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To Green or Not to Green?: A Study on Consumer Behavior and Ethically Produced Fashion

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To **Green** or Not to **Green**?: A Study on Consumer Behavior and Ethically Produced Fashion

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Submitted in partial fulfillment of
the requirements for the University Honors Scholar designation
at Johnson & Wales University

Abstract

For a long time, production in the fashion industry wasn't given a second thought when consumers would purchase fashion goods. Little about how the industry produced its goods was public knowledge, so consumers didn't worry about the environmental implications of the products they were purchasing. In today's world, where companies are required to be more transparent and have social responsibility, consumers are more knowledgeable (Shen, et al.; Grappi, et al.; Chan and Wong). This widespread knowledge seems to be affecting the way people purchase fashion. This paper examines how (and if) a consumer base knowledgeable about environmental pollution, caused by fashion production, changes the way they purchase goods. Using the knowledge, I've acquired from my studies, along with scholarly research and a survey, I've examined different cases of known unethical production in fashion to see if knowledge of these cases has changed how consumers purchase their goods. I've also identified if there is a generational change in what consumers consider when purchasing fashion.

Table of Contents

❖ Abstract.....	1
❖ Acknowledgements.....	2
❖ Introduction.....	3
❖ Chapter 1.....	6
➤ Literature Review in Sustainable Fashion.....	6
❖ Chapter 2.....	11
➤ The Beginning of the End.....	11
➤ Airing Dirty Laundry.....	13
➤ The Price they Pay.....	16
❖ Chapter 3.....	18
➤ Consumer Behavior.....	18
➤ Corporate Behavior.....	22
❖ Chapter 4.....	25
➤ Popular Opinions in 2019.....	25
➤ What Does it All Mean?.....	31
❖ Chapter 5.....	33
➤ Solutions for the Future.....	33
❖ Conclusion.....	37
❖ Works Cited.....	39

Introduction

Today, water levels in the Aral Sea are less than 10 percent of what they were 50 years ago (Sweeney). The fisheries and communities that relied on this sea to function are dust filled with salt and chemicals from the dried lake bed and these chemicals have caused a public health crisis, contaminating the surrounding farmlands' soil (Sweeney). This hardship has occurred because two rivers in Central Asia, the Amu Darya and the Syr Darya, were diverted from the Aral Sea to provide irrigation for cotton production in Uzbekistan and nearby Turkmenistan, where many factories that produce American clothing are located (Sweeney).

In Indonesia, the Citarum River is considered to be one of the most polluted rivers in the world (Sweeney). Textile plants located alongside the river have been dumping chemicals like lead, mercury, arsenic and many others into the water, bringing health problems to the people and wildlife who rely on the Citarum (Sweeney). Greenpeace International, a global environmental organization, discovered that the Citarum has an alarmingly high alkalinity (Sweeney). Greenpeace says in an article that "the discharge (from the textile plants) is highly caustic, will burn human skin coming into direct contact with the stream and will have a severe impact (most likely fatal) on aquatic life in the immediate vicinity of the discharge area." (Sweeney).



Indonesians on the Citarum River (Tri)

Places like the Aral Sea and the Citarum River are not unique. Many places all over the globe are feeling the effects of the fashion industry's production. Eileen Fisher, an American clothing designer, has even said, "The clothing industry is the second largest polluter in the world ... second only to oil...It's a really nasty business ... it's a mess" (Sweeney). For a long time, the fashion industry has been the second largest contributor to global pollution, without anyone knowing a thing about it (Morgan and Ross). Today; however, there seems to be a shift in knowledge about the situation and care about the consequences.

As generations age and enter the marketplace, shifts in consumer behavior occur. In recent years, as millennials and Generation Z have come to the forefront of the consumer base, a want/need for ethical goods seems to be in higher demand than ever before. Millennials and Generation Z are people born from 1981 to 2010. This demand to know where, how, and why their products are produced carries over into the fashion industry, an industry notorious for poor environmental considerations. The question I want to answer is: do consumers want ethically produced fashion, despite a difference in price and availability? I am studying the consumer

response to ethically produced fashion goods because I want to know if people would prefer to buy environmentally friendly goods over ones that are not produced with the environment in mind. By discovering this shift in consumer behavior, I can teach my reader about the potential implications in the business world from “green” production. My hypothesis is that there is a generational change in consumer behavior when it comes to ethically produced fashion.

In this thesis, I discuss the consumer response to ethically-produced fashion goods in several chapters. In the first chapter the literature available on ethical fashion production is explored in its different mediums. The second chapter discusses the historical context of the issue along with current issues that the fashion industry is facing regarding production. The third chapter compares current consumer behavior to corporate behavior and the fourth discusses my own survey research. The fifth and final chapter talk about different possible solutions to the problem off unethical production in the fashion industry.

Chapter 1

Literature Review in Sustainable Fashion

Environmentally ethical fashion production and its implications are part of a growing scholarly conversation. Much of the research on this topic focuses on how consumers respond to companies that use ethical means of production versus ones that do not. There are many different mediums through which people are talking about this problem. The research itself is compiled mostly by surveys and case studies, but there are also great films and books that shed light on this subject as well. This conversation is growing in popularity as many of the survey, articles, and studies have been conducted and written after 2009.

Surveys

Conducting surveys has proven to be an effective tactic at gaining consumer data (see Grappi, et al.; Shen, et al.; Chan and Wong). These authors all compiled data from surveys focused on how people to respond to ethically produced fashion goods. Bin Shen, Yulan Wang, Chris K.Y. Lo, and Momoko Shum from The Hong Kong Polytechnic University in Hong Kong, People's Republic of China, who specialize in textiles and clothing, show the relationship between ethical and environmental business practices and consumer behavior specifically in the fashion industry by use of a survey, the results of which are explored later in this paper. Ting-yan Chan and Christina W.Y. Wong, who work in the Business Division of the Institute of Textiles and Clothing in the Hong Kong Polytechnic University, examine the existing relationship between ethical fashion and the consumer in relation to pricing using a survey. Both of these surveys were conducted in 2012 (Shen, et al.; Chan and Wong). In 2017, Silvia Grappi and her

associates, professors of economics, business, and human studies from various Italian universities conducted their survey in relation to the exposé written and published by Greenpeace, which will also be studied later on (Choi, et al.).

Case Studies

The Greenpeace exposé, discussed in the last section, was published in 2011 and included two different case studies that are about the water crisis and toxic pollution caused by textile production (Choi, et al.). These studies focus on the Youngor Textile Complex and the Yangtze River Delta and another on the Well Dyeing Factory and the Pearl River Delta (Choi, et al.). The authors then address the need for corporate social responsibility and present ideas and recommendation on how to do so. Another case study relevant to the topic is “Sustainable Fashion Supply Chain: Lessons from H&M.”, written in 2014 (Shen). The author is from the Glorious Sun School of Business and Management in Donghua University in Shanghai and in the study, talks about how fast fashion brands are changing their business strategies to be more environmentally friendly (Shen). The author focuses on H&M as an example and looks in depth at their supply chain management and how sustainably it produces. The author does question whether human or environmental capital are really addressed in the brand’s “sustainability”.

