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Ms. Walker

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The Fast Fashion Industry and its Environmental Impacts

Up until around the 1960's, the fashion industry was producing clothing items slower than it is today. Not that many garment factories existed and clothing was still made at home. Young people in the 1960s and 1970s, though, began creating new clothing trends and rejecting the sartorial traditions of older generations. They embraced cheaply made clothing to follow the trends and the use of polyester fabrics became more popular. With the increasing demand for affordable clothing, fashion brands in the U.S and Europe turned to massive textile mills across the developing world to save millions of dollars by outsourcing labor.

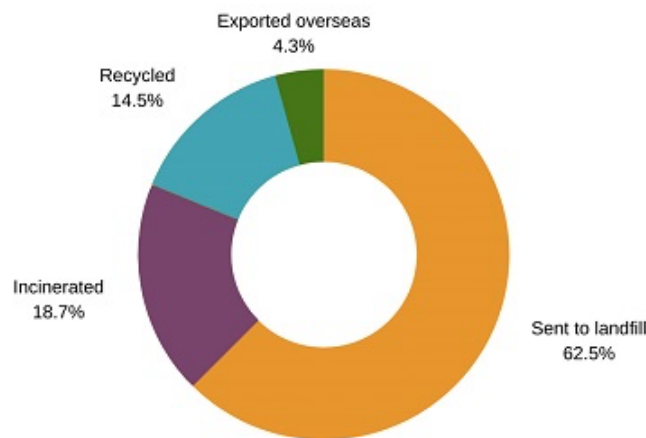
In the late 1990s and 2000s, fashion companies like H&M, Zara, and Topshop took over. These brands are in the forefront of the fast fashion industry. Their goal is to price their clothes much lower than their higher-end competitors at more volume and lower quality. They are able to design, produce, market and distribute new items all around the globe in about 2 weeks. “This method of conducting business is extremely valuable in this fashion industry as many experts believe we no longer follow a four-season fashion calendar, but rather we are in the 52 micro-seasons of fashion” (Singh). Along with online shopping taking off at this time, almost everyone is now able to shop for on-trend clothes whenever they want and dress like their favorite celebrities.

The speed and demand of the fast fashion industry is increasing the concern on environmental issues such as land clearing, biodiversity, and soil quality as well as introducing possible health risks. With the industry endangering the state of not only our planet but also our own well being, there are many changes that need to be made by the fast fashion industry and its consumers.

The Current State of the Industry

The goal of fast fashion is for consumers to feel in and out of style with the release of new collections every week. The speed at which garments are produced means that more clothes are being disposed of by consumers, which creates a huge amount of textile waste. In the U.S alone, 16 million tons of textile waste are generated each year and about 10 million tons get sent to landfills (Porter). Not only does throwing away clothing wastes money and resources, but it can take 200+ years for the materials to decompose in a landfill. During the decomposition process, textiles generate greenhouse methane gas and leach toxic chemicals and dyes into the groundwater and our soil.

The EPA reports that Americans generate 16 million tons of textile waste a year. On average, 700,000 tons of used clothing gets exported overseas and 2.5 million tons of clothing are recycled. But over 3 million tons are incinerated, and a staggering 10 million tons get sent to landfills.



Source: Porter, Beth. "What Really Happens to Unwanted Clothes?" Green America

Polyester, being one of the most popular fabrics used in fast fashion, only exacerbates the problem. It is derived from petroleum and, "the production of the synthetic fabrics releases nitrous oxide, a greenhouse gas that is 310 times stronger than carbon dioxide" (Leon). Polyester can shed microplastics, which can add to the increasing levels of plastic in our oceans. Microplastic can become a problem when it interacts with food production and the, "fibres released by washing of clothing could be an important source of microplastics to aquatic habitats," since an average wash load of 6 kg can release over 700,000 fibres per wash (Napper and Thompson). Their small size allows them to bypass water filtration systems and end up in drinking water and fertilizer. They frequently pollute our food not only by ending up in the digestive tracts of the seafood we eat, but also through on-land fertilizers and irrigation systems. A recent study has also found microplastics within human placentas. This discovery introduces

