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**“Ethical dimensions in production, consumption and trade: an
international account”**

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Introduction

During the last decades, the way consumers, producers and vendors interact with each other has changed drastically. Nowadays, when a consumer makes a purchasing choice, the price and quality of the product aren't the only main factors. Consumers, now more than ever, take into account the social and environmental impact of purchasing goods, leaning more towards products made with more 'ethical' practices and avoiding ones with a negative impact on humans, animals and the environment. Even though shopping ethically in today's market and being a conscious consumer may not be so easy nowadays, especially with so many companies not being open or honest about their practices, if enough consumers at least attempt to shop in an ethically conscious way, it can cause a chain reaction, with companies taking notice of the change in consumer demand, wanting to gain a competitive advantage and addressing their production process and supply chain practices. That shift also results in vendors having to rethink their practices and pay more respect to human rights, making sure their workers are treated fairly. So, consumers, producers and vendors all have responsibilities and have to take into consideration who their choices affect and to what degree.

Some ethical considerations of production for example can be the use of animals in the cosmetic industry and whether the suffering it causes is necessary or not. Another example can be the rise in Fast Fashion globally, negatively affecting the health of the factory workers and the population living near it, as well as the environment. At the same time, the ethical aspects of consumption have to do with overconsumption and the excessive demand for meat. Lastly, in trade, the ethical considerations refer to the wellbeing and safety of workers, whether they are factory workers or employees that are part of a minority group.

It is important that everyone is educated on these issues and recognises how it affects humans, animals and the environment. It is also necessary that producers, consumers and vendors make ethically conscious decisions and that scientists invest their efforts in research for alternative methods and less harmful practices. Lastly, it is extremely crucial for governments to do their part and protect the environment and vulnerable populations through laws and regulations.

Animal Testing

Introduction

Humane Society International has defined the term “animal testing” as the procedures performed on living animals for purposes of research into basic biology and diseases, assessing the effectiveness of new medicinal products and testing the human health and environmental safety of consumer and industry products such as cosmetics, household cleaners, food additives, pharmaceuticals and industrial/agro-chemicals (*Humane Society International, 2012*). The animals that are subjected to these procedures are usually mice, rats, rabbits and guinea pigs and some non-human primates, for example, monkeys and even chimpanzees (*CULABBR, 1988*). Some of those procedures, and the ones that are performed the most regularly, are for example exposure to diseases, drugs and chemicals by force-feeding, forced inhalation, forced skin exposure and by injection into the abdomen and muscle. Another procedure is physically restraining the animals, for short or extended periods of time, for inspection and monitoring while also depriving them of food and water. Surgical procedures and genetic manipulation are another a part of animal testing. An additional example can be the infliction of various injuries such as burns and wounds in order to study healing, the physiology of pain and possible treatments. These animals are almost always subjected to ear-notching and tail clipping for identification purposes and are put into stress inducing situations, for instance electric shocks and forced swimming. As expected, all these procedures cause a great amount of suffering, on a physical as well as a psychological level. After the experiments are completed, some of the animals are put through the same treatment in subsequent experiments and the ones who are no longer useful are killed, typically by carbon dioxide asphyxiation, neck-breaking or decapitation.

In Cosmetic research, animal testing means performing the invasive procedures that were previously mentioned, to the animals who are most commonly mice, rats, hamsters and rabbits, specifically for the purpose of gathering information about their reactions to chemicals that are going to be used on cosmetic products. The information obtained from these tests is then used to substantiate a company’s claim that a cosmetic product is safe for human use. Manufacturers have to test for the risks that can come from immediate exposure to the product through normal use, accidental contact with the eyes or skin, and accidental ingestion but they also have to test for more long-term risks, for instance the potential to cause cancer or birth defects. They also focus on determining how the product can irritate the eyes and skin, the general toxicity of it, mutagenicity (the induction of permanent changes in the genetic material of cells) and phototoxicity (the influence of ultraviolet light on cosmetic products). Lastly they test for allergic reactions, through directly applying products on animal noses, eyes, mouth and mucous membranes. Cosmetic companies have invested great effort into testing their cosmetics on animal subjects and that results in around 500,000 animal deaths, every single year around the globe(*Humane Society International*).

A brief history of animal testing

Animals proved to be useful in the biomedical science field and research for everything, from basic understanding and exploratory research in medicine and biology to drug and vaccine testing and development (*Giacomotto and Segalat, 2010, Hendriksen, 2009, Hendriksen, 2007*). These procedures performed on living animals for scientific purposes, are not a new phenomenon. Animals have been used in medical research since the beginning of medicine and thanks to them a list of countless discoveries, cures and treatments has been created.

The history of animal testing actually goes all the way back to Ancient Greece and can be traced back to the 4th century BCE. Ancient Greeks, especially physician-scientists, believed that nature and the human body could be understood by exploration and experiments and wanted to study anatomy further. Thus, they suspected that dissecting vertebrate animals for anatomical studies would help satisfy their anatomical curiosity. One of those academics, and one of the first documented scholars to perform experiments on living creatures, was Aristotle. Aristotle for example, after discovering a fertilized hen's egg of a suitable stage, opened it in a way that the embryo's heart was visible and studied it. Even though humans, and more specifically criminals, were also used in biomedical research and experiments at the time, using human models was discouraged. However, the use of animal models was not questioned at all until the development of empiric schools of thought. So, before that era, dissections of animals was a normal practice. Dissections performed on animals are called vivisections, defined as the exploratory surgery of live animals in order to acquire knowledge on the mechanisms and functions of living organisms. During a vivisection, physician-scientists used to examine sensory nerves, motor nerves and tendons in order to understand their functional differences. The difference is, that back then, animal tests were essentially conducted on medical grounds and not for cosmetic purposes.

Ever since the first appearance of cosmetic products, which historians trace back to 4,000 BC in ancient Egypt with the use of kohl for dramatic eyes, chemists have had to test their creations in order to deem them safe for general consumption. Before such testing could be done, many civilizations all over the world had to use whatever ingredients were available, often causing severe harm to their skin and health. Examples of that can be found in Ancient Egypt and India, where mascaras for the eyes and various other cosmetic products caused several health problems, blindness and even death.

Despite the fact that animals have been used to test the safety and effectiveness of drugs and vaccines in the U.S. since the early 1920s, it wasn't until the early 20th century that cosmetic animal tests started to become accepted and common. More specifically, the history of cosmetic and beauty product testing on animals can be traced back to an untoward incident that occurred in 1933 when a woman lost her eyesight after applying mascara. This event was followed by a series of unfortunate accidents where several women were blinded after applying the Lash Lure mascara, since it contained an untested chemical, p-phenylenediamine, that can cause severe allergic reactions, blisters, ulcers and abscesses. These events forced the federal government, and more particularly the U.S. Food and Drug Administration (the FDA), to pass a few years later, in 1938, the Federal Food, Drug, and Cosmetic Act. After that, it became mandatory for cosmetic companies to test their beauty products on animals in order to verify their safety.

Another animal testing method followed a few years later, in 1944, called the Draize irritacy test. This test requires exposing the animal's eyes and skin directly to the chemicals that are being developed. Even though this test is the cause of extensive animal suffering, it was considered to be the gold standard for cosmetic safety assessments for several decades to follow. Finally, following the end of World War II, animals also came into widespread use for testing the safety of consumer products such as household cleaners, food additives, and pesticides, based on the theory that their reactions could predict the potential for harming humans and other animals.

In closing, experimenting on animals has always been used by people as a way to try to understand a little more about nature, biology and the human body and during the 20th century it even became mandatory to perform animal testing for many industries, such as the cosmetics one. However, in the past decades there has been a rise in demand for cruelty free products. Many consumers have raised serious concerns about the ethics of using animals to test product safety, especially for cosmetics, and as a result animal testing as a practice has relatively declined.

Reasons for the decline in animal testing

Animal testing, as well as the cruel procedures and methods that were used on animals, were exposed to the public in the early 1980's and that resulted in a big outburst against the tests. Henry Spira, an animal rights advocate, who was considered one of the most effective advocates of the cause (*Singer, 2006*), influenced a significant part of the population during the 1970s and 1980s and persuaded them to work towards eliminating these tests. One way he did that, was by being in charge of running full-page newspaper ads, which held Revlon and other cosmetic companies accountable, not only for continuing to implement animal testing practices but also for fostering an environment where animal cruelty was acceptable and tolerated merely for the sake of beauty. As expected, consumer demand, influenced by the work of Henry Spira and other animal activists, slowly started to shift away from brands who tested on animals and more towards cruelty free alternatives. Consequently, due to consumer pressure, Revlon needed to change the brand's image and animal testing policy and became the first cosmetics company in the U.S. that financed a major research program. The goal of that research program was to develop alternative solutions instead of the use of animals in eye-irritancy tests. Not long after, Revlon's example was followed by many cosmetic brands, such as Avon.

A collective step towards the cruelty free direction was taken soon after, with the announcement that was made by the Cosmetics, Toiletries, and Fragrance Association (CTFA), which all the major U.S. cosmetics companies are a part of. According to this announcement, a \$1 million grant was invested into developing alternatives and it was received by the Johns Hopkins School of Hygiene and Public Health in order to establish the Center for Alternatives to Animal Testing (CAAT). The CAAT's main goal is to encourage the development, use, acceptance and adoption of the alternatives. One of the significant achievements of the center was the development of ALTWeb, an international clearinghouse where people have the opportunity to gather information about the research, the resources and the alternative methods. The significance of sites like ALTWeb, that display the available information about the safety of ingredients and product formulations, have played a big part in reducing the number of animals used in testing for cosmetic products.

The millions of money that were invested for the purpose of developing alternatives, for example the grant that was previously mentioned, resulted in many new alternative testing methods and the increased use of them as safety screens. These new methods replace at some level, the traditional animal testing methods and so, they help to reduce the number of animals needed for testing a product or ingredient. Hence, another big step that contributed to the decline of animal testing, was the approval of these first alternatives to the Draize rabbit eye irritancy test by the Food and Drug Administration (FDA) and the Environmental Protection Agency (EPA). At this moment in time, some manufacturers use ingredients that have already been tested and are "Generally Recognized as Safe" (GRAS) and therefore do not require further animals for testing. Toxicologists also have the opportunity to test directly on humans who volunteered for the tests, thus reducing the amount of animals needed. Lastly, many new in vitro (test tube) toxicology testing techniques and in silico (computer modeling) analyses play a significant part in replacing the use of animals or decreasing their number. These new non-animal eye and skin tissue irritancy tests have attracted a lot of attention recently not only by the scientific community but also by consumers and as a result, businesses as well. Many industry executives realized that alternative testing methods make good business sense, since they are not only more humane but also faster, cheaper and more predictive of human response than traditional animal tests.