Journals

Journal articles have also been published addressing this topic. *The Journal of Business Strategy* published a piece in 2009, around the time this conversation became more relevant, titled "Business as environmental steward: the growth of greening" (Olson). Eric G. Olson, Senior Manager at Ernst & Young in Downey, California has more than 20 years of experience in business strategy and operations supply chain management. In the article, he talks about

business strategies and public reactions information for companies that should take “greener” or environmentally friendly prerogatives. He explains what the main drivers of business decisions are and how global warming is a driver that companies are taking more seriously. He also provides table and figures to help explain his writing. The article then discusses the different ways to go about being “green” in different sectors of a business. Another article was published in the *Journal of Cleaner Production* in 2014 titled “Sustainable Production, Consumption, and Livelihoods: Global and Regional Research Perspectives.” (Vergragt, et al.). The authors are professors in business at the Tellus Institute, Institute for Global Environmental Strategies and the Manchester Institute of Innovation Research. They discuss in this article, how the United Nations launched the Global Research Forum on Sustainable Production and Consumption as well as research on past consumer behavior and try to formulate a systemic change in such behaviors through the use of the Global Research Forum on Sustainable Production and Consumption.

Film

A film that sheds some light about ethically produced fashion is *The True Cost* (Morgan and Ross). This film was produced in 2015 and is about how the fashion industry is destroying the lives of its factory workers and the environment in which they produce their products (Morgan and Ross). The film travels to different areas in the world where fashion goods are produced. They speak to people at each level of the supply chain, from the level of cotton farming all the way up to the factory workers and designers, to hear their stories about how the fashion industry has affected their lives and environment. The narrator also tells the audience lots of statistics and numbers related to environmental pollution caused by fashion production.

Books

Where Am I Wearing?: A Global Tour to the Countries, Factories, and People That Make Our Clothes written by Kelsey Timmerman in 2012 is a nonfiction book that is relevant to the conversation surrounding ethically produced fashion. In this book, Kelsey Timmerman, decides that to avoid getting married, he will go on a quest around the world to discover where and how his clothing is produced. When visiting each production area, he takes account of the environment around him: the people, places and pollution. He visits Honduras, Cambodia, China and some American factories. Timmerman meets the people who work at these factories and talks to them about their lives and work and eats meals with them and their families to see what their lives are like.

Laws

The law can also play a role in ethically produced fashion goods. The *Australian Year Book of International Law* published a piece in 2015 about the Paris Climate Accords by Julie Bishop who attended the United Nations Secretary General's Climate Summit in 2014 (Bishop). This was where the first talks of the Paris Climate Agreement began. These pages discuss the outline of the agreement. This is relevant to the fashion industry, because the companies would be required to follow by law, whatever guidelines were created at the summit. The United States had also chosen not to partake in the agreement, which effects the products that are made for American companies.

Conclusively, the conversation surrounding environmentally, and ethically produced fashion goods is growing. Since 2009, many surveys, articles, case studies, films, and books have been created to further the general public's education on the subject. With so many different mediums used to address the problem, anyone can easily access information about ethically

produced fashion and make their own ideas about it. These sources help to provide an understanding of what that may mean for both producers and consumers alike in the upcoming years

Chapter 2

The Beginning of the End

In the year 1960, the average American consumer spent 10% (about \$4,000 USD) of their income on clothing and shoes. During this time, about 95% of those clothing purchases were manufactured domestically in the United States of America. Today, the average consumer in the United States only spends 3.5% (about \$1,800 USD) on the same products, of which only 2% are manufactured in America. We are also buying more clothing today than ever before, chalking up to about 20 billion garments a year (70 pieces of clothing per person), where as in 1960, the average person purchased less than 25 garments a year (Vatz).

This dramatic increase in the amount of clothing being consumed is due to the emergence of global production. This development can also account for the drop in the consumer cost of fashion. In the 1970's, large textile mills and factories were built in areas of China and other third-world countries in Asia and Latin America that had the capacity to produce larger orders in shorter amounts of time than any American factories could and for cheaper labor costs (Vatz).

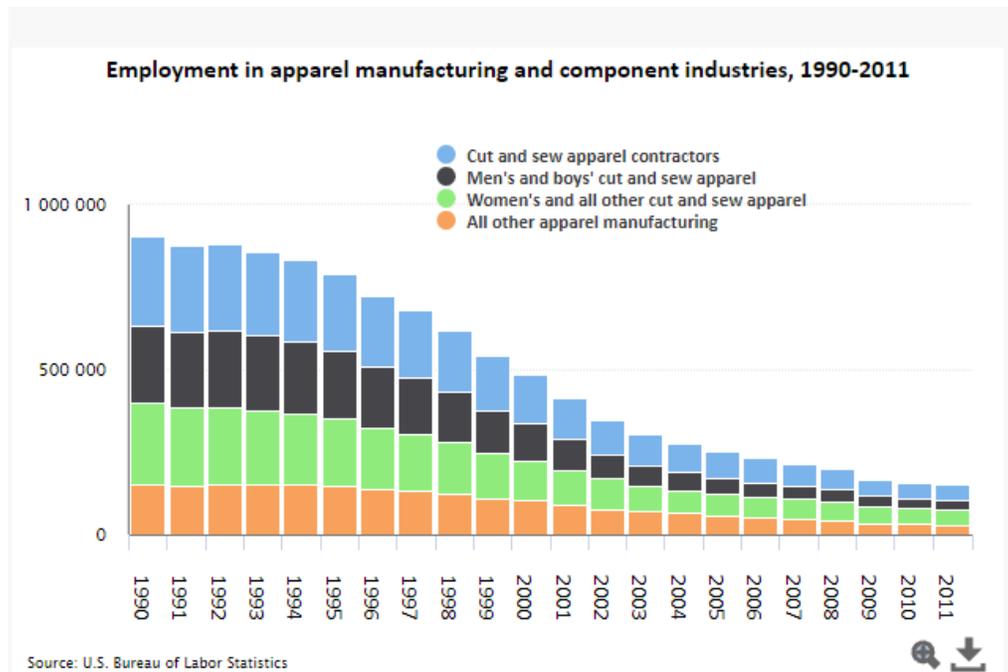
According to an article written by Stephanie Vatz, managing editor at Newsela,

“By 1980, even though about 70 percent of the clothing Americans bought was still made domestically, a handful of big retail chains like Gap Inc. and J.C. Penney began transitioning away from actually making their own clothes. Instead, they increasingly just designed and marketed them, but outsourced production factories overseas where the work was done at a tiny fraction of the cost” (Vatz).

This trend of outsourcing has only increased since the 1980's contributing to the decreased quality of work and environmental conditions in the fashion industry.

In 1994, the North American Free Trade Agreement (NAFTA) called for fewer import restrictions and duties on foreign-produced clothing products (Vatz). This agreement, along with

the cheap production costs overseas, caused a chain reaction among American clothing companies, and between 1990 and 2011, 750,000 apparel manufacturing jobs in the U.S. disappeared (How).



