the most polluting sectors worldwide, increasingly exposing significant health consequences (Niinimäki et al. 2020). The increasing impact of the fashion industry, which has improved the pace of consumption and disposal of products, has led to a proliferation of negative environmental, ethical and social effects, and several initiatives to steer the fashion industry towards a more sustainable path (Petersen and Riisberg 2017). Many entities see sustainability as an opportunity and several authors point circular economy and multifunctionality as strategies to achieve it (Silva 2018; Jalil and Shaharuddin 2019, 2020).

In addition to concerns about the environment, consumers increasingly prioritize hygiene and protection, and lean towards products with functional properties that enhance their wellbeing (Berry et al., 2020; Niinimäki, 2017). As far as children’s fashion is concerned these themes stand out; babies and children are more sensitive and

vulnerable users and therefore more susceptible to infections and pathologies (Cooke et al. 2018). Textiles can influence their physical and mental health (Shaharuddin and Jalil 2021a). In addition to the significant impacts on the ecosystem caused by using toxic chemicals in the manufacturing, confection and dyeing processes of garments, children's permanent contact with these substances leads to respiratory, digestive and/or dermatological pathologies (Berry et al. 2020). One of the organs that require more care is the skin; since the contact of textiles with the skin is constant, clothing can have a great influence on the epidermal state. (Skodova et al. 2020).

According to literature, sustainability is not only beneficial for the environment, but also for the health of babies. In addition to pollution being directly linked to health, the non-use of toxic products in clothing follows a positive vision of sustainable consumption (Berry et al. 2020). The implementation of baby clothing brands with sustainable concerns could have an impact on the skin and health of users.

In recent years there has been an increase in consumer interest in more sustainable alternatives. Although several authors point to a mismatch between consumer attitudes and behaviors and the actual purchase intention (Harris et al. 2016; Grubor et al. 2017), attributes such as sustainability are increasingly relevant to brands. The association of sustainable concerns with the action and image of a brand has become essential for its differentiation (Koszevska et al. 2020; Grubor et al. 2017).

A brand is a mixture of functional and emotional characteristic, with an intangible symbolic value (Grubor et al. 2017). It is a symbol of distinction and relevance that is presented in a linguistic, visual and sound form, giving identity and value to the product, while differentiating it from competitors (Gomez et al. 2011). Currently the main challenge for a company is the ability to create and maintain an irresistible brand, since it directly influences the purchase decision (idem, ibidem). Thus, the following research question was raised: "How to position, in the fashion market, a sustainable baby clothing brand (0–24 months), which does not use toxic substances in the manufacture of its products?".

To answer this question and determine the main characteristics that a sustainable baby clothing brand should have, qualitative research was carried out. This work seeks, through the analysis of fourteen baby clothing brands within the premises of sustainability, to create guidelines for the development of an appealing and differentiated brand. The article begins with a contextualization of the problem, followed by a theoretical review on *Sustainability in children's fashion, Strategies for sustainable fashion* (materials, finishes and business models) and *Positioning of a sustainable fashion brand*. The third section presents the methodology and data to be analyzed. Subsequently, the previously collected data are discussed and analyzed on *Discussion* and finally the conclusion, limitations and future research perspectives presented.

2 Literature Review

2.1 Sustainability in Children's Fashion

Designers, manufacturers, and consumers all play a leading role in the shift to a circular economy. Although knowledge, awareness and adaptation of all entities are fundamental, the validation and success of these changes will essentially depend on the attitudes

and behaviors of consumers (Koszevska et al. 2020). The term *sustainability* was formally used for the first time in the 1990s (Rizos et al. 2017). Although its definition has undergone some changes over the years, in the last decade it has been defined mainly by the physical and material resources of the economy. Sustainability focuses on reducing the primary consumption of resources, through recycling, reuse and waste improvement strategies, promoting products with different life cycles or biodegradable and encouraging their longevity (Niinimäki 2017; Henninger et al. 2021).

