

# **Fashion Sustainability: Benefits of Using Sustainable Practices in Producing Sustainable Fashion Designs**

Sharifah Shafie<sup>a</sup>, Arasinah Kamis<sup>b</sup>, Muhamad Firdaus Ramli<sup>c</sup>, Sarimah Abu Bedor<sup>d</sup>, Farah Najwa Ahmad Puad<sup>e</sup>

<sup>a, b, d, e</sup> Faculty of Technical and Vocational, Sultan Idris Education University, Malaysia

<sup>c</sup> Faculty of Arts, Computers and Creative Industries, Sultan Idris Education University, Malaysia

Corresponding Author: [sharifah.pdpkp@gmail.com](mailto:sharifah.pdpkp@gmail.com)

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## **Abstract**

The fashion industry is one of the main contributors to the world's largest pollution. It is due to the tons of water usage producing excess carbon dioxide gas, excessive use of energy to produce clothing, and non-renewable sources for fibre, fibre, and environmental pollution with harmful chemicals. This study aims to explore the benefits of using sustainable fashion design materials and manufacturing practices. In-depth interviews were conducted with six experts in the fashion industry. The interviews were transcribed verbatim and analysed using thematic analysis. The findings revealed four themes of sustainable fashion benefits, i.e., reduce environmental pollution, increase consumer convenience, reduce costs, and increase societal development. Sustainability is an important aspect of fashion design, whether in producing fibre or the production of fashion design itself. Therefore, the fashion industry must be responsible to the community and the environment by ensuring less negative environmental impact of garment production involving raw materials, processing, and production. Furthermore, early education intervention is essential to shape one's behaviour and promote critical thinking towards a more sustainable future for all groups in achieving sustainable development goals.

## **Keywords:**

Sustainable Fashion, Environmental Behaviour, Sustainable Development Goals

## **INTRODUCTION**

The fashion industry is considered a major contributor to many social and environmental problems and negatively impacting the environment from the production process to consumer disposal (Mcneill & Venter, 2019). An estimation of 10 million tonnes of textiles is dumped annually in Europe and the United States while China alone exceeds 20 million tonnes. Meanwhile, in Malaysia, about 2000 tonnes of textiles and disposable clothing are produced daily. According to Malakahmad et al. (2017), about eight per cent of solid waste in the country comes from fabricated waste. The decomposition of naturally occurring textile waste releases methane, hazardous greenhouse gas and is a major contributor to global warming. The dyes and chemicals in textiles and other clothing components will be absorbed into the soil causing soil pollution and drainage. It is because most textiles are made using synthetic materials that are fabricated from synthetic fibres of petrochemical blends. Solid waste management is considered a daunting task in several Asian developing countries, including Malaysia, where waste wasting rates increase each year at levels beyond their ability to manage them properly (Malakahmad et al., 2017).

According to a study conducted (Šajin, 2019), about five per cent of European household spendings are spent on clothing and footwear with an estimated percentage of 80% and 20%, respectively. His study also found that Europeans bought 6.4 million tonnes of new clothing or 12.66kg per person in 2015. The research shows that the number of people's clothing in Europe has increased by 40% between 1996 and 2012. At the same time, more than 30% of non-used clothing are released a year. Removed clothing is not recycled but continued to be sent to the disposal sites. This practice leads to environmental pollution because the clothes are accumulated at the disposal sites. Clothes made from chemical products cannot be fully decomposed, thus leading to environmental pollution.

Past researchers have debated the reasons for such concerning situations. Henninger, Alevizou, and Oates (2016) discovered an inconsistent understanding of sustainable fashion among micro-organisation members, marketing directors and consumers. Sustainable fashion was considered unimportant for their business; thus, its values were poorly communicated with consumers (Henninger, Alevizou, & Oates, 2016). Additionally, consumers did not seem aware that sustainable fashion did not necessarily involve higher prices (Henninger, Alevizou, & Oates, 2016). Moreover, the lack of knowledge about environmental effects in product life cycle stages among textile and fashion industry stakeholders (Khan & Islam, 2015) implied low sustainable practices in this industry.

Thus, the objective of this study was to explore the benefits of producing sustainable clothing based on experts' opinions in fashion and clothing. Apart from consumption and consumer behaviour, this research should also look at the fashion production process. Among others, the need for extensive knowledge on raw material processing, garment manufacturers' use of clothing involving the acquisition, use, maintenance, and disposal (Quinn & Sinclair, 2016). This concept of fashion sustainability can indirectly determine the new fashion designs and the latest styles that are then followed by consumers. Therefore, this study obtained views from several experts in the field of clothing fashion on the benefits of the materials used, as well as sustainable methods in the production of clothing fashion.