Today, most apparel manufacturing for the United States market takes place overseas. Vatz writes, “the U.S. apparel market is the largest in the world, comprising about 28 percent of the global total. And hardly any of this clothing comes with a Made in the USA tag” (Vatz). All of this overseas production leads to another key problem: American companies not having to follow American regulations. For example, most of the global production of clothing takes place in China, so any American company that manufactures their products there must abide by Chinese laws and regulations (Global). The Chinese don’t have strict environmental policies, whereas the United States does (Choi, et al.). This allows for companies to cut corners and put aside environmental consideration for the sake of making a larger profit. Even the United States’ refusal to cooperate with the Paris Climate Agreement in 2017 leaves the door open for companies to continue producing their products in an unsustainable fashion (Bishop). It also sets

an unsettling precedent of the government not enforcing harsher regulations on companies that produce globally.

Airing Dirty Laundry

The history of textile production has led to what it's become today: one of the world's largest pollutants. Places like the Citarum River and the Aral Sea are just a few examples of many areas that have been affected by the textile industry's lack of concern for the environment. Greenpeace International, a global environmental activist group, published an expose on textile manufacturing in 2011, displaying examples of the industry's production processes and its consequences (Choi, et al.). In this exposé, it is written, "According to the United Nations Environment Programme, worldwide, it is estimated that industry is responsible for dumping 300–500 million tons of heavy metals, solvents, toxic sludge and other waste into waters each year." (Choi, et al.). These chemicals have affected a wide range of the surrounding area's environment and people.

One such place where water is heavily affected by textile production is China. According to Greenpeace International, "China has some of the worst water pollution in the world, with as much as 70% of its rivers, lakes and reservoirs being affected...and in many cases, the factories polluting critical water sources are producing goods for the US and European markets, with research indicating that about 20% to 30% of China's water pollution comes from manufacturing goods for export" (Choi, et al.). This high number of areas affected by manufacturing comes as no surprise, as there are more than 50,000 textile mills in China, which today, is the world's largest exporter of textile goods (Choi, et al.).

Like the Citarum River in Indonesia, the Pearl River Delta in China is experiencing similar disastrous side effects of manufacturing. The Pearl River Delta is located near the Hong Kong and Macau special administrative regions, making it a vital source for industry as well as the area's 47 million people (Choi, et al.). Despite its importance, Greenpeace International says, "Between 2003 and 2007, industrial wastewater discharges into the Pearl River Delta increased by 52%...with more than 60% of its waterways now designated as "polluted"." (Choi, et al.).

The province of Guangdong has even set regulations on the amount and type of chemicals that can be dumped into the Pearl River Delta but in a 2009 report titled *Poisoning the Pearl*, it was discovered that factories along the river were exceeding these set limits and dumping chemicals that are unregulated by Guangdong (Choi, et al.). One of the factories that was studied in the report was the denim manufacturer Top Dragon Textile Company, which operates out of Qingyuan, Guangdong (Choi, et al.). This factory is located along the Pearl River Delta and dumps all its waste into the river's water. Mr. Chan, a man who lives adjacent to the Top Dragon manufacturing plant is quoted as saying

"They discharge water like this every day. It is black in color and pungent when it comes out of the pipe. Our entire village stinks on windy days; you can see foam rising from the discharged water and flying about everywhere, even into our houses. I don't know whether this factory treats its water at all. All I do know is that what comes out looks and smells like this. We dare not complain, because they have power. We are mere villagers. What could we possibly do to stop this?" (Choi, et al.).

On the following page, a photo can be seen of the river's water which does appear black in color with a layer of the foam Mr. Chan refers to along its banks:



(Choi, et al.)

Another area of textile production that significantly affects the environment is cotton farming. While cotton has been a staple source of textile production for a long time, the way it is farmed has changed over the years to meet increasing demand. In the state of Texas alone, 80% of the cotton that is grown has been genetically modified, and whole fields of it are sprayed with pesticides (Morgan and Ross). An organic cotton farmer in Texas (one of just a few organic cotton farmers in the state) has gone so far as to say that most farmers “treat their fields like factories” (Morgan and Ross). This amount of pollution in Texas pales in comparison to that of Punjab, India: the state that is the largest user of pesticides in the entire country (Morgan and Ross). Punjab farms’ only GMO (Genetically Modified Organism) cotton seeds are produced for and by the United States of America (Morgan and Ross). The company that provides the town with the seeds also provides them with the pesticides they are required to use to meet American cleanliness standards (Morgan and Ross). This use of pesticides and GMO seeds has led to large patches of infertile soil that will only continue to increase in size, driving out the town’s only

source of income and destroying the land in its wake (Morgan and Ross). These pesticides have also caused the people that live in Punjab various health problems and the medicine they use to cure these illnesses is provided by the same company that supplies them with the seeds and pesticides that make them sick (Morgan and Ross). This cotton problem has become so prevalent in Punjab that the farming town has become accustomed to having a higher rate of suicides (Morgan and Ross). Across India, farmer suicides have totaled over 250,000, making this the largest recorded wave of suicide in world history (Morgan and Ross).

The Price They Pay

Farmers in India have most certainly been influenced by the vicious process that is textile production. This wave of suicides in the country shows that not only is the environment being negatively affected by the fashion industry, but the people are negatively affected too.

Dhaka, Bangladesh has been home to many textiles' plants for years. The city is also home to many tragedies caused by these plants. In 2012, a large fire broke out in the Tazreen Fashion factory in the Ashulia district of Dhaka, killing 117 people and injuring 200 (Morgan and Ross). This fire is the deadliest in Bangladesh's history, but this is not the deadliest incident caused by fashion factories (Morgan and Ross).

On April 24, 2013, the Rana Plaza, an eight-story commercial building in the Savar Upazila District, collapsed to the ground, killing 1,134 people and injuring over 2,500 (Morgan and Ross). This tragedy was caused by several preventable factors. Jim Yardley, the European editor for the *New York Times*, wrote in an article, "[the accident report] blamed the mayor for wrongly granting construction approvals and recommended charges against the building's owner, Sohel Rana, and the owners of the five garment factories in the building ... as the

building was constructed with substandard materials and in blatant disregard for building codes” (Yardley). The day before the collapse, workers reported seeing cracks appear in the walls of the factory and felt the building shake so violently that they began to flee (Yardley). According to Yardley, “the government report suggested that Mr. Rana illegally constructed upper floors to house garment factories employing several thousand workers...Large power generators placed on these upper floors, necessary because of regular power failures, would shake the poorly constructed building whenever they were switched on” (Yardley). These generators most likely caused the cracks that the employees complained about, and despite these complaints, Mr. Rana and the bosses of his factories ordered their employees into work the morning of the collapse and caused the deaths of 1,134 people (Yardley).