Although some political initiatives and impulses in the direction of consumers towards sustainable consumption are increasingly frequent, this task has manifested some challenges in changing consumer behavior (Francis and Sarangi 2022). With the emergence of the new coronavirus SARS-CoV-2, responsible for the Covid-19 disease, the economy was faced with numerous obstacles and many consumers began to rethink their current practices and evaluate their shopping habits, becoming increasingly aware of the environmental impact and excessive consumption (Henninger et al. 2021). The pandemic also highlighted the shortcomings of the linear system, not only at an environmental level but also socially and economically (Henninger et al. 2021; Severo et al. 2021). According to Francis and Sarangi (2022), society is more aware of the negative impacts of its consumption and a greater acceptance of ethical and sustainable fashion is remarkable.

However, the excessive consumption of children's clothing is not only reflected because of a linear model. The physical evolution of children is very accelerated (Bezerra et al. 2017), which causes a constant adaptation of clothing to the different stages of its development. To respond to this need, the proportion of children's clothing consumption is increasingly high for families (Zhang 2018). Most parents buy new items and discard old ones, resulting in wasted resources (Shaharuddin and Jalil 2021a). In addition, the consumption of clothing aimed at this target has great emotional value (Petersen and Riisberg 2017).

2.2 Sustainable Fashion Brand Strategies

The discourse on sustainability has increased (Ritch 2019). Consumers have a variety of associations with a particular brand, influencing their attitudes and consumption of the same (Kim and Oh 2020). In this way, many clothing brands have made efforts to adapt their values, implement marketing strategies and make their products more ecological, to have a more significant association with sustainability.

2.3 Textile Materials and Finishes

The choice of textile materials and finishes can be a strategy for sustainable fashion brands. Literature shows that materials are essential in the current understanding of what makes fashion and textiles sustainable (Fletcher 2016). According to Shaharuddin et al. (2021), sustainable materials must be strong, soft and compatible with other materials to protect babies' health. Many authors point out advantages in the use of natural fibers in children's clothing since synthetic fibers usually contain considerable amounts of petrochemicals that impact not only health, but also the environment (Berry et al. 2020; Shaharuddin et al. 2021). Regarding newborns, attention doubles; the touch and warmth

of the material are felt right after birth, so materials must be organic, natural and free from harmful chemicals (Shaharuddin et al. 2021).

Cotton is one of the most used fibers in baby clothing (Shaharuddin and Jalil 2021b). When pesticides and synthetic fertilizers are not used, as is the case with organic cotton, the benefits for the environment and the well-being of children amplify. Although cotton is widely used and recommended, other alternatives have been studied to make the materials more sustainable (Shaharuddin et al. 2021). Minimizing material diversity, as well as applying zero-waste design techniques and multifunctional design guidelines, promoting quality and durability, valuing natural resources, recycling, and reusing, can all be implemented towards sustainability (Fletcher 2016; Gardetti and Torres 2017; Aldalbahi et al. 2021).

A large part of the impacts caused on the environment and on the health of babies by the fashion industry comes from the processes used to provide certain qualities or performances to fabrics, namely in dyeing processes with synthetic dyes (Mohamoud and Andersen 2017; Tang et al. 2018; Svedman et al. 2019). Some studies report the use of natural products as non-harmful alternatives to conventional products (İşmal 2017). However, there are dye stability issues, which are often resolved with toxic auxiliary products (Pargai et al. 2020). For instance, the concentration of metal-based mordants is sometimes quite high, showing risks to health and the environment (Dutta et al. 2021).

Color is one of the main attributes of clothing, having a direct impact on child development and the consumption of clothing aimed at this target (Siu et al. 2017). Several research are being carried out to reduce environmental and health impacts in textile dyeing processes (İşmal 2017; Sid and El-Hawary 2019). The use of bio-mordants, surface modification (e.g., plasma treatment and UV irradiation) and microencapsulation can efficiently increase the stability of the functional properties of dye. (Pargai et al. 2020; Dutta et al. 2021).

