

Textile design as a critical leverage to achieve a more sustainable fashion.

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Structured Abstract

Background scientific research: Sustainability is one of the most repeated words in the Fashion industry, being a core topic of many textile and fashion events (Copenhagen Fashion Summit 2020, Sourcing Journal Summit R/Evolution 2020, Texworld USA 2020, Première Vision 2020, etc.), and at the centre of the Fashion Industry's Agenda in 2020 (Ley et al., 2020). One year after the Fashion Pact of 2019 and two after the Fashion Industry Charter for Climate Action of 2018, the most important (in terms of production and revenue) brands, retailers, and organizations are joining forces to collaborate to reduce the negative perceived impact of the fashion industry as a whole, as it is said to be the second most polluting after the petroleum one (European Commission, 2020). The textile industry means an important part of this value chain, and we could say that is a growing and sophisticated business with a fragmented and relative low-tech production system. Its tradition roots 200 years ago, but the innovation processes have been addressed to quality processes in the last 50-60 years, to health and safety product's control over the last 10-15 years, and barely in recent 5-6 years towards sustainability.

As up to 80% of product's environmental impact are determined at the design phase (European Commission, 2020), in this paper we will present the results of a research we are carrying out with the Design Departments of some Textile Companies working for fashion brands.

Many scholars have written about the textile industry and sustainable development (Paraschiv, Tudor, & Petrariu, 2015) and their role in the apparel industry (Ahmad, Miskon, Alabdan, & Tlili, 2020; Xu, Liu, & Yang, 2018), but we have not found specific academic literature about how textile design contributes to sustainability in fashion. Sometimes, research in the field of design is more focused on fashion design itself than in textile and fabrics, being textile design almost unnoticed for fashion consumers.

However, big retailers and brands are working to meet the requirements that transparency claims of society imposes. One of these steps is the disclosure of the information regarding the suppliers throughout the whole value chain. Kering Group, Stella McCartney, and Patagonia (to name only a few) have made public the names of the most relevant suppliers since many years. H&M (Hennes & Mauritz AB) began to disclose in 2019 additional details on materials used in garments and the factories they come from. These, and other actions pushed H&M to the number one of the top 10 of the Fashion Transparency Index 2020 with 73% score of transparency, after having occupied third or fourth positions in the “podium” for the last three years with scores up from 48% to 61% (Fashion Revolution, 2020).

In this paper we have analysed how design departments of 6 textile Portuguese and Spanish Companies and 5 Indian and Bangladeshi companies address sustainability goals, and what Spanish and Bangladeshi fashion consumers know and expect from the textile producers of their garments related to sustainability. There are significantly different results comparing Iberian Peninsula and Bangladeshi-Indian companies, but very similar in terms of consumers.

Description and methodology: The question of study is how design departments of textile companies can contribute to a more sustainable fashion and how can they directly interact with fashion consumers. This paper intends to fill the gap arising some aspects to be developed in further research projects. Its content is related to SDGs 9 and 12, among others.

Regarding the companies, the methodology used is based on secondary research, through the state of the art in the academic conversation and the information disclosed by the 11 companies on their websites; and primary research through the analysis of the questionnaires sent to these companies. Regarding the fashion consumers, we have done primary research with a survey answered by more than 400 people (373 Spanish and 34 Bangladeshi) about the knowledge they have yet, and what they would like to know about the textile providers of their favourite brands. We have selected companies from both different NACE Classification (National Classification of Economic Activities) and sales revenue and relevance in Spain: 13.20 Weaving of textiles, position 1; 46.41 Wholesale of textiles, position 25; 13.91 Manufacture of Knitted and crocheted

fabrics, position 40; 64.20 Activities of holding companies, position 770; and 46.42 wholesale of clothing and footwear, position 937 (this class is pioneered by Inditex). The revenues of these Spanish companies varied from €2Million to €95.4Million in 2019. Riopete Textiles in Portugal had an annual revenue in 2019 of €75.74Million. The Indian and Bangladeshi manufacturers are different in size (from 200 to 12,500 workers), expertise (denim, cotton, dyeing and finishing, etc.), and revenues (from €2.91Million to €91.18 Million in 2019).

Summary of results achieved already or expected to be achieved demonstrating the relevance

of the research for theory and practice: From the results we have obtained until now, Iberian textile companies freely design an average of 90% of their products, including printing, colours, fabrics, finishing, etc., and 100% say that sustainability is a strategic objective of their companies. In Bangladeshi and Indian companies more than 80% of their designs follow buyers' requests, and 100% say that sustainability is a strategic objective. According to these results, Iberian textile companies are who offer the brands their fabrics, being the design department of the textile company 100% free to choose the composition and blends of the fabrics and textiles that they sell. As textile companies reflect that sustainability is one of their strategic objectives and 100% of their customers (brands) are more committed to sustainability than before, the design departments of Iberian textile companies have a great potential to mobilize the market. In the case of Bangladeshi and Indian companies, they cannot freely design the textiles and only 40% can freely choose the composition of blends of their textiles. They work under the orders' pressure of the brands. In this case, the brands lead the change towards a more sustainable production. Some of the brands to whom our companies surveyed sell are: Inditex, Mango, Cortefiel, Pepe Jeans, Esprit, C&A, Marks&Spencer, VF Corporation, Chanel, Armani, Desigual, Adolfo Domínguez, Valentino, Wallmart, Aeropostale, Target, Uniqlo, GAP, Calvin Klein, Guess, DKNY, Levi's, etc.

The productions processes' priorities of the textile department of Iberian companies are related to the reducing of consumption (energy, water, chemicals), the increasing of renewable energies and the technological innovation. The Bengali and Indian companies don't have as priorities the objectives aforementioned: only 20% consider them especially important or have the power to make decisions in this sense.

80% of the textile companies' design departments receive training related to sustainability, both in Bengali and Iberian companies, and 80% in Bengali and 100% in Iberian are interested in getting more knowledge about it. It is important to devise material and specific fora to continue to train textile designers to face this challenge.

At the same time, textile companies are B2B, and they don't engage directly with general fashion consumers. Visiting the websites of the textile companies analysed, there is no specific content addressed to general public, it is difficult to find the names of the buyers, and there is no or scarce activity in social media.

It contrasts with the preliminary results from the questionnaires sent to general fashion consumers (both Iberian and Bengali). They show that 88% of people surveyed would like to know which are the textile providers of the garments they buy; 61% say they don't remember any brand explaining something related to the textile processes of their apparels; the main channels brands use to explain about textiles (according to the surveys) are: social media video, website and labels.

The main findings are the difference of the percentage of own design in Iberian or Bengali textile companies; the difference of priorities in addressing sustainable processes; the equal need for achieving sustainability, and the need for training in both cases. Regarding to consumers, the need of approaching general fashion consumers to textile companies and vice-versa, via different communication channels, both in Iberian Peninsula, and in Bangladesh-India.

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