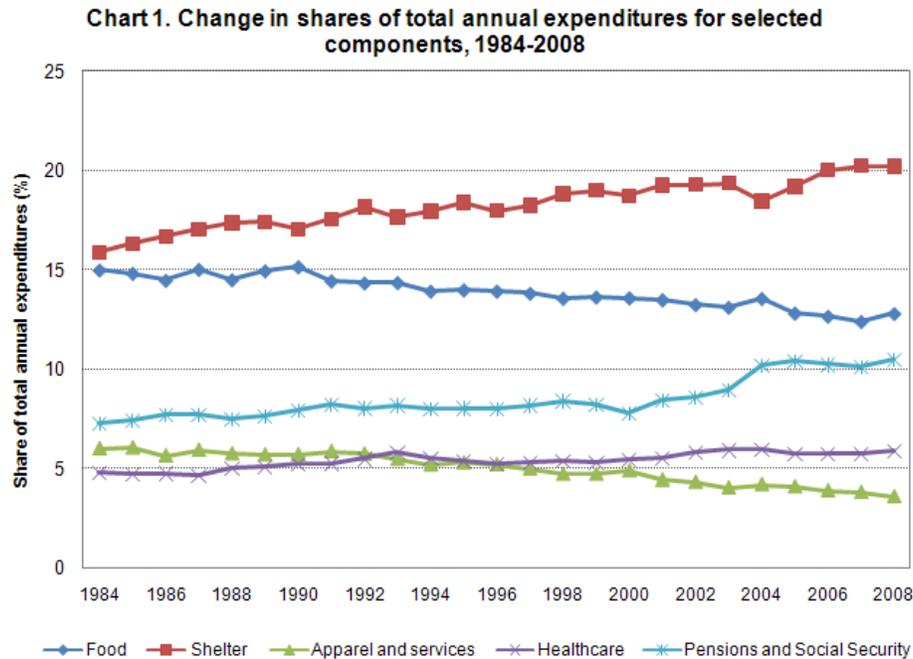
Between the environmental and social implications of fashion production, many problems have come about worsening the state of the world’s environment. If the industry continues to grow in the same way that it has since the 1960’s, conditions will only continue to worsen, as the current unsustainable trend of more clothing being produced for less of a cost increases.

Chapter 3

Consumer Behavior

Over the years, attitudes towards sustainable fashion and the idea of being environmentally aware has changed. 60 years ago, there was little concern for the environment or for the way the products people used were produced. Today, in 2019, there is far more awareness and concern for these situations, and that can be seen in data in research.

As was stated before, in the year 1960, the average American consumer spent 10% of their income on apparel (Vatz). Today, this percentage has decreased to 3.5%, which can possibly be due to the decrease in the overall price of apparel, or the lessened consumption of it (Vatz). This decrease in consumer spending seems more likely due to the former idea of a decrease in price, as the United States in total, purchases 20 billion garments per year (Vatz). This table from the Bureau of Labor Statistics concurs with a decrease in spending on clothing, as it shows a steady decline in the amount of income spent on apparel from 1984 to 2008:



(U.S. Bureau of Labor Statistics)

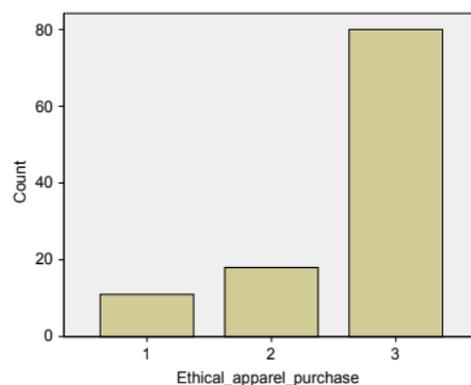
This decrease in consumption may also be attributed to an increased awareness of textile production and sustainable fashion. A study was done examining the consumer response to the Greenpeace “Dirty Laundry” exposé on the water quality in China (Grappi, et al.). This study examined whether people would still purchase from a brand that was named in the exposé and how the consumers’ attitude changed overall towards textile production (Grappi, et al.). For this experiment, the authors chose four brands that were implicated in the “Detox Campaign” (i.e. “Dirty Laundry”) and had consumers read the report, and respond to scenarios about each brand (Grappi, et al.). Each of the scenarios remained the same except for the brand chosen and how that specific brand responded to the campaign. In the report it is written, “At the time of the data collection, out of the four brands two (i.e., Burberry and Valentino) agreed to detoxify their productions, the other two brands (i.e., Armani and Versace) did not” (Grappi, et al.).

The results of this experiment proved a change in consumer behavior once people were given information about the brand's unethical production processes (Grappi, et al.). The report says,

“Yes, NGO (a nonprofit organization that operates independently of any government, typically one whose purpose is to address a social or political issue) campaigns significantly influence consumers' judgments of blame and their subsequent evaluations and purchasing behaviors towards the brands involved in toxic chemical scandals. Companies should not underrate NGO campaigns” (Grappi, et al.)

These results prove that consumers may demand ethically produced fashion when they are shown information about how unethically it is produced, but this doesn't necessarily imply that there is an increase in overall demand.

In another study done by the Hong Kong Polytechnic University, a survey was taken of over 100 consumers in China on their overall opinion of ethically produced fashion without being presented any data to persuade them (Shen, et al.). This survey asked consumers whether they had ever bought something that was an “ethically produced” product and if they could name a specific brand that produced ethical fashion (Shen, et al.). The results of this survey can be seen in the following charts:



Notes: 1 = yes; 2 = no; 3 = not sure

Figure 2.
Bar chart on ethical
fashion purchase
experiences of
respondents

Name of fashion brands/retailers	No. of respondents
MUJI	7
H&M	5
Marks & Spencer	3
Stella McCartney	2
Timberland	1
UNIQLO	1

Table II.
Ethical fashion brands
named by respondents

(Shen, et.al)

These results indicated that most of the respondents were unsure of if they had ever made a purchase of an ethically produced product and that very few respondents, only 19, could name an ethical fashion brand. In the study, the authors wrote, “This result indicates that ethical fashion apparel has not been well promoted (Figure 2). Similarly, only 10 percent of the respondents could correctly name at least one fashion brand that sells either socially or environmentally responsible apparel. Surprisingly, 90 percent of them were not able to name any brand (Table II)” (Shen, et al.).

This survey indicates that the participants lacked a knowledge of the topic of ethical fashion, which hindered their ability to make ethical purchases (Shen, et al.). However, the brands that participants named as being socially and environmentally responsible are very popular retailers in Hong Kong, indicating that if consumers believe brands to have ethical values and good transparency, they will be more likely purchase their products (Shen, et al.). The authors found that

“a lack of knowledge of ethical fashion practices prevents consumers from translating their concerns into actual purchases ... The findings indicate that beliefs about the fashion industry influence consumer support for SRB (socially responsible brands) and ERB (environmentally responsible brands). Consumer beliefs about a company’s practices are often based on their perceptions of the company in terms of goodwill and reputation. Hence, their confidence in a company can be enhanced by increasing the transparency of production and manufacturing processes” (Shen, et al.).

The results of both studies seem to indicate that knowledge and brand transparency lead to ethical purchases by consumers (Shen, et al.; Grappi, et al.). The question then, is there more information and brand transparency available today that leads to more ethical fashion purchases?

Corporate Behavior

Brand transparency seems to be a leading factor in decision making for consumers when it comes to ethically produced product purchasing. Brands that appear more honest and socially responsible drive consumers to buy from them. There also appears to be a trend in more companies becoming more transparent to accommodate this consumer demand.