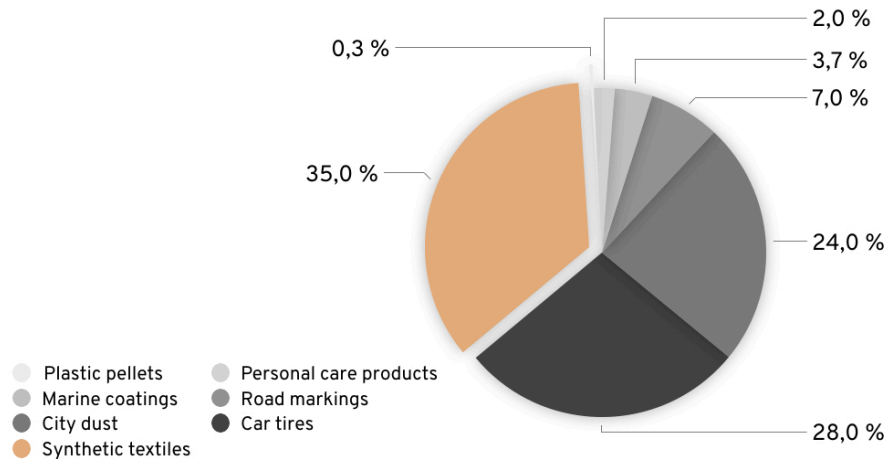
possible consequences on pregnancy outcomes and fetus development as ,“Microplastics carry with them substances which acting as endocrine disruptors could cause long-term effects on human health”(Ragusa et al.).



Unwanted Clothes at a landfill in Mesa, AZ. *Creator: Alan Levine*

Microplastics, though, do not solely come from fast fashion clothing and appear in all sorts of man-made products such as paints, adhesives, plasters, cosmetics and personal care products such as facial cleansers and toothpastes (NOAA). This does not diminish the fact that the fast fashion industry has played a big part in spreading the plastic as it accounts for about 35% of microplastics in water. These fibres post a threat to our ecosystems and health regardless of where they come from.

Percentage of microplastics in the water



Source: Boucher, Julien, and Damien Friot. "Primary Microplastics in the Oceans."

IUCN, 2017

Natural fabrics such as cotton, linen, and silk can also be a problem with the current demand that fast fashion has created and continues to satisfy. The fibres of these materials are often blended with synthetic fibres to reduce the cost of a fabric as well as make it more wrinkle resistant, stretchy, and durable. The clothes, though, are barely worn before being thrown out. In fact a "study found that fast fashions are constructed so that they typically last no more than 10 wearings"(Pierre-Louis). In addition, conventional cotton requires enormous quantities of water and pesticides in developing countries. This increases the risk of drought and creates huge amounts of stress on water basins, as well as competition for resources between companies and local communities. The processing of leather also impacts the environment as it , "generates an

enormous amount of waste: 1 metric ton of raw hide yields 250-300 kg of leather but also leaves 600 kg of solid waste, including sludge”(Short).

Furthermore, fast fashion has taught us to expect that a t-shirt should cost less than \$10, that we can buy a cheap, copy-cat of a celebrity look within the week, and that new collections should be constantly dropping. The precise tag, though, does not reflect the wages that the farmers, sewers and factory workers receive. In order to keep prices as low as possible and maximize profits, many brands have factories in countries like Bangladesh and India. Factories in these countries compete against each other on pricing, agreeing to lower and lower rates for labor. In Bangladesh, the second-largest exporter of fashion to the U.S. and one of the cheapest places in the world to source fashion, the legal minimum wage for garment workers is 8,000 taka (about \$94) a month, far below the estimated living wage of 16,00 taka (~\$189), which would provide a family with proper food, shelter, and education (Butler).

A research study done by the Center for Global Policy accuses global brands such as Nike, Gap and Adidas of using Uyghur forced labour in their textile supply chains. The forced Uyghur labour under a state-sponsored labor transfer scheme dominates , “manual cotton picking in southern Xinjiang, which produces over three quarters of the region’s cotton (and nearly all high-quality long staple cotton); they also play a major role in cotton harvesting in the more mechanized cotton-producing regions”(Zenz).