It is estimated that two-thirds of the impact of textiles on the environment during their useful life is developed in the use phase, i.e., in the maintenance and washing processes (Fletcher 2014). The use of non-toxic products in the finishing phase would help to reduce the impacts caused by the release of substances and disposal of clothes into the environment. Baby clothes require a high number of washes, so maintenance and washing information strategies are also important to reduce impacts and increase the shelf life of products. Observing these activities, not as an obligation, but as part of the process, can increase consumer satisfaction and self-esteem, helping them to rethink, evaluate and change their habits (Miilunpalo and Räsänen 2019).

2.4 Business Models

Another type of strategies that can be implemented for a sustainable clothing brand can relate to the implementation of certain business models. The circular economy is a frequent topic in most businesses. Assumes an economy where tomorrow's resources are today's products (Niinimäki 2017), as opposed to the linear economy system (Koszevska et al. 2020).

Rizos et al. (2017) defined, based on the work of other authors, three main strategies for the circular economy: use of fewer primary resources; maintenance of high value of

materials and products; and changing usage patterns. In this way, there are several strategies that can be adopted by companies to implement the concept of circular economy in their business model, which can be subdivided by the production, use and disposal phase.

Regarding the way of handling, care and relationship, the phase of use of a product is the one with the least information available, both from the literature and consumers' point of view. According to Mugge et al. (2004), products that have services associated with them will allow greater knowledge of the consumer and monitoring of their needs. Niinimäki (2011) adds, further, that these services simultaneously postpone the early psychological obsolescence of the product, so strategies for extending the shelf life of the product are of great interest when chasing sustainability.

Updating and repairing services can promote the increase in the product's useful life, also requiring higher quality and durability production (Aakko and Niinimäki 2022). Rental services can also offer innovative consumer-product-brand relationships (Niinimäki, 2014). There has been a substantial growth of this practice in the textile and fashion area (Niinimäki, 2015). Reuse or second-hand sales are other strategies pointed out. On the one hand, brands maintain a more lasting relationship with their customers, and, on the other hand, they reach new markets. There are already several brands that collect their used products to sell second-hand. It is a key branding strategy for sustainability, as the brand shows its responsibility for the end-of-life of its products (Hvass, 2015).

Since the growth of babies is very fast and, consequently, their relationship with the product is very short, this type of strategy is very promising for sustainable baby fashion. Several brands already use baby clothes rental strategies, such as the American brands Grokinder, Rent a Romper and Upchoose, and the British brand Bundle¹. These brands offer monthly rental plans, the value of which depends on the number of pieces. The first two only work with their own pieces and the last two work with several brands, all of which are committed to high quality, organic products and have sustainability at the center of their business model.

2.5 Positioning of Sustainable Fashion Brands

Like textile materials and business models, brand positioning can be an important strategy for sustainability. Brands are, in general, powerful instruments of change, strongly connected to the consumer (Stanciu and Burghilea 2020). In this sense, strong sustainable brands with clear strategies are primarily responsible for implementing the concept of sustainability in society (Grubor and Milovanov 2017), while building a strong reputation in their niche (Stanciu and Burghilea 2020).

Building a sustainable brand takes time and a differentiated approach, just writing about sustainability is not enough (idem, ibidem). Transparency in business and processes is required, as well as clear and assertive communication (Grubor and Milovanov 2017). Therefore, the biggest challenge for marketers and brand managers is to create interest in consumers for a sustainable lifestyle in an easy, accessible, and attractive way (Stanciu and Burghilea 2020). To this end, marketing strategies must be aligned with

¹ More information about the brands in Fig. 1.

the company's vision, values and culture, while reflecting a deep understanding of the consumer and their needs. Brand strategies define its positioning, its value proposition and, consequently, the advantage over the competition (Gomez et al. 2011).

The positioning of a brand favors the creation of a differentiated image in the consumer's mind, in terms of the attributes and benefits of its offer and the value generated by it. A well-planned strategic positioning contributes to increasing purchase intent and decreasing price sensitivity, while retaining consumers (Bandyopadhyay and Ray 2020). Credible and better positioned brands are more inspiring and able to influence mass transformation. With the right strategy, sustainable brands will not only reach the most eco-friendly target, but a wider audience (Grubor and Milovanov 2017). Even so, the perception of an environmentally friendly brand is crucial for the success of a sustainable brand, since it is through the association of environmental concerns and social commitments with the consumer's own memories about the brand that a strong image is created (Loučanová et al. 2021).