As is evident, after learning about all the cruelty that goes on behind the scenes, many consumers turned against animal testing, while some companies figured it made good business sense. However, there are many people who still support these testing methods, claiming that they are necessary to ensure their safety and many companies who refuse to oblige to the new developments.

The ethical considerations of animal testing

After all that, one can rightfully assume that animal testing is a very controversial subject and it has always been a morally interesting topic. Almost every aspect of this discussion has its critics and its supporters, with both having reasonable opinions but also radical points of view. On one hand, the detractors of animal testing, whether they are individuals or whole organizations, emphasize the cruelty and suffering inflicted on these animals, who have rights against pain and distress and therefore, their use for experimentation is unethical and must be stopped (*Rollin, 2003*). Supporters also highlight how unnecessary all that cruelty really is when there are many other alternative solutions (*PETA UK, 2015*). Other than the significant ethical concerns there are a few other downsides to animal experimentation, according to its critics. The main concerns are the high costs, the required skilled manpower and the time consuming protocols (*Doke and Dhawale, 2015*). On the other hand, animal testing supporters argue that its benefits clearly outweigh the drawbacks and that animal testing is a necessary and inevitable evil. The father of physiology, *Claude Bernard*, declared that "experiments on animals are entirely conclusive for the toxicology and hygiene of man. The effects of these substances are the same on man as on animals, save for differences in degree".

From one point of view, the way that animals are treated is cruel, the testing methods are unethical and the practice as a general is unjustified and inhumane (*Rollin, 2003*). This is one of the most fundamental arguments against animal testing and due to that, several consumers have expressed serious concerns about the ethics involved in testing products on animals, especially cosmetics. The main issue is the amount of suffering and the great number of animals that are harmed, which outweighs any benefits humans or animals could have from the practice and in turn, does more harm than good (*Aysha Aktar, 2015*). According to the *U.S. Humane Society* rodents, for example rats and mice, are by far the most commonly used animals in tests and they are usually followed by fish and birds. However, the number of animals that humans consider more conscious or self-aware, like cats and dogs, is significantly lower. Therefore, the more likely an animal is to have a consciousness similar to humans, the fewer of that animal one can see used in tests. From that, one might conclude that the empathetic line gets drawn decisively at “human-like”. Nevertheless, considering that the list of animals that express self-awareness has expanded to include dolphins, elephants, some bird species and the great apes, that raises the question of whether or not this kind of testing is justified any more so than it would be on humans.

Apart from that question, there is also the issue of whether the results from the species tested can perfectly be applied to humans, since the theory that animals are the perfect test subjects has recently come under scientific criticism. There is a possibility that some animal testing isn't effective enough to produce applicable results for human biology or that it is a poor model for the concept altogether. For example, according to *Dr. Richard Klausner*, who was the former director of the National Cancer Institute: “The history of cancer research has been a history of curing cancer in the mouse. We have cured mice of cancer for decades. It simply didn't work in humans.” That statement was made during the late 1990's but even recently more work confirms the belief that animal testing isn't the most accurate way of testing. As specified by the *American Journal of Translational Research* in their article in 2014, the “average rate of successful translation from animal models to clinical cancer trials is less than 8%”. Similarly, according to a study issued by the *Proceedings of the National Academy of Sciences* in 2013, mice are bad models for inflammatory diseases in humans, the outcome of which is often cancer.

The last argument against animal testing is the rapid progression of science and the significant technological advancements that were made during the last century. Thanks to these advances scientists are indeed able to decrease the need to experiment on animals in their labs. At this moment in time, peoples' health and safety can finally be protected from untoward reactions and sideeffects by various effective, reliable, and humane alternatives to animal testing. Modern researchers are capable of growing actual human cells for testing, from stem cells and lab-grown cell cultures to complex three-dimensional cell tissue models. Not only that, but computational biology is also rapidly advancing, meaning scientists use computer programs with already existing data from advanced chemical databases, in order to precisely model and predict the reactions and the toxicity of new drugs and chemicals (*National Institute of Environmental Health Sciences*). So, if it is possible for an institute to conduct a study without the use of animals, then it should no longer operate in them, like the UK-based Sanger Institute, a genetics laboratory, did in 2019.

As a counterargument, animal testing is considered by some, to be essential. This opinion is supported by a significant number of medical institutions, medical professionals, and private research groups. One supporter of animal testing for example is *Stanford Medicine*, arguing that the use of animals in certain types of biomedical research benefits humans by making the scientists able to discover the causes, diagnoses and treatments of many diseases and therefore, helping to moderate and even eradicate suffering in the world on a large scale. Almost every human alive today has at some level, benefited from the advances in medicine that came from animal testing. According to *Kurt J. Isselbacher*, the former director of Massachusetts General Hospital, so many of the modern medical wonders originated from animal testing practices. Examples of these medical advancements are the radioactive iodine that is used for scanning a patient's thyroid glands, anticoagulants for preventing blood clots and even the polio vaccine. That vaccine alone, which was developed by testing on monkeys, has saved around 500,000 lives and prevented 10 million cases of paralysis since 1988 (*Centers for Disease Control and Prevention*). Even in recent years, vaccines that save the lives of millions of people worldwide, like the Covid-19 vaccine by Pfizer and Moderna who tested their vaccines on mice and macaques, are developed because of animal testing.

Another argument for the significance of animal testing is the similarities that humans have in their genetic and physiological makeup with certain animals. In some cases the similarities are extremely close, for example the 98 percent of the DNA humans share with one of the most commonly-used lab animals on the planet, mice. As a result, almost everything tested on mice can be applied to our own species. That fact, renders the animals, in particular mammals who are the closest to humans in evolutionary terms, the perfect models for many diseases that target humans (*National Academy of Sciences*). The shorter natural life span of these animals also helps the research, since scientists can detect how drug treatments can manifest over a full lifetime, or even how it can affect multiple generations of animals. This aids researchers in predicting how the effects of a particular treatment may ripple out to others in the actual context of a biological and social setting.

In addition to humans, many animals enjoy the benefits of animal experimentation, since hundreds of drugs and treatments that were originally developed for human use, are now frequently used in veterinary clinics as well, helping animals live longer, healthier lives (*Stanford Medicine*). *Stanford Medicine* also makes a point of treating the animals used for experimentation, in an ethical and humane way. Even if there are no meaningful, ethical considerations behind the humane treatment of the animals, researchers still have an incentive to treat them that way, since it is necessary for scientists to replicate the results for them to be valid. If the animals are treated in a poor way, the results they produce will not be pure or reliable data.

Despite their differences, both sides are trying to address the same questions. They are both trying to find the answers to whether animal testing is really necessary, if it actually helps, if there are other ways to make medical progress and no other ways to adequately test cosmetics. There are no definitive, easy answers to those questions. What is clear, however, is that the issue of animal experimentation is a negotiation. A negotiation that continuously evolves with time and technology and a dialogue that all individuals in society and all members of the global community should be a part of.

Response from the international community

As previously mentioned, animal testing is a global issue and in order to move past it, many countries and international organisations should make an effort to reduce the number of animals used for testing vaccines, drugs and for other scientific purposes by investing money into developing adequate and accurate alternatives and work towards putting an end to animal testing for cosmetic purposes.

The European Union for instance, is an example to be followed when it comes to seeking and applying alternatives to animal testing for personal care products. It all started in 2004, with the implementation of a directive ban by the European Union, where all testing of finished cosmetic products and their component ingredients on animals was prohibited. Five years later, in 2009, that directive was expanded to ban the sale of any cosmetics, where the final product or any of its ingredients have been tested on animals. Not long after, in 2013 that ban was in full effect, despite the protests from the European Federation for Cosmetics Ingredients and the 70 companies that were based in Switzerland, Belgium, France, Germany and Italy. The European Union's example of enacting laws favoring cruelty-free cosmetics or introducing campaigns and bills in order to reduce cosmetic animal testing, was followed by numerous countries like Russia, Brazil, New Zealand, Israel and India.

Steps forward were also made in China, despite the fact that there, more animals are used in research than anywhere else in the world. Previously, to sell in the country, brands had to agree to the possibility that their products could be tested on animals. Now however, imported cosmetics are no longer required to be subjected to animal tests.

Another country that followed the EU's course of action in putting an end to animal testing, after decades of long unending pressure and marketing campaigns, was the US. In 2021, the United States senate, passed a bill that prohibits animal testing in the evaluation of cosmetic products and the sale or transport of cosmetics developed by using animal testing. This bill is called the federal Humane Cosmetics Act and it is a significant step towards putting an end to animal testing. As for this moment, there are six states in the U.S. with cosmetic animal testing bans and similar legislation is also pending in state legislatures. Big steps were also taken in North America, after Mexico became the first country in the continent to totally ban cosmetic animal testing.

On the other hand, after Brexit, the United Kingdom will not stand firm on the bans on animal testing (*Kerry Postlewhite*). Even though the UK has prohibited animal testing for cosmetic purposes since 1998, the government had "reconsidered its policy" according to the Home Office. After 23 years of advocating for animal rights, ministers have paved the way for the expansion of animal testing for ingredients used in cosmetic products. In a letter, the government stated that it was aligning itself with a decision made by the European Chemicals Agency (ECHA), where scientists stated that they needed to test some ingredients used only in cosmetics, on animals in order to make sure they were safe to use. A government spokesperson however, stated that that doesn't change the fact that there is no change in legislation when it comes to the ban on using animals for the testing of finished cosmetic products.

The meaning behind the “cruelty free” label

The policies that were enacted by the governments seem to be important steps towards progress while cruelty free products seem to make good business sense. However, corporate commitment to them varies widely and many major companies still test on animals despite the public statement that a company may make about their decision to end animal testing. At first glance, it can reasonably be assumed that a product with the label “cruelty free” or “not tested on animals” would be the result of a production process that’s free of any type of cruelty. But a deeper and more careful examination of the manufacturing process of these items, reveals that this does not always apply to reality.

At the present moment, there is no government agency and no legislation that defines the term “cruelty free” and there is no set standard for their usage. That means that it is up to individual companies and manufacturers to define what is and isn’t considered cruelty free. As a result, any company can claim their product is cruelty free and many cosmetic companies can choose to promote their products with claims of no cruelty in their labeling and marketing. As specified by a non-profit organization, the MSPCA (*Massachusetts Society for the Prevention of Cruelty to Animals - Angell*), when brands claim to be cruelty free, they could be implying that only the final product has not been tested on animals, while the ingredients have. It could also mean that, even though the product and/or the ingredients are not currently being tested on animals, they have been tested in the past and could possibly be tested again in the future. Another scenario is that the manufacturer itself did not conduct the animal testing, but instead had a supplier test for them. That supplier, when it comes to countries with strict animal protection laws, could be from a foreign country where the laws preventing animal testing are weaker than the country the manufacturing process is currently taking place. Additionally, the Cruelty free label can imply that the product was not tested on animals, but forced labor was involved. The last scenario, and the least likely one, is that neither the product nor its ingredients have ever been tested on animals. That is highly unlikely to happen, since the majority of the ingredients used today have all been tested on animals at some point in time and could be tested again.