What Should Be Done

It is evident that more communities around the world need to be operated in a manner that is environmentally and socially responsible, healthy, and improves the quality of life. Fast fashion brands and consumers need to both take steps doing that before the state of our environment and health become worse.

Fast fashion brands can have regular check ups on the garment factories that they work with to make sure that they are operating under proper working conditions. Alternatively, these brands can start working with garment factories that are Leadership in Energy and Environmental Design (LEED) certified by the U.S Green Building Council. LEED provides a framework to create healthy, highly efficient and cost-saving green buildings. Certified buildings are highly equipped for water conservation, energy efficiency, resource use, CO2 emission, waste management, and use of daylight. Certification even extends to buildings that provide a safe and healthy work environment, with residences, school facilities, markets and transport stands for workers.

Fast fashion brands can also offer a recycling program, introduce more environmentally friendly clothing, and move away from the fast fashion business model. At H&M, for example, customers can bring clothes from any brand in-store to be recycled into new clothes and buy from their sustainable fashion collection that uses eco-friendly materials like organic cotton and recycled polyester. On top of that, brands need to release fewer items each year and reduce the number of "micro seasons". These companies can put more effort into creating trends that last longer than a couple of weeks and selling more staple wardrobe items instead of what's incoming on the runway.

As for the forced labor that occurs in the clothing supply chain, consumers should hold companies accountable for creating clothing items through these means and demand to uphold basic human rights. Fashion brands should also identify any opportunities to increase pressure on governments that allow such labor so that they are not complicit in any coercive labor schemes.

Consumers could also learn how to love the clothes that they currently own and make more conscious choices rather than constantly buying new ones. However, with about 34 million people in the United States living in poverty, avoiding fast fashion isn't as simple as it is made out to be and is possibly many people's only resource for clothes (Semega et al.). Sustainable clothing isn't cheap either, as tops can range from \$25-\$95 and bottoms at \$50-\$200+ depending on what brand you buy from. These prices seem steep when compared to tops and bottoms in H&M, where all items are less than \$40 with some tops being as low as \$3.

Sustainability, though, is not just about buying the most sustainable garments or spending a fortune on the kindest brands – it's also about making sure the clothes we already own are well taken care of and treasured for a lifetime. Consumers need to start buying less, choosing well, and making clothes last. There is no need to buy the next new trendy top that came out last week. Instead, choose clothes with eco-friendly fabrics such as denim, linen, cotton.

Buying and using secondhand clothes is also an environmentally friendly and cheap option to minimize our carbon footprint. People could start thrifting at shops like Goodwill and small thrift stores in local areas, or even borrowing clothes from friends and family. Instead of

throwing away clothes, people can donate them to thrift stores, have garage sales or sell clothes through online marketplaces like Poshmark, Depop, and ThredUp. Sellers using these platforms can connect to a global community and make fashion less wasteful. Buyers can shop with intention, reject throwaway fashion culture, and stand for sustainability. A study done by Green Story on ThredUp found that, “Buying one used item reduces its carbon, waste, and water footprints by 82%”.

People can even host events in their community to swap clothes, much like the Stop-and-Swaps held by GrowNYC. These events are held in different spots around New York City and people donate clothes that they don't want so that they can swap them with other clothes. It's completely free and everyone gets new clothes in the end. Using secondhand clothes means that we will be keeping plastic out of landfills and contributing to the decrease in textile waste.



People are gathering at the Stop and Swap. *Creator: Grow NYC*

Mending and upcycling old items can make clothes last longer and help us wear our clothes until they are worn out. Learning how to sew would help in turning old clothes into new items. Sewing allows you to repurpose almost anything: turn old shirts into quilts, thick blankets into sweaters or even close up tiny holes. Sewing is multifaceted because there are so many projects that anyone can do and it's not limited to fashion items, but you can also make home items and other crafts. If sewing is not for you, then there are plenty of skilled dry cleaners and local seamstresses who can fix up trousers and patch pockets for you.

Fast fashion brands seek to satisfy the demand that it has created by constantly selling newer products. Our love for constant newness has come at too high a price for our planet. If more campaigns encourage consumers to love their clothes rather than constantly buying new ones, then we can see more consumers making small conscious changes and improving the sustainability of clothing across their life cycle.

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