## **LITERATURE REVIEW**

### **Sustainable fashion**

Sustainability is defined as the development that does not affect the environment while satisfying the needs of future generations (Shen, 2014). According to Deschamps et al. (2017), sustainable practices are activities to meet human needs while avoiding products and services that negatively impact society or the environment. Therefore, preserving the environment is given the topmost priority in satisfying every need, not only for now but also for future generations. In the context of sustainable fashion, this goal can be achieved in an integrated way. One of them is producing fashion products using sustainable methods and materials without causing pollution or harming the physical environment.

Previous researchers describe various definitions of fashion sustainability. For example, according to Iran and Schrader (2017), sustainable fashion refers to clothing that involved designing, manufacturing, reusing, and disposing of materials consistent with the concept of sustainable development. On the other hand, McNeill and Moore (2015) explained sustainably produced fashion as responsibly reducing the impact of garment production on the environment. Furthermore, sustainable fashion includes designing,

distributing, reusing, recycling, or disposing of fashion that supports the entire system to minimise the negative impact on society and the natural environment (Kozłowski et al., 2018). In addition, numerous terms have also been used in previous studies on sustainable fashion. Among them are eco-fashion, green fashion and ethical fashion.

### **Benefits of sustainable practices in the fashion industry**

There are many advantages if the fashion products are produced sustainably. According to Mcneil and Moore (2015), fashion clothes produced sustainably can reduce the negative effects on the environment and provide shopping choices that are ethical to fashion consumers in fulfilling their desire for fashion. Furthermore, Kozłowski and Mackiewicz (2012) stated that there are a few sub-sectors that can help improve the sustainability of fashion products by using fibres that are easy to decompose and not pollute the environment. In today's world, many people are conscious and aware of environmental pollution and the urge to practice sustainable practices in their fashion (Shim et al., 2018). For instance, consumers in Turkey addressed that they favour the sustainability aspect in fashion, such as using organic materials and production (Lundblad & Davies, 2016).

## **METHODS**

This study used a qualitative approach with the case study method. An in-depth interview was conducted with six experts in the field of fashion. Three of them were industry experts, while the other three were fashion design lecturers. The opinions and views of these experts were very useful in this study as they involved more in the fashion industry, whether in the fashion market or in terms of fashion design itself. The selection of the study participants was based on their ability and willingness to provide the information needed to answer the research questions (Creswell, 2012). The selected study participants were known to have extensive experience in the fashion industry, so the study participants answered the research questions and provided additional information that helped the study.

Research trustworthiness is important for qualitative studies (Lincoln & Guba, 1985; Merriam, 2009), which is the issue of honesty (trustworthiness) in determining internal validity and external validity (Lincoln & Guba, 1985; Seale, 2002). Credibility, transferability, dependability, and confirmability can be implemented in various ways, including triangulation, peer review, trail audit, member checks, etc. This study uses member checks and peers checks to determine research trustworthiness. The study participants were asked to confirm the findings. This process requires respondents to examine the findings and interpret the prefixes to determine whether the findings are accurate and appropriate throughout the study (Merriam, 2009).

### **Sampling technique**

The purposive sampling technique was used to select study participants for in-depth interview sessions. This technique was used to select study participants with characteristics that meet the predetermined conditions and individuals who have a lot of information in line with what they want to study (Patton, 2002; Merriam, 2009; Gall et al., 2003 & Creswell, 2012). Therefore, the use of this technique can increase the degree of transferability. The study participants were also selected based on their ability and willingness to provide any information needed to answer the research question. According to Armstrong et al. (2000) and Powell (2003), the selection

of expert panel is based on several criteria such as background, relevant work experience, willingness to contribute to the validity of the study, having diverse opinions, views, knowledge and updates on what is being studied.

### **In-depth interview**

An in-depth interview method was used in this study to gain experts' insights on the benefits of using sustainable practices in producing sustainable fashion designs. Six experts were interviewed for their opinions and insights as they are directly and practically involved in the garment manufacturing industry. The specialists consist of three people involved in the fashion industry while the three others are lecturers in the fashion fields. Before the interview was conducted with the experts, several structured interview questions were developed and listed so the interviewer would get to use them. Interview questions were first verified by three experts; content, linguists and field experts. Interview questions consist of two parts, Part A and Part B. Part A deals with sustainability in the fashion industry, while Part B deals with consumer attitudes and behaviours in fashion sustainability. However, this article only summarises the interview data for Part A, which are the benefits of using sustainable practices in producing sustainable fashion designs. These interviews were conducted in person and took approximately one hour per session for each interviewee.