In conclusion, animal testing is a very controversial subject that concerns a great amount of people. Recently, many animal rights activists have made their voice heard by governments, businesses and consumers and many significant steps have been taken to prevent the harm and the cruelty that animals are put through. Still, there is a long way to go in terms of providing more humane treatment to animals and minimizing their suffering.

Fast Fashion

Introduction

Fast Fashion is the mass-production of clothing, at a rapid speed and with the lowest possible cost. It is the latest and most trending business model of the apparel and footwear industries, which as a whole, is a multibillion dollar enterprise. The apparel industry can alternatively be called the fashion industry, considering the boundaries between them have been blurred since the 1970's. It is a dynamic and diverse segment of the global marketplace and has important effects on the world's economy and society as a whole. For example, at least 430 million people depend on the industry for jobs (*World Bank 2017*), from factory workers in Bangladesh to fashion designers in Italy.

The fashion industry as we know it today, based around firms and fashion houses, started in the 19th century. However, over the past twenty years, there have been countless technological changes, divergent consumer purchasing habits and globalization. As a result, two centuries later, the fashion industry has been going through a transitional period and therefore, the whole structure of the industry has to adjust. The outcome of this adjustment is nothing other than the fast fashion market segment. Fast fashion firms took advantage of these technological advancements and made use of the now available, high-speed production in developing economies in order to provide the newest trending designs and satisfy high consumer demand for low-cost products. As a way to provide these low-cost, low-quality, trend based clothes to consumers at unrivaled speeds, profit-seeking companies often end up having to use cost-cutting methods that are unethical and exploitative. Exploitation mainly occurs in the manufacturing sector of the fast fashion industry, by making contracts with factories with insufficient safety investments and low wages. Firms further cut costs in the first step of the supply chain, by design piracy. These firms profit off of stolen designs, since research and development costs are decreased, as they are only copying designs of other manufacturers. The last way fast fashion firms maximize profit by cutting costs is by using inexpensive materials and producing cheap, disposable clothing. Garment quality is declining every year and as a consequence the clothes look faded and worn out right away. Still, fast fashion has a way to make sure customers don't pay attention to the poor quality and that is by trend anchoring. Trends are changing rapidly and the need of consumers to stay up to date results in an endless cycle of buying and thus, making the Fast fashion industry one of the most polluting in the world.

Fast fashion operates on a much faster product turnover cycle than traditional models. Instead of having two to four collections per year and offering new products every three to four months, fast fashion firms offer new products every two to four weeks. The manufacturing and distribution process must be significantly shorter than their more traditional competitors and their products have to be in the stores shelves on schedule with the current fashion trends. The fast fashion business model has to rely on unethical cost cutting methods or else it wouldn't be able to exit the competitive fringe and compete with traditional industry leaders. Nevertheless, the practices of Fast fashion don't go unnoticed by the rest of the industry. These cost-cutting methods and the unparalleled speed at which the clothes are produced and distributed are affecting the industry as a whole and leading firms in other segments to exit the market or to use cost-cutting methods of their own.

The transition of the global apparel market towards Fast Fashion, can occasionally indicate a “democratization“ of the fashion industry, since fashion can now be enjoyed by every consumer, regardless of their class and the latest styles can be accessed by everyone, no matter their income (*Brewer, 2019*). However, the numerous risks that come from cheap, disposable clothing, affect the health of both the environment and the humans involved and these dangers are concealed throughout the lifecycle of each garment. As a result of practices like water-intensive cotton growing, untreated dyes being released into local water sources, low wages and poor working conditions for textile workers, it is easy to conclude that textile manufacturing involves many environmental and social costs.

Fast Fashion as an Environmental Justice Issue

According to the United States Environmental Protection Agency’s definition, environmental justice is the “fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations and policies” (*United States Environmental Protection Agency, 2018*). Although the concept has been defined in the United States, environmental justice is not limited to that specific region and doesn't have to be restricted by geopolitical boundaries. As an example, the textile and garment industry push the excessive environmental and occupational burdens that are associated with mass production and disposal across high income countries and on to the under-resourced communities in Low and Middle income nations. These nations don’t usually have the support and resources needed in order to implement the environmental and occupational safeguards and protect the environment and human health. More specifically, while the consumers of high income countries enjoy their chance of purchasing more clothes for less money, the population who works or even lives close to textile manufacturing facilities has to endure the burden of constant environmental health hazards. Moreover, the continuously increasing buying habits of consumers in developed countries, result in countless amounts of textile waste, that is later disposed of in landfills and other unregulated settings in the developing nations. So, it is essential to understand the magnitude of the global injustice that is happening and to broaden the environmental justice framework so that it will reflect the disproportionate impact of those who are responsible for producing and disposing of our clothing.

One of the environmental and occupational burdens that fall to the Low and middle income countries is the environmental hazards during textile production. Textile production is the first step of the global fashion supply chain and the process involves the manufacturing of natural and synthetic fibers such as cotton and polyester. Both of these materials are used in roughly 90% of the clothing sold in the United States market and the two of them are linked with serious health impacts to those involved in the manufacturing process in addition to many environmental risks(*Khan, Malik, 2014*). More specifically, polyester is derived from oil and cotton requires a substantial amount of water and pesticides in order to grow, since, according to a report by the World Wildlife Fund (*2019*), around 20,000 liters of water are needed for the sole purpose of producing one kilogram of cotton.

The production of these materials and their use in the fashion industry accounts for about 10% of the world's carbon emissions (*Conca 2015*). Furthermore, during the 2015 manufacturing process of fibers and textiles, the industry resulted in an approximate 1.2 billion tons of greenhouse emissions, surpassing the carbon footprint of both international flights and maritime shipping combined (*Ellen Macarthur Foundation 2017*). An additional cause of the tremendous amount of Fast Fashion's CO₂ emissions is caused by the dependency of the fashion industry on complex global supply chains and the constant fast-change, hyper competitive production cycles. That dependency signifies that Fast Fashion companies drive a high-carbon transport network in which raw materials move from one country to another until they are ultimately transformed into clothing that ends up in retailers all around the world.

Beyond its harmful impact on the global carbon footprint, textile manufacturing results in additional hazards regarding the local water systems, since the industry contributes 17–20% of global industrial water pollution (*Kant 2012*). Part of the production process is textile dyeing, with a number of dyes that contain carcinogens proven to cause several cancers (*Ghaly et al. 2014*). The waste water that comes from the textile industry usually contains high levels of those dangerous dyes in addition to many other chemicals and is often discharged into local waterways. The heavy metals and the other toxicants released into the water supply can be harmful to aquatic wildlife and have an adverse impact on the health of animals and nearby residents.

While some consider the end of the fashion industry's supply chain to be getting the finished product to consumers in high income countries, environmental injustices continue long after the garment is sold. So, in addition to the detrimental impact that production and transportation of garments have on environmental health, the Fast Fashion industry also generates alarming levels of waste as society consumes and discards brand new garments at unprecedented levels. In fact, according to the Environmental Protection Agency, 11.9 million tons of clothing and footwear were discarded in the United States in 2015 and 8.2 million tons of those ended up in landfills (*Environmental Protection Agency 2019*). Moreover, the average American disposes roughly 36 kilograms of clothing and textiles every year, occupying almost 5% of landfill space (*Wicker, 2016*).

Consumers though aren't the only ones responsible for the large amounts of waste created. The fast fashion model in itself encourages consumers to view clothing as disposable and even several large Fast Fashion companies discard a substantial amount of new clothing (*House of Commons Environmental Audit Committee 2019*) and thus generating new levels of waste. The garments that are not sent straight to landfills, usually end up in the second-hand clothing trade. Around 500,000 tons of used clothing from the United States are transported abroad in order to be sorted, categorized and sold in second-hand markets and typically into low and middle income countries (*Angelov, 2016*). The garments that are not sold in these markets end up as solid waste, clogging rivers, greenways, and parks, and create even more environmental health hazards for developing countries that lack robust municipal waste systems. That happens because not only are these discarded garments non-recyclable but also take hundreds of years to decompose. Unlike the natural fibers like wool and cotton, the synthetic fibers such as polyester typically take over 200 years to decompose. More specifically, the polyester used in the textile industry has an especially slow rate of decomposition, with many scholars arguing that a single polyester bottle can take from 800 to even 1000 years to decompose in natural conditions (*Zengin et al. 2016*).

Additionally the textile industry consumes the majority of polyester globally, even more than plastic bottles and other PET products combined (*Shen et al. 2012*). These synthetic fibers cause a lot of damage, the extent of which is staggering, with scientists calculating that microfibers constitute 85% of human-made litter on ocean shorelines (*Browne 2011*). These microfibers are exceptionally damaging to the environment, with an increasing body of literature arguing that microfibers have already entered the human food chain not only through the consumption of fish but even through drinking water (*Henry and Klepp 2019*).

In conclusion, Fast Fashion is among the most polluting industries in the world with some arguing that the industry is inherently diametrically opposed to sustainability. That means that in order to satisfy customers' insatiable demands, the industry needs to continuously evolve and as a result ends up consuming notable quantities of raw materials, producing dangerous pollution levels and a serious carbon footprint, and generating a concerning amount of waste. All of these practices contribute to making environmental sustainability difficult to achieve.

Fast Fashion as a Social Justice Issue

As important as the environmental issues caused by the global textile and garment industry are, the social costs associated with Fast Fashion are just as significant. These social costs are substantial and include the damages to human health and human rights along each step of the production process (*Kapp, K.W., 1978*).

One social justice issue associated with the production of cheap clothing for example, is the constant danger that workers have to face due to occupational hazards during garment assembly. Garment assembly, a major part of the global textile supply chain and an important step of the production process, employs roughly 40 million workers around the world (*Harper Collins, 2011*), the majority of which are from low and middle income countries. There have been many serious industrial disasters all over the world, even in the United States, where a cigarette that was discarded in a waste bin full of highly flammable fabric, caused the "Triangle Shirtwaist Factory fire" in 1911. Since then, disasters like this prompted the creation of textile labor unions and thanks to that, occupational protection standards have improved greatly in the United States. The same cannot be said for the work settings in the developing countries. The dangerous working conditions that have drawn regulatory attention to the United States and the European Union have not been eradicated, they just shifted overseas. There, due to insufficient political infrastructure and poor organizational management, the occupational and safety standards are usually not being enforced (*Anguelov N, 2016*). As a result of these inadequate safety standards the workers have to face numerous health hazards, for example respiratory hazards caused by poor ventilation by cotton dust and synthetic air particulates and eventually resulting in lung disease and cancer, musculoskeletal hazards due to repetitive motion tasks and other draining and life-threatening conditions like damage to endocrine function, unfortunate reproductive and fetal outcomes, accidental injuries and even death (*Akhter S, Rutherford S, Chu C., 2017, Gebremichael G, Kumie A, 2015*).