One company that seems to be the shining example of transparency is H&M (Shen). The fast fashion retailer has taken many steps to make itself more socially responsible and more transparent to the consumer. H&M makes sure to create products using pesticide-free cotton and is an active, participating member in a program called the Better Cotton Initiative (BCI), which provides better farming techniques to cotton farmers (Shen). The company also makes attempts at cutting down carbon emissions from transportation of its goods. Bin Shen, from the Donghua University of Shanghai, wrote in a case study,

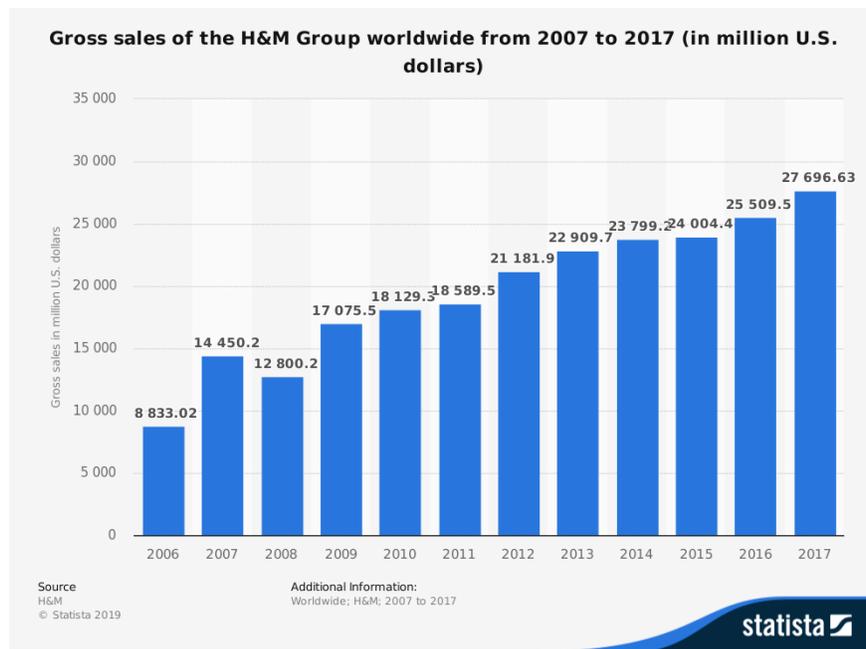
“After recognizing this environmental consciousness, efficient and clean modes of transport are used to reduce this negative impact at H&M. Ferry and train are relatively clean modes in transportation. At present, shipping via sea or rail is the main mode of H&M’s transportation from supplier to distribution centers (more than 80% of the volume). In return, the amount of carbon dioxide decreases over 700 tons a year” (Shen).

These different efforts that H&M takes to make their company more sustainable, are ahead of most other brands in the fashion industry, especially of those in the fast fashion segment of the market like H&M.

Even with these efforts, there are still problems with the company's "transparency". H&M still produces most of its product in Bangladesh (there are 163 suppliers there working for H&M) in the same garment district where the Rana Plaza collapsed (Shen). While the company says that they "take many initiatives with Bangladeshi suppliers, including monitoring factory compliance and providing training to suppliers and their workers" they do not further elaborate on these policies or have any evidence to show them being performed (Shen). The company also has an in-store initiative to collect used clothing from customers and offer them a discount on their purchase in return. However, according to sustainability expert Maxine Bedat, "coupons just encourage more consumption, and only about one out of every 1,000 pieces sold is ever recycled" (Brands). Despite these setbacks in sustainability, H&M is well received and is one of the most socially responsible and transparent brands by everyday consumers, as supported by the results of the survey performed by the Hong Kong Polytechnic University (Shen, et al.).

These are thriving brands that take the same types of measures to keep their products sustainable. Eileen Fisher has been an advocate for sustainable fashion for a long time, saying of her brand, "We see it as an important long-term investment for us. It's a bit hard to rationalize that cost but we do it because... we think it's the right thing to do and because we believe there's going to be no business done on a dead planet. So, we better do the best we can" (Brands). Her company's renewal program, involving buying back her brand's own worn garments, has sold about \$3 million worth of clothing that would have become waste (Brands). Patagonia has also created a program called "Worn Wear" that encourages its customers to go in store and have their owned garments fixed, rather than purchasing new ones (Brands). Even Ikea is trying out a new policy to buy back its used furniture pieces (Brands).

These companies seem to be leading a trend in the retail industry. With sustainability becoming increasingly important amongst a growing consumer base, companies are trying to meet and surpass their expectations of transparency and social responsibility. This model so far is proven to be successful as companies that are seen as transparent have better sales. H&M was one of the leading apparel retailers in the United States in 2017, based on retail sales (Leading). Below, H&M's gross sales from 2007 to 2017 can be seen steadily increasing, showing that companies with good transparency and social responsibility are performing better.



As the trend of “socially conscious” companies continues to gain relevance among current consumers, brands are attempting to create an air of social responsibility in their companies. Doing this improves the brand’s reputation among consumers and, in turn, drives up their profits making companies more open to producing ethically.

Chapter 4

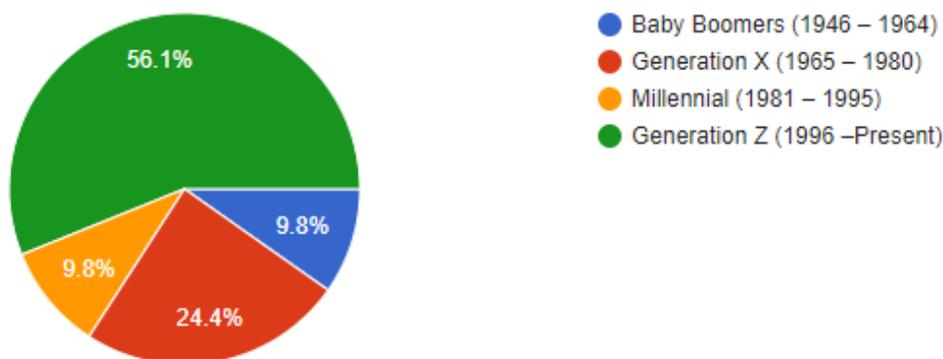
Popular Opinions in 2019

While the amount of discussion about ethical fashion production has increased, there is little to no research on popular opinions has been done in the last few years. To fill in this gap of information I conducted my own short survey to see how people's' opinions and knowledge has changed. The survey consisted of 18 questions (multiple choice and written answer) that were as follows:

1. What generation do you belong to?
2. What is your age?
3. What is your annual average income?
4. Where do you buy your clothing & accessories?
5. Does it interest you to know how you clothing & accessories are produced?
6. Would you buy a product if you were aware it was produced in a poor environment?
7. Are you more incentivized to buy products that are environmentally friendly?
8. Please list and explain your recent purchases that have been sold as environmentally friendly products
9. What might keep you from buying environmentally friendly products?
10. If price were not a factor in making a purchase decision, would you prefer to buy an environmentally friendly product?
11. If accessibility were not a factor in making a purchase decision, would you prefer to buy an environmentally friendly product?