### **Data Analyses**

The data obtained from the experts' interviews were analysed manually. First, the researcher transcribed the interview data verbatim and performed it simultaneously during the data collection process. Several steps were needed to be followed to analyse data that can give meaning to the researcher to analyse (Creswell, 2012). Those steps are transcribing, coding and theme formation. The data obtained were compiled by reading repeatedly; hence, only information regarding the research question was selected. Then a specific code was set. All relevant data were encoded for selection and theme formation to ensure the codes were well structured and simplified for the researcher. The naming of themes was done so that there was no overlapping between the other themes (Merriam, 2009).

## **FINDINGS**

The first findings of the study were related to the background of the study participants. The first industry expert is a manager of a company involved in manufacturing products using used jeans fabric (Expert 1). The second industry expert is a company manager who also produces goods from used materials (Expert 2). His company also provided training and skills to people who are interested in the industry. The company has branches in every state in Malaysia, with a total of 14 branches so far. The third industry expert is a fashion designer with a well-known fashion academy in Selangor (Expert 3). She trains individuals who have a passion for the garment and fashion design industry. She also produces a lot of sustainable clothing designs in terms of materials used. The fourth expert is a lecturer with extensive experience in fashion design, and she has 41 years of experience in the field of clothing design (Expert 4). The fifth expert is also a fashion lecturer of a public higher education institution (Expert 5). She has 25 years of fashion design experience. Finally, the sixth expert is also a lecturer in fashion design (Expert 6). She has a wealth of experience in the field of fashion design and often conducted

research about fashion. The findings showed four themes based on the interviews with the participants: environmental benefits, comfort to the wearer, cost-benefit, and social benefit to the local community.

### **Reduce environmental pollution**

The main benefit is to protect the environment from getting contaminated. The first obstacle is in terms of materials or sources to produce sustainable and fashionable products.

Expert 1 stated that the most important benefit is the environmental benefit, which ensures that our environment remains protected from the pollution caused by the fashion industry. Expert 2 talked about the importance of protecting the environment for future generations.

*“... .If all of the materials used are from natural materials, environmental pollution can be avoided, and Malaysia can also play a role in producing environmentally friendly products”. (Expert 2)*

Experts 3 told the main purpose of using sustainable materials in producing fashion products is to keep the environment free from contaminations. Whereas Expert 4 stated:

*“... The use of recycled clothing will certainly save our planet from being contaminated by a large pile of used clothing.” (Expert 4)*

The 5th expert said that if the fashion products were made of high-quality materials, they would certainly be useful in the long run. Therefore, it can be reused, recycled or resold to others. As such, this will reduce the negative impact on the environment. Expert 6 affirmed what the United Nations (UN) has to say about the Sustainable Development Goals (SDG), to keep the environment free from pollution and save the planet from being damaged.

### **Increase consumer convenience**

The second benefit is in terms of comfort to the wearer. What do the wearers say when they use fashionable clothing made of sustainable materials? Expert 2 stated that clothing made from natural sources would have a comfortable effect on the wearer's skin and positively affect their health. Expert 4 stated;

*“... if we maintain sustainability in the use of environmentally friendly materials or materials to produce clothing products, it will certainly be more suited to the weather in our country and our bodies.” (Expert 4)*

Experts 5 pointed out that the benefit goes to the consumers of the garment itself. They would feel comfortable wearing it if the fabric quality is good. While Expert 6 stated;

*“... ..If we use fabric design that is a functional design, it will serve you the functions, and indeed we will find comfort”. (Expert 6)*

She added that clothing made from natural fibre would be better suited to the weather in our country. Therefore, consumers would feel more comfortable wearing the clothes.

### **Reduce cost**

The third benefit is in terms of cost. Some participants discussed the benefits associated with cost. Experts 1 said that using sustainable materials in fashion apparel will save a lot of money to reuse those materials to make new products. Expert 3, on the other hand, stated;

*“... It saves cost because it is not easy for the fashion industry to produce a new product because it needs to go through Research and Development. If used fashion products are used to produce new products, this will save on the cost of producing the product”. (Expert 3)*

A similar opinion is also discussed by Expert 4, who said that if upcycle or recycle method were used, it would save more money. Expert 6 also said it would benefit the buyer financially. However, he also argued that upcycle materials would not necessarily make the new product cheaper as it would sometimes cost more to produce new products such as opening, hatching, cleaning and resuming the fabric.

### **Increase societal development**

The fourth benefit is the social impact. Experts 1 and 3 said the sustainable fashion market could create and help single mothers by giving them the skills to produce new products from used clothing. This way, it can help these women to earn income to continue their daily lives. This strategy was done by Expert 1 himself in the management of his current company.