There have been certain international disasters that highlight the crushing impact that the poor working conditions of the garment industry have on the workers. One such disaster was the 2013 collapse of the eight-story Rana Plaza factory that happened in Bangladesh and led to the deaths of 1134 people and the injuries of approximately 2500 others (*Ansary and Barua 2015*). Although there had been warnings the day prior to the collapse and the bank and shops on the same building were closed due to concerns over the building's integrity, the factory managers not only ordered the workers to report to work as normal, but also threatened them to work or their pay would be docked. It is tragedies such as this that highlight the countless health hazards that garment workers have to face. Although these disasters have been catastrophic, they have not made a significant difference in worker safety standards in low and middle income countries (*M. Taplin, I., 2014*). and many of these harsh conditions persist.

Another ethical consideration in Fast Fashion is design theft. Due to the Fast Fashion business model that is influenced by consumer behavior and fast changing trends (*Tokatli 2007*), Fast Fashion companies are now more focused on producing and delivering low-cost clothing that is influenced by the latest trends or just plain copied from them, despite the fact that traditionally, the focus of the fashion industry has always been about creating new designs. Therefore, numerous Fast Fashion companies have been accused of compromising intellectual properties and diminishing consumers' motives to spend their money on high-cost original designs. That plays a big part in discouraging creativity and individuality in the fashion sector and stopping new, up and coming designers from joining the industry. Even though many large, well-known fashion companies like Adidas and Gucci have enough resources to challenge alleged infringements of intellectual property from the Fast Fashion firms, the new emerging designers will most likely struggle. At first they can struggle to achieve visibility among the low-cost, low-quality, trend based clothing and they will definitely struggle if their designs get misappropriated, since they often lack the resources they need in order to be able to challenge intellectual property theft. That happens because the law offers limited protection to intellectual property in the fashion sector and as a result many Fast Fashion firms can actually disregard intellectual property law. In short, the Fast Fashion business model is more inclined towards mimicking traditional designers and may pose a very dangerous threat to the integrity, value, and viability of other designers.

The role of industry, policymakers, consumers, and scientists

During the past decade, the serious environmental and social impact of Fast Fashion and the throw-away culture promoted by the industry, has come to light. As a result, an increasing number of consumers and other stakeholders are demanding that companies reform their behavior and keep their environmental and social damage to a minimum. As research suggests, "greater knowledge of unsustainable practices by companies influences customer behavior and judgments" (Grappi et al. 2017). So, even though environmental and social justice along each step of the global supply chain has proved to be an extremely difficult challenge, still, consumers, policymakers, scientists and even the corporations themselves have the responsibility to promote sustainable and ethical production in an equitable manner. Therefore, environmental and social justice all around the globe, has to rely heavily on innovations in textile development, trade policy, corporate sustainability and consumer habits.

First of all, sustainability when it comes to textile and more specifically fiber development, actually refers to practices that minimize environmental pollution and reduce the exploitation of workers and natural resources, all while meeting the modern lifestyle needs. In order to do that, innovative, sustainable and recyclable types of fiber, that don't threaten human health, have to be used in textile production. No matter whether the fibers are natural, like cellulosic and protein fibers, or manufactured, like Lyocell, a fabric made from the cellulose of bamboo, the key in reducing the environmental impact of textile production is the use of sustainable fibers.

Secondly, sustainability in regards to trade policy, refers to fair trade in the fashion industry. Fair trade is a set of standards that should be met in the production process of a product and during its supply chain, such as safe working conditions and fair pay. The fair trade companies can try and compete with Fast Fashion retailers but at the end of the day, markets for fair trade and eco-friendly textile manufacturing stay insignificant when it comes to size and the process of auditing ethical and eco-friendly supply chains can be challenging and expensive. This is where policies and regulations come into play. Through these trade policies and regulations the developed countries with a high income have a chance to promote occupational safety and environmental health.

Even though usually occupational and environmental regulations can only be enforced within a country's borders, there are various ways in which policymakers can mitigate fast fashion related, global environmental health hazards. For instance, it is possible for Europe and the United States to increase import taxes for clothing and textiles or alternatively, the countries could also place caps on the annual weight of garments that are imported from low and middle income countries. The developing countries themselves, on the other hand, have the viable option to regulate the import of used clothing that gets handed down to them by western countries and some of them have already begun the implementation process. Examples of the countries previously mentioned are Rwanda, Tanzania and Uganda, where they raised taxes on second hand clothing imports and simultaneously offered incentives to domestic manufacturers According to a report released by the United Nations Council for African Renewal (Kuwonu, 2017).

When it comes to supply chains and especially to the concerns about working conditions and labor standards, the emphasis is on the transparency of the supply chain and the traceability of raw materials that make up the garments. That disclosure of the supply chain details is, in many instances, even required by law. There are numerous legal provisions, for example in the U.K. there is the Modern Slavery Act of 2015 and in the United States there is the Dodd–Frank Wall Street Reform (Section 1502), the Consumer Protection Act and the California Transparency in Supply Chains Act of 2010. In addition to these legal provisions, there are many other forms of “soft law”, that include voluntary codes that advise and guide the companies to ensure that their supply chains are held to higher standards. As a result, companies can conduct themselves in a more ethical manner as a means of gaining a competitive advantage through pursuing corporate social responsibility policies instead of trying to follow the legal requirements (de Brito et al, 2008). However, it is difficult for companies to determine the demands of various stakeholders due to various ambiguities. In addition, many "soft law" guidelines have a limited impact, as they often rely on voluntary compliance and sometimes lack effective enforcement mechanisms. Despite all that, many companies have chosen to enforce more ethical practices and policies in regards to environmental health, social, ecological and economic issues on a regional as well as an international level, thanks to the initiatives that promote sustainability and corporate social responsibility. In conclusion, trade policies and regulations seem to be the most successful answer to achieving large-scale changes to the fast fashion industry. However, there is another important factor in attaining sustainability, and that is consumer behavior.

Science also plays an important part in achieving sustainability. Environmental health scientists have the responsibility to support environmental and public health with evidence that comes from research. As a result, there is an emerging need for research that studies the serious health effects of Fast Fashion along every step of the supply chain and especially the effects of that business model in the developing world. The focus on the consequences of Fast Fashion on low and middle income countries is justified since, there is no doubt that environmental exposure has been distributed unequally all over the globe and it has disproportionately impacted the low and middle income countries the most. Optimistically, advanced research done in this area will result in the translation of research findings to public health policies and practices that eventually lead to environmental health through sustainable production and ethical consumption.

When it comes to the companies themselves, sustainability means environmentally friendly practices that promote health and safety across all the steps of the supply chain. The concept of corporate responsibility encourages businesses to develop sustainable policies and to reach decisions while taking environmental and social health into consideration, with regards to a much wider range of stakeholders than simply the company's shareholders. There are many certification and oversight organizations, for example the National Council of Textiles Organization and Fair Trade America, that provide auditing tools and evaluation programs in order to verify fair trade and production standards. Companies can then choose to get certified by one or more of these independent, accrediting organizations while other ones are focusing their efforts in “greenwashing.” Greenwashing is the practice according to which, a corporation markets their products as “green” without actually meeting any of the criteria (Lyon TP, Montgomery AW, 2015) while taking advantage of the emotionally appealing nature of eco-friendly and fair trade products. In order to prevent these practices from happening, as well as to put a stop to the already existing ones, the whole industry has to embrace the internationally recognized certifications and meet the standards they set. Nonetheless, corporate responsibility standards lack the force of mandatory law.

While it is optional and voluntary for companies to adhere to the criteria, it is also very important since it is possible that they can help with raising awareness and causing consumer pressure on other businesses to follow their leading competitors' higher ethical standards. In addition to the ethical considerations, corporate social responsibility is also fundamentally good for business. More specifically, the world's top 20 companies have all adopted some type of CSR (corporate social responsibility) report regarding revenue, while numerous established designers, including Vivienne Westwood and Stella McCartney, made a great contribution to the cause, promoting social responsibility policies in the fashion and garment industry.

On the opposite end of the spectrum from the fast fashion business model, there is the "slow fashion" one. It was founded by Kate Fletcher (2007), an activist who drew inspiration from the "slow food" movement, a movement that emphasizes environmental and social responsibility in the production process of food. Slow fashion companies highlight their more sustainable practices and recognise the value of craftsmanship, good stewardship, and quality products. As a result of the more ethical sourcing and production techniques and the organic, recycled and durable materials they use, they end up not only enhancing but also promoting sustainability. Additionally, the slow fashion companies pay higher wages to the workers involved in the production of their garments while also offering safer working conditions compared to the supply chains of their fast fashion industry counterparts, placing an importance on the protection of human rights. Finally, even though the cost of slow fashion clothing is usually greater than the cost of fast fashion garments, they are more durable and last longer, without going out of fashion and thus creating less waste as a more sustainable alternative. In closing, the slow fashion movement promotes sustainability along each step of the supply chain, from sourcing to production and even in consumption. That is possible thanks to the sub-industry's emphasis on connecting raw materials, designers, retailers, and consumers. Even so, the movement still has to face an uphill battle with the low-cost, low-quality, mass-marketed designs in a world where consumer demand keeps increasing at unparalleled speed. So, there is a need for slow fashion companies to convey the true cost of fast fashion to consumers clearly and effectively and to continue to highlight slow fashion's sustainable practices and contributions to environmental and societal health, so as to help consumer demand shift away from fast fashion and towards more sustainable types of design, sourcing, production, and marketing.

Lastly, consumer behavior in regards to sustainability, refers to the type of companies consumers in high income countries chose to support. It is important that they support companies whose practices minimize their negative social and environmental impact but it is also important that they are properly informed about the different certifications that exist and what they actually mean. Even though the role of the certifications is to raise industry standards, only certain companies actually guarantee a high level of standards while others only just make broad, extensive claims about their sustainability practices (Lyon TP, Montgomery AW, 2015). So, consumers in high income countries are obligated to become aware of greenwashing and think critically about the companies they support. Consumers also have the responsibility to adopt the "less in more" lifestyle in order to address the environmental justice issues in the fashion industry, despite the fact that the Fast Fashion model relies on the idea of "more for less". So, consumers in high income countries can do their part to promote sustainability practices globally, by buying clothing either made from high-quality materials that lasts longer, or from second-hand stores. At last, consumers may want to repair the clothing they already own, or purchase from a retailer whose supply chain is transparent.