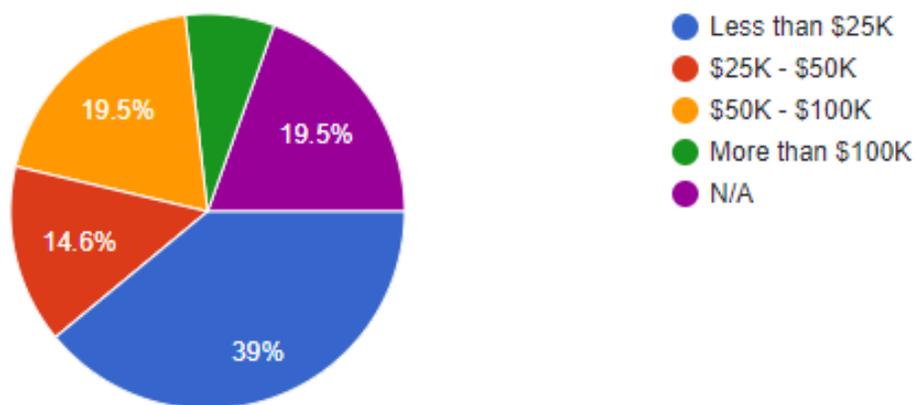
12. If you had more knowledge about environmentally friendly products while making a purchase decision, would you prefer to buy one?
13. Please explain any additional reasons why you wouldn't purchase an environmentally friendly product
14. Have you noticed an increase in the number of products being marketed as environmentally friendly products?
15. Have you noticed more brand transparency (making important facts and data available to its consumers) when it comes to fashion brands?
16. Please list any fashion brands that you believe to have good transparency
17. Please list any fashion brands that you believe to have bad/no transparency
18. Please leave any additional comments you have on this subject

The first question about what generation the participant belonged to I believe is the most important. No current research has focused on the potential change in consumer behavior between age groups. The results of the question showed that 56.1% of participants identified as belonging to generation Z (with 22% of participants, the highest percentage, being 20 years old), 9.8% identified as millennials, 24.4% identified as belonging to generation X, and 9.8% identified as baby boomers:



The ages of participants in total ranged from 14 years of age up to 69. This shows almost an even split between people aged 23 and younger and those who are older. This could mean that younger people had more interest in the subject, driving them to take the survey over those who are older. This increased interest in ethical fashion can also further be proven by the division in other answers provided by the different generations.

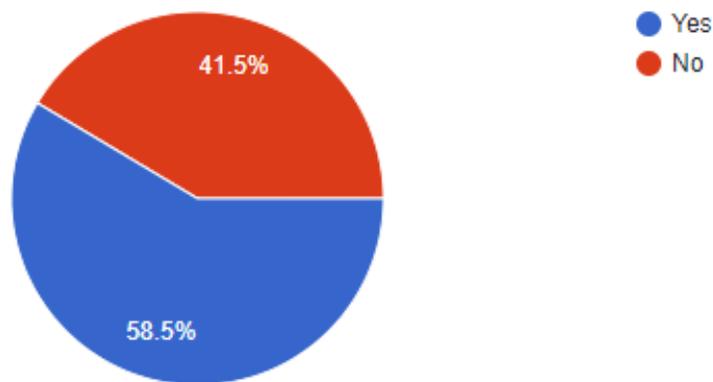
Knowing the average income of those who took the survey is also relevant because those with more disposable income may be driven to purchase more expensive goods. Marketed environmentally friendly products tend to have a higher cost for companies and that additional cost is paid for by consumers. The responses to question 3 were as follows:



These results showed a divide in whether price would deter people from purchasing ethical products. 81.25% of people in the “Less than \$25k” category listed price as a reason they wouldn’t purchase an environmentally friendly product, whereas only 66.66% of people who make over \$100k listed price as a deterrent. This also showed that the same percentage of people who make less than \$25k annually and chose price as a disincentive also belonged to generation Z. This would imply that younger people make less money and therefore cannot usually afford to purchase ethically produced products.

Exposure to ethical fashion is also important to know about consumers, so I asked participants where they currently buy clothing and accessories to see what channels of distribution are most popular. The results were that most people, 95.1%, shop in physical retail stores (so much for that whole “brick and mortar is dying!” theory), 51.2% shop online, 46.3% in second-hand stores, 14.6% in sustainably marketed stores, and only 4.9% in high end designer stores. And of the 14.6% that shop sustainably, 50% of those participants belong to generation Z.

Knowing if others had any interest in learning about where their clothing and accessories are produced also shed some light into how much consumers are curious about brand transparency. The answers can be seen on the following graph:



The split between answers is nearly half and half. But, of the 58.5% that answered “yes” to wanting to know where their clothing and accessories are made, 50% were from generation Z. This shows an increased desire for brand transparency and knowing how and where the products they purchase are made. Similarly, when asked if the participants would purchase something that they were aware was made in an ethically compromised environment, 68.3% of people said they would not. Of this percentage, 56.25% of the “no” answers came from participants in generation Z, and only 25% of the answers came from those belonging to generation X and baby boomers combined.

Next, participants were asked if they were more incentivized to purchase products that are marketed as environmentally friendly. To this question, 63.4% of people answered yes and the remaining 36.6% said no. Once again, the majority of people who answered with “yes” were from generation Z making up 53.85% of the answers. I then asked for examples of products that were environmentally friendly that people had purchased. Answers ranged from Lush products, to metal straws, to cleaning supply brands like 7th Generation. One of the most common answers to this question though, was “I don’t know” or “Not sure”. One participant from generation Z even said “Unfortunately, I can’t remember the last time I bought something environmentally friendly. Nowhere I know offers it 🤔🧐”.

These kinds of responses led me to my next question: What might keep you from buying environmentally friendly products? For the possible responses, I created options that seemed to be the most common deterrents for consumers. Price, as stated before is a common disincentive for younger people, but among this group, unavailability of these products and a general unawareness about how and where to find them also seem to keep people from purchasing them. The results of the poll show that price was in fact the leading deterrent of purchase with 85.4% of the participants saying this would stop them from making an environmentally friendly purchase. 51.2% of people then said that accessibility would keep them from purchasing a product and 46.3% said that unawareness would disincentivize them as well. Participants also listed other things that might keep them from buying an ethically produced product like functionality, quality, and commitments to other causes. However, when each factor is removed from making a purchase decision, people were more open to buying environmentally friendly products, with 100% of participants saying if price were not a factor, they would prefer to buy an

environmentally friendly product. Similarly, 97.6% of people said that if accessibility and unawareness were not factoring, they would also prefer to buy an ethically produced product.

Subsequently, it was important to know if people had noticed an overall increase in the amount ethical products and brand transparency. The answers showed that 65.9% of participants had noticed more products on the market being sold as environmentally-friendly and that 56.1% of people had noticed more brand transparency in the fashion industry. This shows that consumers are noticing more and more ethical products and brands, meaning that companies are listening to consumer demands and providing better products and information about the ways in which they produce these products.

Participants had also been asked to name brands that they felt exemplified good transparency and bad transparency. Among the companies that were named as having good transparency, H&M was listed three times, lining up with the research done by the Hong Kong Polytechnic University (Shen, et al.). Other companies listed were Patagonia, Stella McCartney, Vivienne Westwood, and Eileen Fisher. Companies that participants thought had bad or no brand transparency were Forever 21 (listed the most), Victoria's Secret, Zara, and surprisingly, H&M. I think this answer indicates that regardless of how much “sustainable work” a company like H&M says that they do, a fast fashion brand is still in the business of fast fashion, one of the most notoriously damaging subcategories of the fashion industry.

