

Lei Shen
Muhammad Hussnain Sethi* 

Jiangnan University,
School of Design,
Wuxi, Jiangsu, China,
* e-mail: Sethi@stu.jiangnan.edu.cn,
e-mail: SI999@jiangnan.edu.cn,
e-mail: Hussnainsethi@yahoo.com

Sustainable Fashion and Young Fashion Designers: Are Fashion Schools Teaching Sustainability?

DOI: 10.5604/01.3001.0014.8036

Abstract

The fashion industry is one of the major polluting industries globally, and it has become a hot topic of debate. Thousands of people participate in climate change marches and attend seminars worldwide, but sadly most of them usually wear fast fashion products due to the lack of awareness. This pilot research investigates how well freshly graduated fashion designers know sustainable textiles and fashion as fashion designers are the ones who lead the fashion industry. We used a qualitative research method, and focus group discussion was applied for data collection. Twenty-four freshly graduated fashion designers from China, India, Bangladesh, and Pakistan participated in this research. The focus group discussions were conducted in Shanghai, China. Topics were divided into three categories: (a) fast fashion, recycling & upcycling, (b) zero-waste fashion, and (c) eco-friendly fibres. Findings disclosed that the participants were well-aware of techniques like fashion illustration, pattern-making, and draping but comparatively uninformed about sustainable fashion. They were familiar with the term „sustainable fashion” but completely unaware of details and their sustainability responsibilities. Suggestions to rectify this important issue are provided in this study.

Key words: sustainable fashion, design education, fashion designers, fashion industry, textile industry.

Introduction

The rise in population and fall in natural resources is becoming a significant issue worldwide. A move towards sustainability does not seem to be a decision but a need of the moment. However, most of us are not living environmental-friendly lives, and there are various reasons for this. Some of us are basically unaware of the environmental crisis, while others do not consider that the environmental problems are the fault of human actions [1]. Sustainability-oriented changes involve making deliberate changes to the attitude and values of an organisation, as well as to its practices and products [2]. Many industries have taken steps towards sustainability and trying to play their role in the betterment of the planet Earth, while, on the other hand, the fashion industry is yet to take significant steps towards sustainability. Due to increasing environmental awareness in consumers, sustainability has become extremely important for the fashion industry [3]. Over the years the debate to make the fashion industry more sustainable has increased, but, unfortunately, sustainability efforts have decreased. Fast fashion is a significant reason for this decline because fast fashion retailers like Zara and H&M introduce trendy, inexpensive, and low-quality products 52 times a year. The fashion industry is responsible for massive carbon and greenhouse gas emissions. The consumption of water is another major is-

sue of the fashion industry, as the sector consumes over 79 trillion litres of water [4]. However, sustainable fashion is the central part of a slow fashion movement developed over the last couple of decades [5, 6]. According to the latest report, the question at the moment is no longer “what steps should the fashion industry take to improve sustainable practices, but rather when consumers will stop buying from the brands that don’t act responsibly towards sustainable fashion. The fashion industry can’t wait for the buyers to lead this movement, but fashion leaders will have to take bold steps to make this planet more environmental-friendly,” said a CEO of a sustainable fashion brand [7].

There are sustainable fashion brands in the market, and designers like Stella McCartney have rejected the usage of fur and leather in their designs [8]; but the prices of such brands are usually so high that most people, especially of the younger generations, cannot afford to acquire such products. The fashion industry started taking initiatives regarding sustainability two decades before. In 2004, Isabella Quehe launched the first ethical fashion show in Paris to raise awareness of ethical practices in the field of fashion design [9, 10]. The first eco-fashion week was launched by New York fashion week in 2009. In 2010, a sustainable fashion show was held at the London fashion week [10, 11]. However, the contribution rate is still

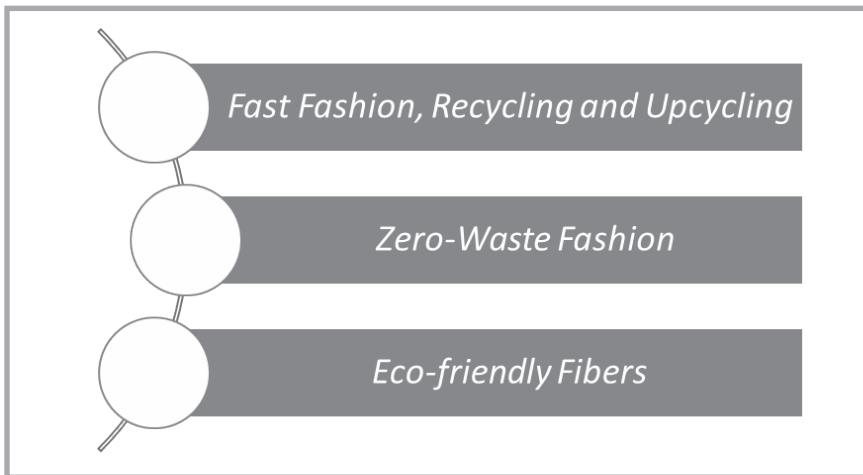


Figure 1. Three key topics.

not as high as it should be. The poor understanding of sustainability is the main reason for insufficient progress. The fashion industry is trying to meet consumers' requirements without considering next generations' needs.