Marketing strategies suitable for sustainable brands include areas such as: production, design, packaging, positioning and communication with the target market. According to Grubor and Milovanov (2017), concerns with the use of ecological materials, reducing carbon emissions, combating waste and educating consumers are some strategies that will considerably increase the purchase intention of a sustainable brand. Still, several studies show that differentiation based solely on product characteristics or economic, social and environmental concerns is not enough. These themes must also be transversal to the promotional message of the brands, taking care not to succumb to a vague or unclear message that confuses the consumer (Bandyopadhyay and Ray 2020).

3 Methodology

Qualitative research was conducted, between December 2021 and March 2022, to understand the main characteristics of a sustainable baby clothing brand to position itself assertively, credibly and appealingly in the fashion market. Initially, a detailed, selective and critical investigation of scientific articles was carried out, followed by content and image analysis (Bardin, 2002) of fourteen baby clothing brands within the premises of sustainability.

In order to understand commonalities between the brands, as well as the guidelines to create a sustainable baby clothing brand, five research indicators were developed to be analyzed on the brands' websites:

Positioning—observed through brand mission, vision, and values;

Visual Identity—interpreted through “image and style”: ‘simple’ when using a simplistic image, with essential and intuitive information, ‘organic’ referring to a harmonious environment, with low contrast of color and image, and ‘cheerful’ when strong colors and high contrast in the elements are used; “colors”: ‘soft’ when using colors with low intensity, ‘mid tones’ to medium intensity, and ‘strong’ to the stronger intensity and greater diversity; and “packaging” analysis of the types of materials used;

Strategies—observed through the actions developed by each brand to promote sustainability and consumer relationships, such as recycling, using clothing donations, magazines, blogs and social media (followers on Instagram);

Products—analysis of fibers and textile dyes used in a sustainable approach;

Business Model—analysis of the type of store: online and/or physical; responsibility for the product: sale, rental, take back, recycling, donation; certifications and awards.

After interpreting the results, this information was cross-referenced with the previous literature review, to answer the research question. Finally, conclusions and directions for future research were presented.

4 Results and Discussion

After an intensive search for sustainable baby clothing brands, fourteen brands were selected and analyzed according to their positioning, visual identity, strategies and product characteristics (Fig. 1), as well as business model (Fig. 2).

In a first contact with any of the fourteen brands, sustainability becomes evident as an integral part of their DNA. According to Petersen and Riisberg (2017) this is determinant for consumer satisfaction since sustainability results more from the perception of the service or product than from the product itself. For instance, factors such as social and ethical responsibility stimulate a better response from customer towards a brand, than price or quality itself.

For all the brands presented their differentiating factor is the product, and one of their main marketing strategies. As it can be observed on the previous tables, this brands mainly use natural fibers and organic materials on their products, with six of the fourteen also using natural dyeing and free of toxic products. After analyzing brands' collections, we can observe that these sustainable products not only offer the answer to environmental or ethical concerns, but also bring together design features and high quality, characteristics valued by the consumer as pointed before by Bandyopadhyay and Ray (2020). The *Mini Rodini* brand stands out, with a colorful and fun collection, contrasting the pastel palette of the others.

Despite consumers' high skepticism regarding certifications, which apparently have minimal impact on purchasing influence (Bandyopadhyay and Ray 2020), most of these brands (nine out of fourteen) not only have certifications (e.g., GOTS and OEKOTEX) as highlights them on their channels.

Authors, such as Bandyopadhyay and Ray (2020), warn that communicating only positive aspects from an environmental point of view can create a negative image of the brand in the mind of consumers. However, these brands do not just share the characteristics of their products, they also share, for instance, strategies for extending their life and waste reduction, practical models of their social and ethical commitment, such as contribution to salary enhancement programs, or appreciation of work conditions. Aspects valued by the consumer, according to the same authors.