Lastly, participants were asked to leave any additional comments they had on the subject, and they left insightful responses. Among the ones that stood out to me were this comment, “I would love to shop more for eco-conscious clothing but I often don’t seek it out...not a good reason, I know but I feel that if I had more info/updates (e.g. text message alerts like I get from old navy about random sales) I would be inclined to click and shop...these may be available but

I'm not hooked up to any major sites for shopping/email notices". This response shows that perhaps more effort is needed on the corporate end to incentivize customers into making ethical decisions. Another participant said, "I mostly buy at thrift stores, but I'll still buy jeans and socks and things like that at Target. As an old, full-time student I can't afford to pay for sustainable products, but I would if I could". Someone else had written as well, "What it comes down to for me is price. I'm a family of 5 on a budget". Both answers concur with the data that says price is the main reason why consumers who would otherwise love to buy sustainably, like the people of younger generations cannot.

What Does it All Mean?

With all this survey data, conclusions can be made about what the future of consumer behavior regarding ethical fashion will look like. It is obvious that younger demographics will age and become the main consumer of goods over those who are older. When this happens for people in Generation Z, the marketplace will have to adapt to their wants and needs to make a profit.

After all the data is compiled it is clear that price is the main reason that consumers do not purchase environmentally friendly products. This research concurs with research that was done by the Institute of Textiles and Clothing in the Hong Kong Polytechnic University that showed a correlation between price and ethical goods (Chan and Wong). In their findings they report, "that only store-related attributes of eco-fashion positively influence consumers' eco-fashion consumption decision, yet, such relationship can be weakened by the price premium level of eco-fashion" (Chan and Wong).

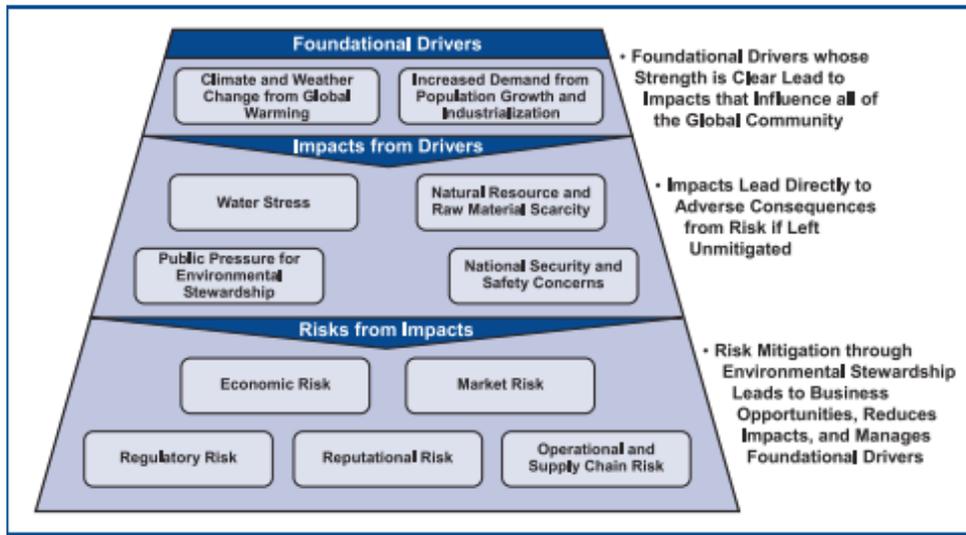
Despite this, it can be assumed that in the near future, Generation Z will demand that more ethically produced products be made. They will do this more so than any other generation has before them as they have more concern for the environment than older people, based on the survey data. They will also call out companies that do not have any brand transparency and ask to know about their products and production processes. It can also be assumed that this adaptation to more ethical goods will take some time due to the price of the goods, for both consumers and for the companies that create them. Because of this demand from younger generations, companies must innovate and find new ways to produce ethically at a smaller initial cost to reduce this deterrent for consumers. Even still, the amount of transparency in brands and ethically produced products will continue to grow along with Generation Z, as more people have noticed both ethical goods and brand transparency being more apparent in today's marketplace.

Chapter 5

Solutions for the Future

The problem of ethical fashion is not one that can be solved overnight. Even though a lot of research has been done on this topic and the issues that fashion production causes have been explored, little conversation is written about how to solve it. Based on my own survey data, and that of others, some potential solutions can be explored to better the process by which clothing, and accessories are made.

It is clear that based on research of consumer behavior, companies should expect to be encouraged by the customers to make their production more environmentally friendly. However, it is also clear that the cost of doing so, may discourage companies from making these changes. Eric G. Olson, a Senior Manager at Ernst & Young in Downey, writes, “Today, the past perception of negativity and confrontation between environmental stewardship and profitable business activity is oftentimes being replaced with a positive spirit of collaboration and partnership. Indeed, many businesses are learning to focus on improving efficiency to lower their environmental impact, which also improves business performance” saying that many companies are finding motivation in the public demand for ethical production and overriding many of the deterring factors of doing so (Olson). Olson also created a table showing what kinds of environmental factors (or drivers) may affect a business’s decision to “go green”:

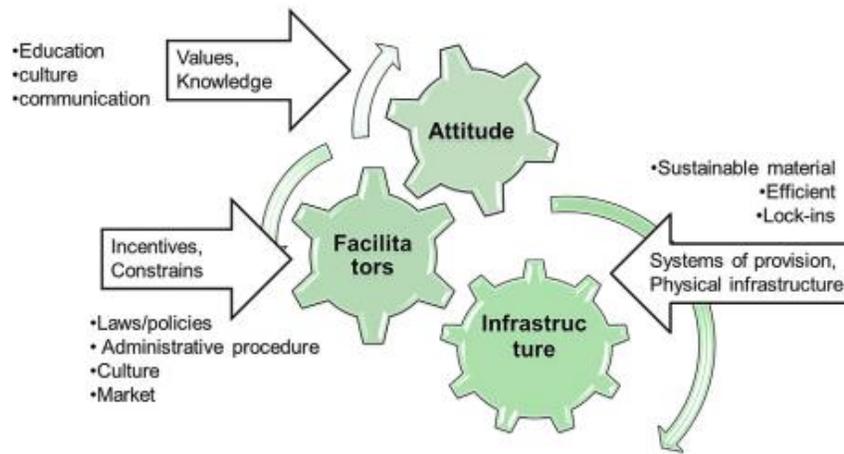
Figure 1 Topography of forces that encourage and drive business action

(Olson)

This table shows that the aforementioned pressure from consumers combined with environmental stressors that may impact a business directly can truly motivate a business to produce sustainably.

With these initial motivators in mind, a promising potential solution has been put forth by the United Nations (UN). Philip Vergragt, Lewis Akenji and Paul Dewick discuss how the UN has launched the Global Research Forum on Sustainable Production and Consumption (GRF-SPaC) to begin making ethical and environmentally friendly production a global phenomenon (Vergragt, et al.). In their words the GRF-SPaC, “is a new initiative bringing together organizations and individuals from various regions of the world engaged in research and its applications in the transition to sustainable production/consumption (SPaC) systems” (Vergragt, et al.). This program aims to make sure that all companies will begin to produce in sustainable ways. They plan on doing so by creating a plan that all people can universally follow in order to become more sustainable. This model of change can be seen on the following table:

P. Vergragt et al. / Journal of Cleaner Production 63 (2014) 1–12



(Vergragt, et al.)