The consumption of fashion is increasing massively every year, but education on sustainability issues lacks promotion [12, 13]. Lack of awareness of sustainability education in educational institutions has also been pointed out as one of the major reasons why different in-

dustries have not taken significant steps in the direction of their social, ethical, and environmental responsibilities [14-17]. Many studies have been conducted in the past to determine sustainability education in the curricula of different educational fields. Most educational institutions were found less devoted to sustainability courses, whereas some universities had added a few eco-friendly lectures in their course contents [17]. Students need to adopt deep learning if they want to understand sustainable practices [18].

Table 1. Background information of participants. Note: BS= Bachelor's Degree; CN= China; IND= India; BD= Bangladesh; PAK= Pakistan.

Interviewee code	Age	Gender	Marital status	Occupation	Nationality	Highest education
1A	24	Male	Unmarried	Masters student	CN	BS
2A	24	Female	Unmarried	Masters student	BD	BS
3A	24	Female	Unmarried	Masters student	CN	BS
4A	25	Male	Unmarried	Working as a designer	BD	BS
5A	25	Female	Unmarried	Working as a designer	IND	BS
6A	24	Female	Unmarried	Master's student	IND	BS
7A	24	Male	Unmarried	Master's student	PAK	BS
8A	24	Male	Unmarried	Master's student	PAK	BS
1B	23	Male	Unmarried	Master's student	IND	BS
2B	23	Male	Unmarried	Working as a designer	BD	BS
3B	22	Male	Unmarried	Working as a designer	PAK	BS
4B	22	Male	Unmarried	Master's student	CN	BS
5B	23	Male	Unmarried	Master's student	IND	BS
6B	22	Female	Unmarried	Master's student	IND	BS
7B	23	Female	Unmarried	Working as a designer	BD	BS
8B	22	Female	Unmarried	Working as a designer	PAK	BS
1C	23	Female	Unmarried	Master's student	CN	BS
2C	22	Male	Unmarried	Working as a designer	PAK	BS
3C	22	Male	Unmarried	Master's student	BD	BS
4C	22	Female	Unmarried	Master's student	IND	BS
5C	22	Female	Unmarried	Master's student	PAK	BS
6C	23	Female	Unmarried	Master's student	CN	BS
7C	23	Female	Unmarried	Working as a designer	CN	BS
8C	22	Male	Unmarried	Working as a designer	BD	BS

Fashion consumption and sustainable fashion seem to be two contradictory ideas. Due to the enormous growth in fashion consumption, the fashion industry is among the world's top 3 most polluting sectors. Our study's primary goal is to determine how well aware fashion designers are regarding sustainability as fashion designers are the leaders of the fashion industry, and they are the ones who can help towards sustainable development in the fashion industry.

Materials and methods

We developed two data collecting instruments: a questionnaire for focus group discussion and a participant background form. Three core topics were chosen for inclusion in the focus group discussion: (a) recycling and upcycling, (b) zero-waste fashion, and (c) eco-friendly fibres (Figure 1). The questions were developed carefully, and the first question about participants' interest in sustainability had to be answered by all the participants, which served as an icebreaker. The next must answered question asked was "whether they studied a specific course on sustainability or sustainable fashion during their bachelor's degrees in the fashion schools?" We developed transition questions for each topic, followed by other questions that explored further into each topic. The phrases "Climate change and the role of the fashion industry" and "Fast Fashion is a disaster" were used to note participants' reactions. We prepared ten questions about sustainable fashion to collect information about their knowledge[19]. Participants were also asked to provide their background details, such as age, marital status, income, educational qualifications other than fashion design and seminars, and other events related to sustainability they had attended. An application to conduct human subject research was written and approved by the School of Design, Jiangnan University, Wuxi, China. Five young fashion designers were selected to serve as a pilot group to pre-test the focus group discussion questionnaire. These participants were known to one of the researchers. Based on the pilot focus group discussion, the instruments were revised to simplify and explain the wording used.