Overconsumption

Introduction

Overconsumption is a very important issue and it can be divided into 2 different categories: Overconsumption of material goods and overconsumption of natural resources. In the case of material goods, the issue has been addressed within the context of a social criticism of the 'consumeristic society' (*Goodwin et al., 1997*). In this society the primary goal is the consumption of material goods as the primary method of achieving happiness. Under these conditions, overconsumption can be defined as the use of goods and services in an excessive, lavish way, as a result of the mistaken belief that '...the possession and use of an increasing number and variety of goods and services is the principal cultural aspiration and the surest perceived route to personal happiness, social status, and national success' (*Elkins, 1991*). However, when the topic of overconsumption is discussed from an environmental perspective, the emphasis changes from the consumption of goods and services to the use of natural resources.

In the case of natural resources, overconsumption portrays a very crucial threat to the environmental health and sustainability of the planet (*Commoner, 1990, Durning, 1992*). In fact, the majority of social scientists agree that natural resource consumption plays a critical role, since its contribution to environmental damage is significant. During the past decades, there have been various attempts and calls to lessen consumption levels, with more and more frequent appearances not only over the airwaves (for instance in the radio shows 'Living on Earth' and 'E-Town' heard in the US) but also in the popular press (for example Dominguez and Robin, 1996, Durning, 1991, Montivalli, 1996, Schmookler, 1991). Although the previous efforts have addressed ways of reducing the consumption of different resources like the invention of aluminum cans and the use of petroleum products, still there is very little research that prioritizes finding the answer to how to alter not only consumer habits but also their lifestyles in order to use fewer resources in general.

In spite of the fact that the two perspectives on overconsumption are related, it is important to recognize that there are significant differences between them. For instance, consumers can aim to attain happiness either by using goods that require a generous amount of resources or by acquiring products that just need a few natural ones. In cases like the latter, even though the people consume an excess amount of goods and services, that doesn't mean that they over consume natural resources. In a similar fashion, consumers might be able to actually satisfy their basic human needs by moderately consuming goods made out of scarce natural resources, such as eating sea turtle soup. In that case, even though people don't consume at levels over their subsistence needs or at excessive levels in misguided efforts to attain happiness, their actions still play a significant part in the depletion of a resource.

Ethical or sustainable consumption on the other hand, is usually deemed as '...the amount of consumption that can be continued indefinitely without degrading capital stocks including natural stocks' (*Costanza et al., 1991*). The indefinite use of these resources actually refers to the importance of anticipating the needs and preferences of the generations that will follow, while also reconciling the differences created among societal members as to what resources should be preserved and why (*Vadnjaj and O'Connor, 1994*).

The strategies for reducing the overconsumption of natural resources

Overconsumption creates some noteworthy issues, determining an individual's share of the resource basket for example, and most importantly about how to allocate the available resources to members of society. As long as these issues remain unresolved they will continue to cause significant problems. It is generally accepted that excessive resource consumption is typically associated with wealthy, industrialized countries where 15% of the world's population consumes an estimated 71% of the world's output (*World Bank, 1992*). These statistics clearly demonstrate and justify the assumption that society's current resource distribution among its members is neither equal nor fair. In order to fix that problem, it is society's responsibility to calculate the most efficient and unbiased resource allocation such as equal distribution among its members or by allocating according to monetary resources.

Another important duty society has to fulfill in order to combat the problem, is designing mechanisms to ensure that these allocations actually get accomplished. However, the process of developing these acceptable mechanisms for resource distribution is a very complex one that requires a lot of extensive work and the help of economists, environmental scientists and other social scientists. Therefore, even if the development of such methods is very likely to happen, it is also possible that they will be available many years from now. Until that time comes, since there aren't any definitive solutions to these problems yet, it is necessary that society develops consumption strategies that are meant to promote environmental sustainability and environmental health. These consumption strategies can include for example the adoption of a simplified lifestyle, that includes minimizing the overall use of resources, and they might actually confirm to be the most practical and successful strategies, at least for the time being. The development and implementation of consumption strategies is at most important, seeing that the more individuals consume more than their 'fair share' of resources in order to satisfy their self-centered motives, the more the total stock of resources will be shortened. As a result, consumption might be undermined in the near future, and resources will most likely be depleted in the process. For that exact reason it is necessary for members of society to limit their own individual, self-centered motivations as well as their consumption levels in order to help rectify common pool resource dilemmas and sustain the integrity of said pool. For that to happen, there has been a lot of scientific effort and research during the last decade, by scientists in a variety of fields, according to which there are 5 main tactics for approaching the issue of common pool resource dilemmas.

One of these tactics can be ensuring resource preservation through restricting access to them. One example of that approach can be the establishment of property rights, which involves assigning ownership to the allocated resources with the intention that consumers use only their assigned shares. Unfortunately, establishing property rights for a variety of resources such as air, proves to be an extremely difficult task, indicating the need for other methods of restricting access to be enforced. One of these tactics could be imposing sanctions and penalties for individuals whose resource consumption exceeds the limits that will be set. If these penalties and regulations are imposed perfectly, in the sense that every act of defiance can be tracked down and exposed and all the offenders get charged, then it is very likely, as supported by considerable evidence (*Plott, 1983, Harrison et al., 1987*), that the price of goods will increase and as a result consumers' consumption levels will decrease.

However, the implementation of this strategy can be very expensive (*Batabyal, 1995*) and according to several experimental studies, even if the high probability of an inspection and penalty levels can result in improved compliance rates, the non-compliance rates can still remain at significant levels, not dropping even with the threat of high penalties (*Alm et al., 1991, Alm et al., 1992, Brown et al., 1999*).

Another one of the approaches for reducing consumption is using taxes and other corrective measures in order to increase the cost of resources. Examples of these measures can be the efforts of implementing recognised and accepted environmentally-based taxation schemes. Price-correcting tactics like this, usually end up controlling consumption levels in a very successful way. However the process of getting legislation passed and generating compliance with taxation proved to be a very challenging one and it calls attention to the tactic's most fundamental problem of resolving the social dilemma. This problem is that in order for this method to work it is necessary for every individual in a society to be inherently willing to understand and embrace the objectives the regulation is trying to achieve. In other words, obtaining the necessary legislation requires public support. So, even though enforcing taxes can be a very effective measure, history has actually emphasized the difficulties in passing such legislation as well as in using corrective taxation.

A third method for minimizing the consumption levels is to convince consumers to limit their use of resources independently and out of their own free will. As of now however, it is not clear whether such persuasion efforts are effective in reducing consumption levels, since there hasn't been enough evidence yet to support the implementation of this tactic. There have been efforts in the past decades to decrease energy consumption levels through advertisements and mass appeals to the general public for example, however these efforts have not proven to be successful (*Syme et al., 1987, Aronson, 1990*). In a similar fashion, the non-mandatory compliance programs that some firms choose to follow, seem to be successful, only because of the firm's belief that it would receive positive publicity (*Arora and Cason, 1995*), with the program's success relying clearly on the company's public relations value.

The fourth tactic for minimizing consumption levels includes consumer generated initiatives instead of initiatives generated by regulatory agencies or companies. That is possible since consumers have enough power to try and limit the excessive resource use through publicly boycotting products that require the overuse of scarce resources. There have been numerous boycotts in the past that have succeeded in pursuit of reducing overconsumption and preventing resource damage. Examples of these successful boycotts can include the boycott of companies that manufactured tuna through unethical fishing practices, resulting in the significant decline of the dolphin population and for similar reasons, the boycott of elephant ivory with the aim of ending the over-hunting of elephants. Even the threat of a boycott has proved to be enough to promote sustainability, for example the threatened McDonald's boycott, a result of the company using polystyrene containers in its food preparations. Even though these examples have established the effectiveness of consumer boycotts, in order for this tactic to actually succeed, substantial efforts to organize and spread information and to synchronize activities are necessary. But even then, consumers' willingness and cooperation are fundamentally the key to the success of a boycott.

Finally, the last method for limiting the excessive consumption of common pool resources is to strengthen communication between individuals about resource use strategies. According to empirical research (*Dawes et al., 1977*) and the use of common pool resource simulations, strengthening communication between individual consumers about these strategies, can in turn secure the success of managing the common pool resource effectively. This happens because strong communication usually assists in enhancing reciprocity motives, since those consumers who demonstrate cooperative attitudes and behaviors are the same ones who will motivate others to follow their example and act in a similar way. Strong communication also helps convince consumers that other individuals are willing to cooperate, and reassure them that others will not act on self-interest and exploit them as a result (*Brown et al., 1999*).

It should be noted that the success of each and every one of the tactics previously mentioned, relies heavily on consumers whose values align with the cause. These consumers are the ones who are willing to limit their own resource consumption levels and to follow the standards that are set, as a means of benefiting the environment and the community as a whole. However, there has been limited success with attempts to decrease the resource consumption levels through penalties and taxation policies as a result of low public support and high noncompliance rates (*Sagoff, 1988*). The attempts to promote voluntary resource conservation, boycotts, or communication of cooperative resource sharing have also not been successful due to the predominant individual motivations to consume resources for self-satisfactory reasons that still prevail. So, in order to actually succeed, these methods need to shift into a more 'pro-environment' value orientation that promotes limiting the resource consumption levels, rather than focusing primarily on self-interested and consumer-oriented interests. Therefore, strategies that change value orientations of consumers is the most effective solution to the overconsumption of resources.

Vegan Products

Introduction

Consumers all over the world are starting to become more and more conscious of their food choices and that's because the impact of food on environmental and human health is now a main topic in mainstream media and in broader conversation. At the present moment, consumers have an immense amount of information available to them about the food they consume, including its origin and its manufacturing process. As a result, consumers are starting to take into account attributes about their food that they haven't considered before, such as the increasing health concerns that come with excessive meat consumption as well as the impact that meat's production process has on the environment. Since such a great deal of attention is being paid to this front, a global interest in alternative protein sources starts to emerge, which suggests that "food is becoming less a commodity and more a specialized individual choice" (*Massow, Weersink, McAdams, 2018*).

In addition, there have been numerous studies (*de Boer, Schösler, Aiking, 2017, Lea, Crawford, Worsley, 2006*), which have demonstrated that there is a growing social pressure to reduce meat consumption while encouraging the adoption of different plant-based diets. On top of that, a new generation of social start-ups, eco-friendly businesses and brands came in strong, including 'Beyond Meat', 'Green Monday' and 'Impossible Foods', with an additional purpose of tackling issues such as climate change and global food insecurity by promoting initiatives that offer sustainable, innovative and responsible food options to consumers (*Lanting, 2019*).