Ten of the fourteen brands have a blog, which is crucial for relationship's strengthening between brand and consumer, especially considering that only two of them have a physical store. With strategic marketing plans, these channels, as well as social media, can on the one hand be the key to encouraging sustainable behaviors and lifestyles (Stanciu and Burghilea 2020), and on the other have a great influence on online purchase (Dubbeldink et al. 2021).

Brands	Positioning		Visual Identity		Strategies		Products	
	Values / Vision / Mission	Image / Style	Colors	Packaging	Instagram (followers)	Others	Fibers	Textile dyes
Merino Kids www.merinkids.co.uk	Making a difference in families with babies. Security, functionality, and innovation.	Simple, organic	Soft	No plastic and environmentally conscious	6,092	Informative blog, with upcycling suggestions	Merino wool; Other natural fibers	GOTS approved and OEKO-TEX certified dyes
Pop My Way www.popmyway.co.uk	Caring for the planet and people, ensuring children are safe from harmful products	Simple, organic	Soft		7,162	Waste reduction using excess textiles in accessories; Vegan	Organic pima cotton	
Newble www.newblestore.com	Love and affection for the future of newborns	Simple, organic	Soft		289,000	Annual sustainability report (KappaAid Group); Informative blog	Cellulosic fibers, recycled and organic fibers	
Mori www.babymori.com	Enjoy every moment and welcome the baby into the world	Simple, organic	Soft		174,000	Informative blog; <i>Kindness project</i> – donating unwanted clothes to the institution; Receive credits for donating branded clothing	Organic cotton, bamboo	
Mini Rodini www.minirodini.com	Appealing clothing for children without compromising the environment	Simple, cheerful	Strong		358,000	Upcycling collection; Minimum wage program; Member of the Svenska chemical group; BIO-NIC-FINISH ECO® finish	Organic cotton and wool; ecoyarn; recycled polyester; tencel	Recipes in safety data sheets;
Sanna Studios www.sannastudios.co	Intention to buy less but better	Simple, organic	Soft	Preference for recycled and compostable materials	8,094	Gift card; Informative blog	Organic cotton and wool	No dyes; Natural or OEKO-TEX certified dyes
Sustain By Kat www.sustainbykat.com	Highlight quality and timeless products. Awareness of health and environment	Simple, organic	Mid tones		7,837	Informative blog	Organic and natural fibers	Natural dyes with Ayurveda process
Illoora The Label www.illoorathelabel.com	Honor the planet and the manufacturers. Create heirloom pieces	Simple, organic	Soft		47,700	Blog with narratives of a mother	Natural fibers	Non-toxic or natural dyes
Kateston www.katehudson.com	Giving babies products that sustainably use natural resources	Simple, cheerful	Mid tones		970	Blog; Artisanal processes	Organic cotton	Natural dyes with Ayurveda process
Grokinder www.grokinder.com	Babies are born, but clothes are not. Promoting a circular economy	Simple, cheerful	Soft		1,417	Capsule wardrobe; Clothing recycling	Sustainable materials	
Rent A Romper www.rentaromper.com	Make parents' lives easier and lessen the impact of the fashion industry	Simple, cheerful	Strong	Compostable shipping kit	6,066	Capsule wardrobe; Clothing donation; Blog	Sustainable materials	
Upcloose www.upcloose.com	Uncomplicate, save and enjoy baby's time more	Simple, cheerful	Mid tones	Reusable packaging	11,300	Selection of favorite clothes; Blog	Organic materials; Organic cotton	
Suprisly www.suprisly.com	Giving the best for babies and being part of their development	Simple, cheerful	Strong	Recycled materials	288	Monthly surprise with baby development-friendly clothing box; Clothing donation to children in need	Organic materials; Organic cotton	
Bandlee www.bandlee.co.uk	Facilitate integration into sustainable fashion, create a better future for children	Simple, cheerful	Strong		11,300	Ecological ozone cleaning method; Blog; Capsule wardrobe	Organic materials	

Information on the main page of website

Fig. 1. Analysis of baby clothing brands according to their positioning, visual identity, strategies, and products.