Participants recruitment

A skilled volunteer assisted with the participants' selection using a purposeful sampling technique [20]. This vol-

unteer contacted fashion designers who had recently graduated from different fashion design schools of China, India, Bangladesh, and Pakistan and who were currently working with various fashion brands as fashion designers or pursuing postgraduate degrees at different universities in China. Potential participants were sent a letter explaining the aims and methodologies of the research and were requested to fill in a willingness form attached to the letter if they were interested participating. A total of twenty-four fashion designers currently working and studying in Shanghai or Jiangsu Province of China participated in the focus group discussion, including three groups of 8 fashion designers each.

Interview protocol and logistics

A member of our research team and his assistant were available on-site, and the focus group discussion was conducted on a Sunday at one of the famous hotels in Shanghai. This hotel had facilities like free parking, internet access, and refreshments. Each participant filled in the background information form. One of the researchers took notes during the focus group discussion sessions, each lasting almost 90 minutes.

Data analysis

Data were transcribed word by word by our researchers, and data analysis was the next step to identify the themes that emerged during the focus group discussions. In order to establish dependable interrater accuracy, both of the researchers separately collated data from the focus group discussion sessions. Trends within each theme were identified, and it was determined that saturation of the themes was achieved after three discussion sessions. For development of the participants' profiles, biographical data were collated.

Participants background information

Twenty-four participants from Pakistan, India, Bangladesh, and China participated in this research, all of whom were currently living or studying in China. Eight participants were selected from each country.

A total of three groups were made and assigned names (a) Alpha, (b) Bravo, and (c) Charlie. The Alpha group of participants was 24 to 25 years old, while those of the Bravo and Charlie groups were between 22 and 23 years old. Nine of

the participants were currently working as fashion designers, and fifteen were 1st year master's degree students, all of whom had completed their bachelor's degrees in 2019. Twelve of the master's degree students were scholarship holders, and three were self-financed students at different universities in China. The income of all working participants was 5000-7000 Chinese Yuan. Twelve of the participants were female and twelve male, all of whom were unmarried. A code was assigned to each participant.

Findings

Fast fashion, recycling and upcycling

Participants were asked to define "fast fashion" and "sustainable fashion" in their own words to determine their knowledge about these terminologies. Next, they were asked to explain the difference between "recycling" and "upcycling". 71% of the participants had no clear idea about the differences between both of these processes. Then, participants were asked how they think both of these processes can help to make fashion products more sustainable. Interestingly, only six of the fashion designers clearly explained this, and one of them stated, "It is the moral responsibility of fashion designers to slow down the pace of fast fashion, and to upgrade the quality of their products. People want to adopt products they are excited about; they don't purchase sustainability, so it's the responsibility of the fashion industry to smartly design those products in a more sustainable way that people are excited about. Indeed, the adoption of upcycling or recycling methods by top fashion retailers can be the breakthrough towards sustainable fashion" (3A).

Several participants commented, including, "I have a bit of knowledge about the recycling process, but I am not sure about upcycling" (2B).

Another participant uttered, "People want new and trendy clothes every three to four weeks, so I think it is challenging for the fashion industry to avoid fast fashion. The fashion industry is a billion dollar industry, and this move can be disastrous for their business, which is why fashion retailers are reluctant to take brave steps towards sustainability. However, the need of the hour is that the fashion industry should take the sensible step for the betterment of our planet" (1C).

Table 2. Focus group details.

Focus group name	Participants	Time
Alpha group	1A 2A 3A 4A 5A 6A 7A 8A	9:00 am-10:30 am
Bravo group	1B 2B 3B 4B 5B 6B 7B 8B	10:45 am-12:15 pm
Charlie group	1C 2C 3C 4C 5C 6C 7C 8C	1:30 pm-3:00 pm

Another participant commented, "I am tired of listening to these terms (sustainable fashion and upcycling), but the matter of fact is we were never taught sustainability during the bachelor's (degree). In fashion schools, we have too many assignments every week that we hardly get time to learn new things by ourselves. I hope we'll get a chance to research this topic during the master's degree" (3C). One participant added "Upcycling is a brilliant idea. It is worthwhile and meaningful. By promoting upcycled fashion, we can help our younger generations" (1A).

Zero-waste fashion

The second key topic was "Zero-Waste Fashion". Most of the participants were aware of this term, and it was agreed during all the focus group discussion sessions that participants learned about zero waste fashion during their undergraduate degrees, as one of the participants stated, "Since pattern making is the most important course in the field of fashion design, I think most of us are familiar with this very well. In Pakistan, we had an assignment and presentation on this topic" (8A).