The effects of meat consumption

Meat is considered, to this day, one of the food groups with the most nutritional value (*Van Wezemael, Caputo, Nayga, Chryssochoidis, Verbeke, 2014*), pleasant to the sense of taste and other sensory aspects (*Verbeke, Perez-Cueto, de Barcellos, Krystallis, & Grunert, 2010*) and a main ingredient of the traditional Western diets (*Scholderer, Kügler, Olsen, Verbeke, 2013*). In fact, the consumption of meat can be a good source of protein as well as many other essential nutrients and micronutrients like vitamin B12, iron and zinc. As a result, it can be an excellent source of energy and a concentrated source of nutrients for low-income families, even if the same amount of nutrients can be obtained without it, through a diet that includes a variety of other food groups. Therefore meat, especially in the western world, is viewed in a positive way and is seen as a very valuable commodity by many people. At the same time, the human population keeps growing and average individual incomes keep increasing and as a result the global average per capita consumption of meat and the total amount of meat consumed are rising. The growth rates however, differ from region to region, with the low income countries having stable but relatively low meat consumption levels, middle income ones with a moderate to strong increase and high income areas with either static or declining growth rates. Despite the public's view of meat, the increase in meat consumption levels has actually been linked to negative health outcomes for humans, since there are substantial health risks associated with the consumption of different types of meat, as well as for the environment seeing that livestock production can have significant environmental consequences (*Bogueva, Marinova, Raphaely, 2017*).

First of all, from a health perspective, meat has been proven to amplify the risks of severe chronic illnesses, for example colorectal cancer from high intakes of processed meat. In addition, large prospective studies and meta-analyses reveal a powerful correlation between excessive meat consumption and a number of diseases, including serious cardiovascular diseases (*Bernstein, 2010*), diabetes (*Micha, Wallace, Mozaffarian, 2010*), rheumatism (*Fraser, 1999*), Crohn disease (*Shoda, Matsueda, Yamato, Umeda, 1996*), nutritional deficiency (*Barnard, Nicholson, Howard, 1995*) and even cancer (*McMichael, Bambrick, 2005*). These studies, usually conducted in high-income Western countries, generally indicate that those participants who consume large amounts of red and processed meat have moderately higher mortality rates than those who don't. Meanwhile, the consumption of vegetarian foods and the adoption of a vegan diet is generally associated with health benefits (*Bogueva, 2017; Lea, 2006*).

Simultaneously, from an environmental perspective, high meat consumption levels have serious negative consequences for land and water use. When it comes to water, agriculture consumes the largest quantity of freshwater, more than any other human activity, almost a third of which is required for livestock. Therefore, the production of meat in water-stressed areas competes heavily with other uses of water, such as the preservation of natural ecosystems, which require a significant amount of it. On top of that, the production of meat generates more greenhouse gas emissions per unit of energy as opposed to those of plant-based foods, due to the energy that gets lost at each trophic level. Meat production also affects biodiversity, through land conversion for pasture cropping and arable farming, while also being a main source of nitrogen, phosphorus, and other pollutants and the single most significant source of methane. Methane actually has a relatively high impact on global warming but a low half-life in the environment in comparison to CO₂.

Despite the harm of excessive meat consumption on human and environmental health, the latest trends, drivers and consequences indicate that meat continues to play a vital part in the social representation of foods and meals, especially in high-income, western countries (*Fiddes, 2004, Graça, 2016*). Consequently, there are growing concerns about changing consumers' meat consumption habits, as it seems that shaping consumer demand towards more plant-based diets, and therefore reducing meat consumption, will most likely be a very difficult challenge that requires a profound societal transition (*Dagevos, Voordouw, 2013*). As a result, a fundamental switch from meat-based to plant-based diets, requires a thorough analysis of the social factors that contribute to meat consumption as well as the development of strategies and the implementation of policies that aim to eliminate meat consumption in the future.

The effects of a vegan diet

A vegan diet doesn't contain the use of any ingredient sourced from animals, ranging from meat and fish to eggs and dairy and instead, incorporates the use of foods like fruits and vegetables, as well as grains and legumes. Veganism has experienced a substantial surge in popularity during the last decade and became more mainstream among the general population (*Rosenfeld, D. 2017*), especially in the western world. An example of that can be the United States, where a large proportion of the American population, larger than ever before, has adopted a vegan lifestyle (*Heiss, S., Coffino, J., Hormes, J., 2017*). There isn't one single incentive acting in isolation, for individuals to select vegan food options for consumption. As most scholars would agree, rather than a single motive, what drives the selection of vegan foods is a complex interplay of motivational factors (*Plante, C., Rosenfeld, D., Plante, M., Reysen, S. 2019*). These motivational factors contributing to why individuals switch to vegan food, can include ethical concerns, religious and cultural beliefs, concerns about the environment, health-related issues and even disgust towards meat (*Rosenfeld, D. 2017*). According to recent research by Janssen, M., Busch, C. and Rödiger, M. (2016), the three most significant factors of switching to a vegan diet are animal-related motives (89.7%), personal well-being and health motives (69.3%), and environment-related ones (46.8%).

First of all, the consumption of vegan foods for the case of animal-related motives should come as no surprise, considering that veganism promotes and even advocates for ethical food consumption. Besides, one of the movement's main goals is to alleviate animal suffering by abstaining from the consumption of products that have used animals at any stage of their production process (*Singer, P. 1990*).

Second of all, health considerations are also one of the key reasons that drive many to become vegan (*Mendes, E. 2013*). Although meat-free diets were viewed in the past as a potential source of nutritional deficiencies, studies have argued that their benefits are now recognized (*Bouvard, 2015; Jungbluth, 2000; Kleemann & Schmidt, 2016; Micha, Michas, Lajous, & Mozaffarian, 2013*). In fact, there is a number of studies and clinical research that prove there are many nutritional benefits to a plant-based diet (*Beezhold, B.; Radnitz, C.; Mcgrath, R.; Feldman 2018, Radnitz, C.; Beezhold, B.; Dimatteo, J. 2015*). Based on the HEI-2010 (Healthy Eating Index) and MDS (Mediterranean Diet Score) for example, among a variety of dietary schemes, it is found that the vegan diet has the highest nutritional quality, in contrast to the omnivorous diet that has the lowest one. (*Bouvard et al., 2015; Jungbluth et al., 2000; Kleemann & Schmidt, 2016*). In addition, when comparing the vegan diet to the Mediterranean one, there is sufficient evidence supporting the health benefits of the former. Furthermore, vegan diets help improve overall health and mortality rates by lowering cholesterol and blood pressure remarkably and decreasing the rates of chronic diseases such as coronary heart disease, type 2 diabetes, and even cancer (*Radnitz, C.; Beezhold, B.; Dimatteo, J. 2015, Dinu, M.; Pagliai, G.; Casini, A. 2016*). In conclusion, a vegan diet that has been planned appropriately, can be nutritionally adequate, while also providing health benefits, preventing and even treating certain diseases (*Wirnitzer, K.C. 2020, Dinu, M.; Pagliai, G.; Casini, A. 2016*).

Lastly, from an environmental health point of view, the vegan diet has a clear advantage compared to an omnivorous diet. The omnivorous diet tends to have a much larger ecological footprint in terms of carbon and water use. As a matter of fact, animal agriculture is accountable for roughly 18% of global greenhouse gas emissions, an amount so large that it surpasses that of the entire transportation sector (*Judge, M.; Wilson, M. 2015*). At the same time, the majority of the global agricultural land, approximately 70%, is currently devoted to livestock production, and thus, is contributing to water and air pollution, biodiversity loss and soil degradation. This can result in intensifying the environmental problems facing our planet, such as global warming and climate change and it is necessary to mitigate these major concerns. That can be done by adopting a more sustainable alternative to the consumption of food produced by contemporary agriculture, and that alternative is a plant-based diet with an emphasis on fruits, vegetables, legumes, and cereals, in accordance with global nutritional guidelines (*Rosi, A.; Mena, P.; Pellegrini, N.; Turrioni, S.; Neviani, E.; Ferrocino, I.; Scazzina, F. 2017*). In other words, in order to improve environmental sustainability, animal-based foods should be replaced with a vegan diet.

Even though there are many reasons that drive a significant part of the population towards a vegan diet, there are also many that create the perception of a barrier. According to *Lea and Worsley (2003)*, these barriers can be created by notions such as one's refusal of changing his eating habits, the perception that the nutritional value of meat is necessary, the aspect of good taste, the influence of the social environment, the lack of knowledge about vegan diets and recipes and the limited option of vegetarian foods outside the home (*Lea & Worsley, 2003; Salonen & Helne, 2012*).

Strategies for a transition towards a healthier and more sustainable food system

As previously mentioned, there are numerous motivational factors interacting with each other and influencing food practices and habits (*Springmann, Godfray, Rayner, & Scarborough, 2016*). These factors can be for example, taste preferences, familiarity with particular foods and distaste for others, the social context, the food provisioning system and its organizational and logistical structure and they play a key role in what consumers choose to eat (*Köster, 2009; Warde, 2016*). So, the transition away from products sourced from animals and towards a healthier and more environmentally friendly food system requires the synchronized efforts of civil society, environmental and human health organizations, market actors and government bodies.

These government bodies are responsible for shaping the food systems for economic purposes and for protecting the health of the population from food that's been contaminated. However, there is less agreement over the degree to which the state should use environmental and human health and animal-cruelty concerns as an excuse for having complete control over the supply of meat and interfering deeply with the production, sale, processing, distribution and price of meat and meat products.

Consumption on the other hand, is not always an individual phenomenon. There are many social aspects included in the consumer's process of making a choice, such as influences from social norms, social situations and groups (*Higgs, 2015; Kallgren, Reno, & Cialdini, 2000*), as well as shared social cognition and social identity. More specifically, the food market and how the consumers chose to participate in it, is viewed as a social marker where people establish their social identities and display their lifestyles (*Verain, Dagevos, & Antonides, 2015*). It is possible that consumer demand can be shaped by different interventions, with the effectiveness each one has on influencing food selection, varying. These interventions can affect either the conscious, reflective decision-making systems or the nonconscious, automatic ones. On one hand, examples of prospective interventions within the conscious, rational choice paradigm are the labeling schemes centered on environmental and human health criteria as well as certification programs centered on welfare and environmental concerns and fiscal interventions like the so-called fat taxes. On the other hand, the automatic, nonconscious responses can be triggered by environmental cues, which influence consumer purchasing habits. Therefore, changes to the food environment can manipulate the settings related to food consumption and retail.

History has proven that the process of changing consumer purchasing behaviors related to food, that happen as a result of interventions, is a slow one. However, what does change, rapidly and continuously, is social norms and the synchronized efforts of civil society, environmental and human health organizations and the government can also help to expedite the process. Nevertheless, in order for such an intervention to succeed in achieving its health and environmental objectives, it is necessary for the population to recognise and acknowledge the impact that meat consumption has on these outcomes. Environmental awareness has increased during the recent decades, and there is sufficient evidence suggesting that a significant portion of the meat-eating population has become sympathetic to the cause (*De Boer & Aiking, 2011; Allen & Ng, 2003*). Hence, a greater level of awareness of environmental issues is essential for a positive effect on consumer attitudes towards reducing meat consumption. In addition, a license from society to government bodies and human and environmental health organizations to implement a suite of interventions with the purpose of stimulating change.