Brands	Business models						
	Online store	Physical store	Rental	Take back (donations, recycling)	Second hand sale	Certifications	Awards
Merino Kids	X					X	X
Pop My Way	X					X	
Newbie	X	X				X	X
Mori	X			X			
Mini Rodini	X	X				X	
Sunna Studios	X					X	
Sustain By Kat	X					X	
Illoura The Label	X						
Kateson	X					X	
Grokinder	X		X	X			
Rent A Romper	X		X	X			
Upchoose	X		X	X			
Surprisly	X			X		X	
Bundlee	X		X	X		X	

Fig. 2. Analysis of baby clothing brands according to their business model.

To promote sustainable brands, companies should focus on improving consumers' perception of their organization's innovation and sustainable commitment, while proposing the involvement of stakeholders (Loučanová et al. 2021). This became evident when these brands highlight their communication with their partners, both on the website as in social media, sharing annual impact reports, as is the case of the *Newbie* brand.

Another example on how important it is the relationship between stakeholders and how valuable it is to be aligned in the same sustainable practices, can be seen through the services brands *Upchoose* and *Bundlee*. These brands offer the rental of clothing from other sustainable brands. In fact, this business model is pointed out, by several authors, of being of special interest to clothing brands with limited "use potential", as is the case of babies and small children, for whom the clothes stop fitting very quickly. When sustainability is at the heart of brands and companies' DNA, these models become even more relevant as they allow a reduction of around 80% in consumption (Petersen and Riisberg 2017). Still, despite seeming obvious and simple, applying this model is challenging, and there are even examples of several brands that did not survive the first years of business (idem, ibidem). The selection presented, *Grokinder*, *Rent a Romper*, *Upchoose* e *Bundlee*, do not represent a high universe (observed through the number of Instagram followers) when compared to the direct sales brands. On the other hand, sustainable rental and leasing services should be more concerned with the environmental impact resulting from the time of use, maintenance, and distribution. *Bundlee*, for instance, has a partner that sanitizes clothing with ozone, allowing the elimination of viruses and bacteria without the use of water.

While there are some solutions aimed at circularity, such as those presented above, it should be noted that most of these brands are not responsible for the end of life of their pieces, knowing that when an item is purchased and has a single user, its lifetime varies between one and three months, for baby clothes. Regarding the disposal of clothes, consumers only do it properly when they have the appropriate recycling containers close

by (Bandyopadhyay and Ray 2020). From these fourteen brands only three collect and donate their used clothes, two of which are rental brands. In this sense, it is also evident that none of these brands sell their products second-hand.

5 Conclusions

The time to change the way we consume is no longer today, it was yesterday. When we talk about clothing that at the time that is being designed already has reduced lifespan due to its inability to adapt to consumer's needs, the challenge for sustainable fashion is even greater. Therefore, this work concludes that to properly position a sustainable baby clothing brand (0–24 months) that does not use toxic products, rather than focusing on materials, finishing processes or innovative technologies, brands should focus on aligning their business strategies with marketing strategies.

This study is in line with the idea of Bandyopadhyay and Ray (2020) that environmental certifications for products and production are not as relevant when compared with real information on the impact of their consumption behavior. Strategies that show the customer their environmental footprint are of greater impact. In this sense, and just as Gomez et al. (2011) says, the innovation of brands and companies depends on their DNA. Only meaningful brands that establish emotional relationships with their audience will attract consumers who trust them and with whom they share their values and lifestyle. We corroborate Petersen and Riisberg (2017), sustainable fashion brands can indeed be a valuable tool for change.

Acknowledgements. This work is supported by the Ph.D. research grant with reference 2021.06351.BD, founded by the Portuguese Foundation for Science and Technology (FCT), Ph.D. incentive grant - BID/ICI-FAL/Santander Universidades -UBI/2021 and also by the Project UID/CTM/00264/2021 of 2C2T – Centre for Textile Science and Technology, founded by National Funds through FCT/MCTES.



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NORTE2020



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