She went on to explain that she had learned about zero-waste pattern-making while she was doing an internship during her studies. Another participant said that he had participated in a zero-waste pattern-making project with his thesis supervisor at university.

One of the young fashion designers in the focus group discussion who was working in the textile industry as a fashion designer said that the company where he was working manufactured zero water waste denim. He also explained the procedure of making zero water waste denim. He shared that, “The fashion or textile industry is taking water for granted, and it has become the second-largest water-consuming industry”. He continued, “One t-shirt consumes 2700 liters of water. Water is the most valuable natural resource, and all the living beings in the world need water to survive, so we should stop taking it for granted, otherwise our younger generations will have to suffer terrible consequences” (4A).

Eco-friendly fibres

Eco-friendly fibres was the third topic where participants needed to point out which fibres were considered more eco-friendly. Each Participant was asked to name the top 3 eco-friendly fibres. Most of them thought that natural fibres are more environmental-friendly, and they named three natural fibres, but when they were asked why they feel that natural fibres are more sustainable, most were unable to explain it in detail. One participant stated, “Natural fibres are more eco-friendly, as compared to man-made fibres, because they are made of plants and animals and are not harmful to the environment, but not all natural fibres are eco-friendly” (7B). When he was requested to provide some examples and more details, he repeated that his knowledge was quite limited in this area.

A few of the participants even confused natural and man-made fibres, and two of the participants thought that “Polyester is an eco-friendly fibre” (5C, 4B). When they heard others laughing at their statement, they tried to justify themselves, one of whom said:

“I think most of us might be more skilled in and familiar with subjects like fashion illustration, pattern making, draping, sewing, and even the history of costume, but we might not have enough information about technical textiles.” He presented the argument that “the job of a fashion designer is only to play with colours and designs and has nothing to do with fibres, technical textiles or sustainability” (4B). He added, “A yarn manufacturer plays with fibres, while a fashion designer plays with the design of an outfit, and

we usually choose the material that goes well with the design; it doesn't matter if it's artificial or natural”.

A participant claimed, “we studied natural and artificial fibres during the first semester of bachelor's degree.” He also mentioned the book name “fibre to fabric” (6C).

Overview

Almost all the participants were unanimous in believing that fashion designers and the fashion industry should take bold steps towards sustainability, but most of them were clueless about what kind of contributions they can offer, as one of them said: “I know that sustainability has become a necessity; I also know that plastic is harmful to nature; I have seen people posting so many things on social media regarding how plastic is damaging the environment, particularly the oceans, but I think this problem is with plastic bags, plastic bottles or other plastic products. What can we (fashion designers) do for sustainability? We just design clothes and other fashion products with available materials provided by textile engineers”.

In response to the question about how young fashion designers can contribute towards sustainable fashion, a well-informed participant commented, “Every industry, every business has social and ethical responsibilities, so being designers we also need to act responsibly, and we should design good quality products rather than low-quality inexpensive products because we are the trendsetters, and if we set these standards, consumers will have to buy our products” (4A).

Conclusions and limitations

This research work's main objective was the investigation of the awareness of sustainable fashion among freshly graduated fashion designers. It was found that 92% of the young designers were aware of concepts like fast fashion, recycling, and no-waste fashion, and most of them also had knowledge of natural fibres to some extent. However, their experience was insufficient. 58% of the designers had no idea about the difference between upcycling and recycling processes. 67% of participants were not familiar with the details and aspects of sustainability, while 83% did not know the responsibilities of a fashion designer towards sustainability. Participants said that they had not partaken of any specific course on “sustainable

fashion” during their studies; but some of them mentioned that they had had a few assignments related to sustainable fashion in their fashion schools. One can understand from the findings that practical courses like fashion illustration, sewing, draping, and pattern making are the main subjects in fashion schools. The biggest reason for the gap in knowledge of sustainability mentioned by participants was the lack of availability of course content in their fashion schools. It was stated that fashion schools in these countries are more focused on typical fashion design subjects.

Overall, the study disclosed the possession of insufficient information regarding sustainability by young fashion designers. The findings of this research work shed light that fashion schools are not taking steps for the better environment they need to make. It has become a necessity for this planet to educate students about the complex concept of sustainability; otherwise, the consequences could be devastating. It is also concluded that fresh graduates agreed that fashion schools need to redesign their scheme of studies and add a “sustainable fashion” course in their curricula. Furthermore, sustainability education should be given to all degree students regardless of their specialised field.