International growth of vegan products

All around the world, and particularly in western, high-income countries, the demand for vegan products continuously increases (*EMR, 2021; Euromonitor, 2021*). As a result, these products are becoming more and more accessible and their sales keep rising at significant rates. In the United States for example, the plant-based food market came to a total of 7 billion dollars, and during 2020, the market's growth rate came to be double the size of the animal-based food market's growth rate (*Gaan, 2021*). However, the portion of consumers in western countries who identify as vegan is still relatively low, fluctuating from 1% to 4% depending on the country (*Statista, 2021a; 2020a; 2020b*). An example of that can be the German market where the production value of vegan and vegetarian labeled products has increased by 37% to €374.9 million in the span of a year (from 2019 to 2020). Despite that, the number of people who label themselves vegan and vegetarian has increased only slightly (*Destatis, 2021; Statista, 2021b*). This fact suggests that vegan foods are no longer consumed only by vegetarians and vegans, but are becoming more and more popular among the meat-eating population (*gfi, 2021; NielsenIQ, 2019*). Because of this, the process of labeling products as vegan, even if they obviously are, is becoming increasingly attractive for food marketers, which they use as a means of communication. This labeling practice however, can also have potential risks along with the benefits. The European Union for instance, doesn't currently have a regulated definition of the term vegan. Nonetheless, the usual definition of a product needs to be in accordance with in order to be able to carry the vegan label, is that the ingredients must not be derived from animals and that the production of the product must not include the use of any animal-related components (*VSMK, 2016*). So, it is important to take into account all production and processing steps. In the European Union, there are two most predominant labels that meet these requirements. These two labels are the Vegan Trademark (*The Vegan Society, 2022*) and the V-Label (*European Vegetarian Union, 2019*). The latter label is the vegan label for food that is used the most frequently and the former is regularly found on vegan non-food products.

Sweatshops

Introduction

During the last few years, it became important for consumers that retailers not only provide them goods with a competitive price, but also with the confirmation that the merchandise is produced under fair and humane conditions. However, now that retail buyers are separated from their suppliers in a structural as well as a geographical way, those consumer demands are becoming progressively harder to meet. As a result, in order for retailers to protect bottom line performance, they need to turn to outsourcing and thus they become vulnerable to criticism by anti-sweatshop advocates.

In the United States, a sweatshop can be defined as 'an employer that violates more than one federal or state labor law governing minimum wage and overtime, child labor, industrial homework, occupational safety and health, workers' compensation, or industry registration' (*US General Accounting Office 1994*). Many apparel manufacturers and contractors fall under this category, with their number continuously increasing. In these factories, immigrant workers and often even children are forced to work under hazardous and unhealthy conditions, long hours without compensation for their overtime and little to no wages (*Mort 1988; Petras 1992*). This issue is not just limited to small, unreliable contractors, nor to businesses in low and middle income countries, but also extends to union-organized businesses in western, high income areas of the world (*Women's Wear Daily 1996*). Although the labor violations of sweatshops seem to be clashing with the heightened interest in socially responsible business, government officials seem to expect that consumers will be the ones taking the responsibility for putting an end to sweatshops and their practices. However, it is not yet certain that consumers have sufficient knowledge and enough concern about the apparel industry issues, both being necessary assets, required for adopting socially responsible shopping habits. Nevertheless, the existence of apparel sweatshops is an important social issue that needs to be dealt with and receive increased scrutiny by consumers as well as industry and government leaders.

Sweatshop practices as a global phenomenon

Sweatshops came into the spotlight when the practices of the Kathie Lee Gifford line of women's apparel were exposed to the public. This line of clothing, that was sold exclusively through the world's largest retailer, Wal-Mart, had in fact been manufactured by under-age workers, under insufferable working conditions in Honduras sweatshops. More specifically, as disclosed by Charles Kernaghan in his 1996 testimony before Congress, a factory in Honduras forced workers as young as 13 years old, to sew garments for the clothing line previously mentioned, for 13 hours straight, under armed guard and for only \$.31 per hour.

This is one of the many instances of exploitation and dangerous working conditions, documented by Charles Kernaghan. Mr. Kernaghan, executive director of the National Labor Committee, is considered to be one of the most predominant people, responsible for exposing sweatshop conditions to the general public (*Ronald J Adams, 2002*).

An additional example of retail companies enforcing similar practices can be Disney's retail stores. As a general rule, during the manufacturing process for merchandise sold through leading retail stores, the direct labor costs usually add up to less than one percent of the final retail selling price. So, for example, for the manufacturing of Disney's "101 Dalmatians" garments, women working in a Haitian factory got paid \$.06 per unit for every \$19.99, amounting to 0.3 percent of the final retail selling price (*National Labor Organization*). Not to mention the intolerable working conditions like the inability to take breaks after working long hours, in a hot, poorly ventilated environment.

There are even more extreme cases, where workers are forced to work under bonded labor, after being tricked into working for very little or no pay while being denied even the most basic human rights, as a way of repaying their debt. These practices are enabled by the overtly suppressed worker rights and associations of collective bargaining that exist in many countries, such as China, where sweatshops are prevailing.

The main target of sweatshop critics up until this point has been the apparel industry. However, the sweatshop problem extends beyond clothing manufacturing and distribution. Even McDonalds for instance, a distinguished fast food provider based in the United States, was connected to under-age labor in China (*The Gazette (Montreal), 2000*). Despite the fact that according to China's labor laws the minimum working age for the country is 16 years old, supposedly, the toys distributed through the McDonald's restaurants were manufactured by children as young as 14 years old, working for the chain's Chinese subcontractor. Even so, McDonald's disputed these claims, stating that the manufacturer was audited not long before the accusations without finding any proof of child labor (*Wall street Journal, 2000*).

Even though there are many instances where sweatshops were documented in developing or low and middle income countries, this does not mean that these exploitative practices are restricted only to the areas previously mentioned. According to a report by the *Independent University Initiative*, exploitation of workers and intolerable working conditions are actually widespread geographically. There are multiple examples even in the United States, one of them being a factory in Pennsylvania, where the investigative team while in the process of auditing, discovered the absence of fire alarms, smoke detectors and back-up lighting in case of an emergency. In addition, many workers, such as the ones responsible for cutting and sewing, were forced to handle multiple carcinogenic chemicals without being protected by the appropriate clothing (*The San Francisco Chronicle, 2000*). In response, a new legislation was proposed by the Congress, according to which the use of forced and/or under-age labor would be punished with serious penalties. Immigrants entering the country illegally are especially vulnerable to this problem, since according to the *New York Times*, approximately 45,000–50,000 undocumented women and children each year enter the United States illegally and are subjected to forced sexual exploitation and involuntary labor in sweatshops (*Stout, 2000*). According to the proposed legislation previously mentioned, the victims would be eligible for compensation and the perpetrators would be convicted with a prison sentence of up to 20 years.

In conclusion, sweatshops and their practices seem repulsive to the majority of the population, especially when they're looked at from a micro or individual point of view. Certainly, the possibility that a young child will be forced to work around 14 hours every single day under poor working conditions such as insufficient ventilation, dim lights and limited or nonexistent provisions for worker safety and civil rights, is a display that the majority of the population finds unethical and unforgivable. So, the question that arises is what has caused sweatshops to become a major issue in global trade over the past few decades?

Microeconomic considerations of sweatshops

It is possible that the emergence of sweatshops over the past few decades, or at least part of that emergence, came as a result of globalization, which has increased both in production and markets. As a consequence there is a continuous rise in global competition, not only for domestic but also for overseas markets. Retailers are forced to find a way to deal with it and they usually handle it by resorting to international outsourcing. It is clear that by resorting to international outsourcing, retailers are aiming to capitalize on the economic principle of regional comparative advantage. For example, when retailers have to make a choice about who will be their supplier, with cost being the deciding factor, they will almost always choose the Vendors that offer geographic labor cost savings (*Monczka and Trent, 1991*). Based on this principle, the most suitable conditions for sweatshops to flourish would be in places with a substantial supply of labor, low skill requirements and minor or nonexistent opportunity costs such as workers with no other options for income.

International outsourcing could also be stimulated by the elimination of trade barriers. This phenomenon, according to a number of critics and protectionists from the United States, like *Ross Perot, Ralph Nader and Pat Buchanan* to name a few, is considered to be a threat to domestic jobs and a way of prolonging human suffering. With the statements also agrees *the Union of Needletrades, Industrial and Textile Employees (UNITE)*, which states that the elimination of trade barriers through free trade, gives an incentive to retailers in the western world to outsource production, by moving factories to low income countries, that have lower wages and inadequate working conditions and thus result in sacrificing domestic jobs (*The New York Times, 2000*).

Co-op America's position on the subject is that globalization doesn't necessarily bring about sweatshops and that there are some additional factors that are believed to stimulate the emergence of them. One factor for example, could be the existence of political and cultural characteristics that encourage the exploitation of laborers, such as the presence of cultural norms that discourage individual rights and initiatives, and the absence of a successful government regulatory infrastructure. Furthermore, the organization identified some extra factors contributing to the rapid increase of sweatshops, like corporate greed, negligent global policies that don't protect countries with ineffective labor laws and regulations, the constant search for the lowest cost, the high pressure to cut costs in every step of the supply chain and lastly, a rapid increase of supply chain specialists working between retailers and vendors, usually resulting in unclear merchandise sources.

While discussing the political economy of child labor, *S. L. Bachman* stated that under-age workers will most likely be forced to work for factories who produce for highly competitive industries with low barriers to entry, low skill requirements and labor-intensive operations. Even though the main focus of Bachman's analysis was on child labor, the same can apply to most sweatshop factories, whether they employ under-age workers or not. More specifically, Bachman's descriptions of sweatshop conditions can apply almost perfectly to the apparel industry, one of the most targeted industries for sweatshop attacks and reforms. In addition, another industry that fits the sweatshop criteria almost as sufficiently is the footwear industry (*Bachman, 2000*).

The simple economics of sweatshops however, will likely change for retailers and vendors, as they gain more and more visibility through mass media and now social media, which expose their practices and criticize them publicly. Every participant in these supply chains, from retailers to manufacturers and everyone in between, is under attack by the media and consequently by consumers and as a result gain negative publicity and litigation. The internet, and especially social media, are now used as a means of exposing corporate practices while being cost-effective, giving, even to the smallest activist groups and critics, the chance to expand their reach (*Spar, 1998*). So, the competitive edge producers gain by the reduced costs has to balance out the price they pay for the bad press they receive.