## **DISCUSSIONS**

Sustainability is very important in sustaining human life and in protecting the diversity of the world's ecosystems in a variety of ways, including protecting natural resources, saving energy, reducing waste quantities, investing in future economies through recycling or reuse approaches (Toprak & Anis, 2017; Arasinah et al., 2018; Sharifah & Arasinah, 2019). Four major benefits were highlighted by all the six experts in the interview. The benefits include the benefits to the environment, consumer, cost, and society.

Sustainable practices such as using materials that do not pollute the environment in designing fashion clothes will help preserve the environment from pollution. Sometimes, the process conducted while designing the fashion clothes will contribute to pollution, such as the use of fabric colouring that is not from natural sources or harmful chemicals. According to Šajn (2019), there are many ways to reduce environmental pollution, including the new business model to rent clothes, designing fashion products that can be recycled or reused, reassuring the consumers to buy clothes in minimal quantity choose environment-friendly clothes. Fletcher and Grose (2012) proposed that the concept of reusing, recycling, and upcycling used clothes could reduce the negative effects on the environment while providing new sustainable business opportunities to fashion designers.

Besides, using sustainable materials such as cotton fabric to design clothes could also provide high comfort to those wearing. Fabrics made from chemicals normally are uncomfortable because they are warm, etc., especially when they are less appropriate to the weather in the country. Clothes that are produced using natural fibres are more adaptable in many countries. Therefore, the consumers would feel more comfortable when they wear clothes made from natural fibres. Research conducted by Lundblad and Davies (2016) also stated that the consumers would want to look good, comfortable and feel confident when they

wear the clothes. When they wear the clothes, they feel of comfort is accompanied by the good feeling and they would trust the use of natural products would give benefits not only to the physics but as well as the psychology, thus making them feel better and confident about themselves.

Moreover, using sustainable materials in fashion designing clothes also reduces cost. When we use the upcycle and recycle method, the used materials could be used to produce new products. The upcycle and recycle method could also reduce the cost spent for research and development because the industry would have to spend a lot to design a new product. Therefore, when they utilise the used products to design the new products, this will reduce the production cost, as suggested by Expert 3 in the interview conducted. This finding aligns with Henninger, Alevizou, and Oates (2016), who stated sustainable fashion did not necessarily involve higher prices.

Apart from the cost, designing fashion products sustainably also benefits society. Single mothers are seen to be benefiting from this because they are exposed to the skills of producing new products from the used clothes. They could design many new products from the used clothes, including bags, house ornaments, self-ornaments, or toys for the children. Through this, single mothers could generate incomes for themselves to sustain their life. When the government commercialises this concept, it also eventually opens up new job opportunities to its citizens. According to Morwitz, Steekel, and Gupta (2007), the positive attitude of consumers towards sustainable fashion products is the starting point to certain behavioural changes. However, empirical studies in the field of environmental consumption have asserted that buying intentions do not translate into actual buying behaviour. Therefore, apart from the sustainable manufacturing process, the attitudes and behaviours of the consumers themselves are also important to achieve sustainable development.

## **CONCLUSION**

This study aims to explore the benefits of using sustainable fashion design materials and manufacturing practices. The findings revealed four themes of sustainable fashion benefits, i.e., reduce environmental pollution, increase consumer convenience, reduce costs, and increase societal development. In conclusion, it is found that the production of sustainable clothing products is very important in preserving the environment. Sustainable practices in producing clothing products can reduce the pollution issues caused by the removal of clothing. Measures to reduce environmental pollution are in the hands of manufacturers or the industry as well as the consumers in their buying behaviours. Education institutions are one of the key platforms facing future challenges. Education for sustainable development is essential to today's society not only for their lives and career but to the nation as well. The authorities should also play a role in the country's successful development because the enforcement and implementation depend on the decision-maker. The United States can be an example of a country that has applied increasingly stringent environmental protection systems and standards for imported textile products. The environmental trade barriers have continued to strengthen. Also, education at the school level plays a very important role in altering people's attitudes and thinking towards a more sustainable future. Therefore, many further studies could be done about sustainable practices in fashion designing. It could be about society's perceptions and acceptance towards the product's design from recycled and upcycled clothes. Through this, the consumers would be more open to the use of products made from used clothes that offer more benefits than the fast fashion products that are detrimental to the environment. Besides, the government should also take necessary measures to elevate the awareness among users through

various activities such as recycling used clothes campaigns, increasing promotional activities about bundle shopping, and organising more competitions such as designing new fashion products using used clothes, etc.

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