This plan works by changing the general infrastructure of companies by utilizing more sustainable materials of production and making them work more efficiently. Then they want countries across the globe to make sustainability a part of their governmental and cultural “norms” by creating new laws to make being environmentally friendly a necessary change for companies and people alike. Lastly, they expect the attitudes of cultures and consumers to change to welcome sustainability, based upon the influence of the other two gears seen in the table. In this plan for mainstream sustainable consumption, one factor cannot work without the other two, i.e. one gear cannot spin without the other two moving as well (Vergragt, et al.). By changing the infrastructure, facilitators, and attitudes of the globe, the GRF-SPaC expects ethical production and sustainability may become more mainstream, but still may not be enough to help the environment:

“Companies have increasingly internalized sustainability to the point that it often becomes part of their core business values and operations. However, below the glossy surface of sustainability reports much still needs to be addressed. On a deeper level, companies are still driven by the profit motive, and by their institutional shareholders that look at profits on the ultra-short term; and ultimately, by the greediness of the actors on the financial markets” (Vergragt, et al.).

This profit motive is what will keep companies from becoming more sustainable faster than they may otherwise be motivated to.

Even though this program may not be able to make enough of an impact to turn all companies into sustainable companies, it can lead by example and inspire other nonprofits, like Greenpeace, and governments to do the same. The GRF-SPaC, along with all the published research in books, movies, and industry journals has helped to further the idea that ethical fashion production is the way of the future. And all of this combined with an increasing demand for ethical fashion by consumers may yet mean a “greener” future for fashion.

Conclusion

The fashion industry is one of the dirtiest industries on the planet today. For a long time, it has been the second largest contributor to global pollution, without anyone knowing a thing about it (Morgan and Ross). Much of the research done on the topic of ethical fashion has focused on the industry wrongdoings in places like the Aral Sea and the Pearl River Delta (Sweeney; Choi, et al.). This research has helped to draw attention to the environmental hazards that are happening right now and the potentially worse hazards we could see in the future if something isn't changed.

Many scholars have also done research on what keeps people from partaking in ethical fashion. And while many found price and a lack of knowledge to be the main factors in keeping people from purchasing, no one was considering the possibility of a difference in age and generations contributing to purchase decisions (Shen, et al.; Chan and Wong). My own research into this question has found that younger generations may in fact be more willing to buy sustainable products despite some of the deterring factors keeping them from doing so more frequently. As younger people age, get better jobs and have more disposable income, my research indicates they will start purchasing ethical fashion products far more frequently than they would be able to now.

Many companies around the globe are starting to prepare for this shift in consumer behavior by implementing policies similar to those of H&M (Shen). While there is clearly more work that needs to be done in this area, for H&M and for other brands, global nonprofit efforts, like those of Greenpeace International and the United Nations' Global Research Forum on Sustainable Production and Consumption, are assisting in making these kinds of ethical changes possible. With the continued effort of consumers and companies alike, the popularity of ethically

produced fashion will continue to grow and perhaps one day will be as prevalent as environmentally hazardous production is now.

Works Cited

- Bishop, Julie. "International Environment Law: Climate Change." *Australian Year Book of International Law*, vol. 33, 2015, pp. 429–430
- "Brands like Eileen Fisher, Patagonia Try to Curb Carbon Footprint." CBS News, CBS Interactive, 20 Nov. 2018, www.cbsnews.com/news/eileen-fisher-patagonia-fashion-brands-try-to-curb-carbon-footprint/.
- Chan, Ting-yan and Christina W.Y. Wong, (2012) "The consumption side of sustainable fashion supply chain: Understanding fashion consumer eco-fashion consumption decision", *Journal of Fashion Marketing and Management: An International Journal*, Vol. 16 Issue: 2, pp.193-215, <https://doi-org.jwupvdz.idm.oclc.org/10.1108/13612021211222824>
- Choi, Jamie, et al. *Dirty Laundry*. Greenpeace International, 2011
- "Global Apparel Market Size Projections from 2012 to 2025, by Region (in Billion U.S. Dollars)." Statista - The Statistics Portal, Statista, www.statista.com/statistics/279757/apparel-market-size-projections-by-region/, Accessed 13 Dec 2018
- Grappi, Silvia, et al. "Fashion Without Pollution: How Consumers Evaluate Brands After an Ngo Campaign Aimed at Reducing Toxic Chemicals in the Fashion Industry." *Journal of Cleaner Production*, vol. 149, 2017, pp. 1164–1173., doi:10.1016/j.jclepro.2017.02.183.
- "How Much Do Consumers Spend on Apparel?" *U.S. Bureau of Labor Statistics*, U.S. Bureau of Labor Statistics, 1 June 2012, www.bls.gov/spotlight/2012/fashion/.
- "Leading Apparel Retailers in The United States in 2017, Based on Retail Sales (in Billion U.S. Dollars)*." *Statista - The Statistics Portal*, Statista, www.statista.com/statistics/197833/2010-sales-of-apparel-retailers-in-the-us/, Accessed 15 Jan 2019
- Morgan, Andrew, and Michael Ross. *The True Cost*. Life Is My Movie Entertainment Bullfrog Films , 2015.

- Olson, Eric G. (2009) "Business as environmental steward: the growth of greening", *Journal of Business Strategy*, Vol. 30 Issue: 5, pp.4-13, <https://doi.org/10.1108/02756660910987563>
- Shen, Bin. "Sustainable Fashion Supply Chain: Lessons from H&M." *Sustainability*, vol. 6, no. 9, 2014, pp. 6236–6249. doi:10.3390/su6096236. Accessed 2018.
- Shen, Bin, et al. (2012) "The impact of ethical fashion on consumer purchase behavior", *Journal of Fashion Marketing and Management: An International Journal*, Vol. 16 Issue: 2, pp.234-245, <https://doi.org/10.1108/13612021211222842>
- Sweeney, Glynis. "Fast Fashion Is the Second Dirtiest Industry in the World, Next to Big Oil." *EcoWatch*. EcoWatch, 02 Oct. 2016. Web. 10 Jan. 2017.
- Timmerman, Kelsey. *Where Am I Wearing?: a Global Tour to the Countries, Factories, and People That Make Our Clothes*. Wiley, 2012.
- "The Consumer Expenditure Survey—30 Years as a Continuous Survey." *U.S. Bureau of Labor Statistics*, U.S. Bureau of Labor Statistics, 26 Jan. 2010, www.bls.gov/cex/ceturnsthirty.htm.
- Tri, Dadang. "Indonesians on the Citarum River." *New York Times*, The New York Times Company, 13 Dec. 2008, www.nytimes.com/2008/12/14/world/asia/14river.html.
- Vatz, Stephanie. "Why America Stopped Making Its Own Clothes." *KQED*, KQED INC., 20 Apr. 2018, www.kqed.org/lowdown/7939/madeinamerica.
- Vergragt P, et al. "Sustainable Production, Consumption, and Livelihoods: Global and Regional Research Perspectives." *Journal of Cleaner Production*, vol. 63, 2014, pp. 1–12., doi:10.1016/j.jclepro.2013.09.028.
- Yardley, Jim. "Report on Deadly Factory Collapse in Bangladesh Finds Widespread Blame." *The New York Times*, The New York Times, 22 May 2013, www.nytimes.com/2013/05/23/world/asia/report-on-bangladesh-building-collapse-finds-

widespread-blame.html.