Macroeconomic considerations of sweatshops

On the other hand, when looked at from a wider, macro point of view there are certain arguments that actually support the existence of sweatshops. More specifically, there are two main arguments that were summarized in a *New York Times* article (*The New York Times, 2000*). The first point is that generally, sweatshop income is more desired than no income. It is generally true that these wages and working conditions are considered intolerable by the standards of high income, western countries, but for the standards of the developing nations such as Cambodia and Guatemala, the wages and working conditions of the sweatshops that manufacture for western retailers, are relatively better. And besides the comparison of working conditions and wage-level between the nations, there is also an important issue of whether there are alternative sources of income for the workers. Of course the pressure from developed countries helps to make the conditions at factories that produce merchandise for established companies like Nike more tolerable, but it also increases labor costs. As a result, some less well established companies will choose to lower their costs another way, for example through reducing the number of workers or by shifting their manufacturing to marginally richer areas like Malaysia and Mexico. So, the workers that will end up displaced won't have anywhere to go. The second main point is that it is possible for sweatshops to facilitate economic development. In fact, sweatshops could represent economic growth in the developing nations that have a sizable, unskilled labor force in need of capital investment. Therefore, by eliminating sweatshops, it is likely that capital formation will be discouraged as thus the economic development rate will slow down.

Retailer codes of conduct

Codes of conduct are generally the 'tools' that get brought up the most when talking about ways to improve sweatshop working and safety conditions. To describe them simply, codes of conduct are a way of stating openly and in detailed contractual language, the engagement terms between organizations and the suppliers they work with. For example, these codes may address factors such as limitations and prohibitions on the use of forced and child labor, conditions about the wage level and rights of association and collective bargaining, restrictions on how long shifts can last, compensation for overtime and standards for workplace environment and safety.

An example of these codes of conduct from a major retailer's perspective, can be The Gap's "Code of Vendor Conduct". The Gap's code of conduct describes in detail the terms of engagement between the organization and all of the factories supplying merchandise for the company and its subsidiaries and divisions. Gap recognises that there are multiple cultural and legal variations between different countries and states that their code establishes all the basic or minimum requirements and that they expect every single one of their suppliers to follow the standards they set. In their code, they address many areas, including but not limited to the work environment and safety conditions, discrimination in the workplace, the level of wages and hours, forced labor and the employment of children. More specifically, The Gap states that all their suppliers must employ children who are either at least 14 years old or meet the country's requirements about the legal minimum working age. Factories manufacturing for The Gap must also forbid physical and psychological harassment or any form of punishment for workers, whether that is threats of violence and sexual harassment, to yelling and other types of verbal abuse. Furthermore, laborers must work in a well lit space with appropriate ventilation, potable water and sanitary toilet facilities. It also is important for factories to have some measures for the safety of the workers such as sufficient exits that are marked clearly and always kept unlocked, allowing for orderly evacuation in case of emergency, and to supply their workers with personal protective equipment and first aid kits. In addition, workers should have the option to join any association they choose to, and to have collective bargaining rights, without the factories interfering with their legitimate efforts to organize and join syndicates on the grounds of collective action. And lastly, for the purpose of monitoring whether these requirements are implemented or not, The Gap demands unrestricted, unlimited and without notice, access to all of its vendors' factories. The factories that are then found violating the Gap's code, will be either terminated or they will need to carry out a corrective action plan.

A code that's similar to the Gap's is the "Workplace Code of Conduct", the result of the Apparel Industry Partnership's (AIP) efforts. It was then adopted by the Fair Labor Association (FLA) and it addressed the issues of forced and child labor, physical and verbal abuse of workers and discrimination in the workplace about the worker's age, race, gender, religion, sexual orientation and political opinions. The code also requires a safe and healthy work environment, right of association and collective bargaining, a living wage and requires that workers be given at least one day off for every seven-day work period.

Workplace diversity

Introduction

According to the *United Nations' International Labor Organization's (2015)* definition, workplace discrimination is “any distinction, exclusion or preference made on the basis of race, colour, sex, religion, political opinion, national extraction or social origin, which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation.” In simple words, employ discrimination is when a worker encounters demenaning actions such as demotions, docked wages, insults and blocked opportunities only because of the fact that they belong in a particular social group. These social groups, have been targets of discrimination for so long that it is necessary for them to be protected by federal antidiscrimination laws and include individuals who belong in the minority when it comes to their race, color, sex, religion and national origin. Individuals over the age of 40 can also be discriminated against as well as workers with a disability. In addition, members who belong in the LGBT+ community, working parents and ex-convicts have also faced their fare share of workplace discrimination and their experience is impacted heavily by their lack of explicit federal legal protection. However, despite the fact that employment discrimination is prohibited by the Civil Rights Act of 1964 and by many other laws and regulations like The Pregnancy Discrimination Act of 1978 and the Age Discrimination in Employment Act for example, unfortunately individuals who belong in these disadvantaged social groups continue to report unfair treatment in the workplace. In fact the number of cases overseen by the Equal Employment Opportunity Commission (EEOC) in 2014 came to a total of 88,778 charges, yielding \$22.5 million in financial relief for litigated cases (*Equal Employment Opportunity Commission, 2015*).

As the workplace is becoming increasingly diverse, with the composition of the U.S. workforce for example being approximately 47% women, 21% ethnic minorities and 10% people with disabilities (*U.S. Bureau of Labor Statistics, 2015*), many successful companies are starting to implement Inclusion and Diversity (I&D) programs as a source of competitive advantage. Even though some companies might view Diversity and Inclusion as a matter of social justice and corporate social responsibility while others view it just as a matter of regulatory compliance, in most cases companies consider it to be an essential part of their growth strategy. Since a diverse and inclusive employee base usually means a variety of different perspectives and approaches it makes perfect sense that such a company would be more competitive in a global economy. However, progress is moving slowly. Many companies are having trouble with increasing representation and understanding precisely where in their organizations diversity is critical and creating a truly inclusive organizational culture in order to benefit from diversity.

Ways Diversity and Inclusion can support business performance

Companies could reap many benefits from having a diverse and inclusive employee base from contributing to the company's performance to aiding with driving value creation. First of all, diversity and Inclusion could help improve the quality of decision making. As supported by research from corporations, academia and other organizations, a diverse and inclusive team makes decisions of higher quality, not only faster but also with a more fact based approach and with barely any cognitive bias and groupthink (*Grant, Rock, 2016, Berinato, Malone, Woolley, 2011*). And as a result of improving quality decision making companies can also improve their business performance (*Larson, 2017*).

In addition, CEOs can strengthen their human capital and acquire more talent to their company, which is one of the biggest challenges for CEOs globally. In fact, a diverse and inclusive workplace is usually seen as a crucial source of competitive advantage and plays a key role in attracting, developing and retaining the necessary talent that companies need in order to compete. That happens because globalization, along with the fast changing trends, technology and demographics, has a serious effect on businesses and the power to disrupt organizational structures and the traditional business models (*Dobbs, Manyika, Woetzel, 2015*). Nevertheless, they can create new growth opportunities, but only for those companies that are characterized by more diversity and therefore have a broader talent pool from which many competitive capabilities can be sourced.

Furthermore, by having a more diverse employee base, companies can increase innovation and customer insight. According to research, a group that's diverse and inclusive will probably result in more creativity and innovation, especially when compared to a team that's homogenous. This is due to the fact that a diverse team includes a collection of different experiences, perspectives and approaches to different situations, making solving complex and unusual problems at least a slightly easier task (*Phillips, 2014, Hewlett, Marshall, Sherbin, 2013*). Also, diverse groups are better suited to cater towards diverse customer markets, since they are able to identify and engage with a wide range of customer segments, including women, ethnic minorities and members of the LGBTQ+ community. A growing share of consumer wealth is held by these markets (*Gao, Zhang, 2016, Badgett, 2013*) and for some companies these groups could even reflect their untapped markets.

Another benefit of diversity and inclusion management could be the increase in employee satisfaction, as well as the reduction of conflicts within a team or between different groups and as a result promoting collaboration and loyalty. High-performing employees are more likely to be attracted to such an environment and thrive in a workplace like this. Moreover, companies with diversity and inclusion that extends way beyond their employees to their supply chain, local communities and even customers, receive a great deal of customer support and can benefit a lot from their improved reputation and enhanced global image.

Lastly, for many companies, diversity and inclusion is simply a matter of license to operate. As recent issues with gender and racial discrimination have become widely publicized in the recent years, for many companies, gender and racial inclusion is a major part of their licensing requirements.

Diversity and Inclusion around the world

The different instances of discrimination that occur in the workplace depend heavily on the country of focus and its culture. This means that the different cultural and ethnic backgrounds of a broad range of countries from all over the world play a very important role on how certain types of discrimination will manifest in the work environment.

In the United Kingdom for instance, there are serious federal regulations in place, in order to protect members of the LGBTQ+ community from facing discrimination due to their sexual orientation (*Badgett & Frank, 2007*) and as a result, the number of instances of formal discrimination against LGBTQ+ employees will likely be lower than countries without such regulations. On the other hand, there are numerous countries, where orientations that aren't strictly heterosexual, are illegal and in all likelihood, this will have serious consequences on the amount of workplace discrimination already taking place (*Rupar, 2014*).

In addition, there are countries with a lot of racial diversity, for example the United States, and countries that are almost completely, racially homogenous. So, the type and the degree of racial discrimination that employees have to face varies between countries due to their differences in racial identity (*Dikötter, 1994*). For example, South Africa, where 16% of executive positions are occupied by black South Africans, has one of the highest levels of diverse representation on executive teams, despite the fact that in the context of local demographics, the country's population is 79% black. The countries that follow are the United States, Singapore and the United Kingdom with 11 to 12% of executive roles occupied by ethnic minorities. The representation of ethnic and cultural diversity of executive teams in the United States and the United Kingdom has noted a slight increase during the recent years, but it has declined however, in other geographies, leading to the lower overall increase of 1 percent across regions.

Lastly, gender diversity depends on the country's gender egalitarianism and parental leave policies. Australia for example, leads the way when it comes to women's share of executive roles, with women occupying 21% of them, followed by the United States with 19% and the United Kingdom with 15%. This also applies to board positions, with Australia at 30%, the United States 26%, and the United Kingdom at 22%. As women's workforce participation levels are similar across all three nations, it's interesting to see that there is such a disparity between them. Nevertheless, during the recent years there has been relatively little progress on women's representation in the workplace.

Conclusion

In conclusion, there are many ethical aspects in today's global economy that should concern everyone who participates in it, from producers to consumers and vendors, all around the world. That means that everyone, including the government, has a responsibility towards protecting those who don't have a voice, for example the animals. Unnecessary hurt and suffering should be avoided, especially nowadays when there are so many alternative practices for producers and many alternative products that consumers can choose. In addition, everyone is accountable for protecting the environment, since every single individual living today is affected by climate change and pollution from excessive amounts of waste, caused by factories and overconsumption. Lastly, it is important to protect the more vulnerable population groups, such as workers in developing countries who are taken advantage of due to the lack of sufficient regulation, the residents of the same countries, who have to live with the danger of important health risks due to harmful manufacturing practices, as well as different minority groups in the workplace.

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