Limitations of our study included the limited number of countries, and the results may vary with participants of other Asian countries. We focused on fresh graduates because the objective of our study was to determine how well fashion designers learn about sustainable fashion in universities; but the findings may differ with experienced fashion designers with greater income and educational qualifications.

Funding

This research was funded by the China Scholarship Council, grant number 201806795029 and by “Ministry of education in China project of Humanities and Social Sciences, grant number 19YJC760096.

Conflict of interest

The authors declare no conflict of interest.

References

1. Batty D. Lack of Environmental Awareness is Still a Problem, but the Bigger Issue is Lack of Action, in *The Plaid Zebra*, 2017.

2. Adams R. et al. Sustainability-oriented Innovation: A Systematic Review. *International Journal of Management Reviews* 2016; 18(2): p. 180-205.
3. Shen B. Sustainable Fashion Supply Chain: Lessons from H&M. *Sustainability* 2014; 6(9): 6236-6249.
4. Niinimäki K, et al. The Environmental Price of Fast Fashion. *Nature Reviews Earth & Environment* 2020; 1(4): 189-200.
5. Carey L, Cervellon M-C. Ethical Fashion Dimensions: Pictorial and Auditory Depictions through three Cultural Perspectives. *Journal of Fashion Marketing and Management* 2014; 18(4): 483-506.
6. Henninger CE, Alevizou PJ, Oates CJ. What is sustainable fashion? *Journal of Fashion Marketing and Management: An International Journal* 2016; 20(4): 400-416.
7. Moore K. New Report Shows Sustainable Fashion Efforts are Decreasing, in Forbes. 2019.
8. Gentile V. Sustainable Fashion: A Paradox that Becomes Reality. Case study: Stella McCartney. 2020.
9. Guedes MdG. Ethical Fashion Brands: Promotion Approach or a Real Value. In International Conference of Fashion and Communication. 2011.
10. Lundblad L, Davies IA. The Values and Motivations Behind Sustainable Fashion Consumption. *Journal of Consumer Behaviour* 2016; 15(2): 149-162.
11. Striet CM, Davies IA. Sustainability Isn't Sexy: An Exploratory Study Into Luxury Fashion, In Sustainability In Fashion And Textiles: Values, Design, Production And Consumption. 2013, Greenleaf Publishing.
12. Perez A, Lonsdale MDS. Garment Label Design and Companion Information to Communicate Fashion Sustainability Issues to Young Consumers. *Visible Language* 2018; 52(3): 115-139.
13. Hermann RR, Bossle MB. Bringing an Entrepreneurial Focus to Sustainability Education: a Teaching Framework Based on Content Analysis. *Journal of Cleaner Production* 2020; 246: 119038.
14. Muldrow L, et al. Sustainability Infused Across the Curriculum at a Minority-Serving Liberal Arts Institution: A Case Study. *International Journal of Higher Education* 2019; 8(4): 1-9.
15. Velazquez L, Munguia N, Sanchez M. Deterring Sustainability in Higher Education Institutions: an Appraisal of the Factors which Influence Sustainability in Higher Education Institutions. *International Journal of Sustainability in Higher Education* 2005; 6(4): 383-391.
16. Abidin NZ, Pasquire CL. Delivering Sustainability through Value Management. *Engineering, Construction and Architectural Management*, 2005.
17. Malik MN, et al. Investigating Students' Sustainability Awareness and the Curriculum of Technology Education in Pakistan. *Sustainability* 2019; 11(9): 2651.
18. Warburton K. Deep Learning and Education for Sustainability. *International Journal of Sustainability in Higher Education* 2003; 4(1): 44-56.
19. Joshi A, et al. Likert scale: Explored and explained. *British Journal of Applied Science & Technology* 2015; 7(4): 396.
20. Morgan DL, Krueger RA. Analyzing And Reporting Focus Group Results 1998: Sage.

Received 03.02.2021 Reviewed 12.03.2021



6th Edition

SMS

Smart Materials and Surfaces
2021

SMS Conference and Exhibition

20 - 22 Oct. 2021 | Milan, Italy



The 9th International Conference of Applied Research on Textile & Materials

November 14-15, 2021

Full Paper Submission
JUNE 30, 2021

Abstract submission is still open
March 30, 2021

Conference POSTPONED to 2021



Springer

New Dates

November 14-15, 2021
Monastir- Tunisia



 ISET de Ksar Hellal-LGTex
Avenue Hadj Ali Soua, BP 68 Ksar-Hellal 5070, Tunisie.
  CIRATM-9

 cirat@atctex.org
  CIRAT-9 & Tun-Tex 3
  (+216) 52702207
(+216) 96398203