Which Should I Shoes? – A Study on Sustainability and its Consumers Though Priming

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Abstract

Human consumption has become a major issue due to its relationship to the current environmental changes, decline of natural resources, rising ocean levels, rising temperatures, and deforestation all around the world (Guckian, De Young, & Harbo, 2017). However, if we could collectively reduce the amount of consumption, we as a society undertake it could provide some breathing room for the planet. For example, focusing on sustainable household consumption patterns can greatly reduce CO2 emissions given off by the industries fueling our constant consumption (Munksgaard, Pedersen, & Weir, 2001). Marketers have recently relied on subtle tactics, in attempt to promote environmentally friendly consumption by presenting their products with particular attributes that participants associate with their product, this tactic is known as priming. This leads to main aim of this investigation.

This thesis focuses on the question: How are products perceived differently when they are presented to be sustainable and what are the characteristics of those influenced by the prime? To answer these questions, a quantitative experimental method was used by collecting 150 surveys were consumers were primed with one of 3 different conditions (luxury, comfort, or sustainability). The aim of the experiment was to determine if the sustainable prime influenced the perception of the shoe collection in comparison to the other two primes. The participants were shown a description of a fictional shoe manufacturer along with a fictional collection the was carefully selected. After the results was collected statistical analysis of the results were done in order to uncover relations between variables.

This research project covers the subject of sustainability and provides relevant information on studies those that delve upon those the attributes of sustainable consumers, marketing and its relationship with sustainability, and priming will be provided, along with the hypothesizes formulated using the studies as a reference. The data from study show that perhaps priming for sustainable behavior is more complicated than initially perceived. Since the data did not show that the sustainable prime had a significant effect on the perception of the shoe, this could mean that using priming as a means to promote sustainable behavior may not the most effective method. Although the results from the survey show a significant relationship between environmental interest and the sustainable prime on sustainable behavior.

Keywords: Sustainability, Sustainable Consumption, Environmentally Friendly Consumption, Priming, Sustainable Marketing, Sustainable Consumers,

Table of Contents

1. Introduction

Since the turn of the century the issue of global warming and its consequences has been the subject of international debate. As experts have linked the amount of CO2 emissions to the current changes found in the environment, that can include natural disasters like hurricanes, deforestation, and global warming (IPCC, 1997). Some experts agree that these drastic changes found in our ecosystems are a result of human consumption (Guckian, De Young, & Harbo, 2017). However, it is not all bleak, some experts provide solutions for lowering CO2 emissions by focusing on sustainable household consumption patterns (Munksgaard, Pedersen, & Weir, 2001). If the individuals all around the globe were to undergo this behavior ,the impact could change the state of the planet and move in a more positive direction. Recently, there has been substantial growth in the amount of consumers showing an inclination for sustainable services and products, citing from a survey conducted on Americans showed that 66 percent of people actively choose a product because it is better for the environment (Kim, Tanford, & Book, 2020).

This leads to the main topic of the investigation, which is sustainable consumption. Sustainable consumption might be a crucial step in the right direction in battling climate change, but not everyone seems to place that much importance to consuming sustainably (Polonsky, 2011). Peattie (2001), who did a study on the development sustainability, mentioned that the term gathered attention because it brought together different issues relating to society that need to be addressed, which were the economy and the environment and highlighted their interdependence. Before this revelation, these facets were treated separately and with emerging focus on sustainability, it has brought the possibility of economic growth, environmental

protection, and providing security of resources for future generations to the foreground as an intertwined choice (Peattie, 2009).

Sustainable products are evaluated differently than other products and this study aims to uncover whether people's characteristics, in terms of socio-demographic characteristics, consumption patterns, and interest have an impact on that. The goal of this research is to see products that are perceived to be sustainable are evaluated differently, and what characteristics elicit these different evaluations. The study is focused on sustainable consumption choices after being exposed to a certain prime. Based on the discussion above, the following research question is formulated: How are products perceived differently when they are presented to be sustainable and what are the characteristics of those influenced by the prime? Along with this this study will investigate whether consumer characteristics can affect the influence of the prime. To answer this question quantitative method using a survey with an experimental design. The product that will be focused on in this study will be shoes. A collection of shoes will be shown to the participants of the survey along with the prime in order to analyze if the prime effects how they evaluate the collection of shoes. Shoes were chosen because it is an accessible product for almost everyone as all ages, genders, and socio economics classes consume shoes making the survey relevant for almost anyone.

This investigation will test environmental concerns in relation to other aspects of a product people might find relevant. By priming the participants, this study can add relevant information to how important consuming sustainably is to shoppers, along with its relation to other criteria that a product might hold. Especially since the topic of sustainable consumption has received little attention (Gilg, Barr, & Ford, 2005; She & MacDonald, 2014; Sanval 1992).The results of this research will contribute to the current scientific literature makes clear what it adds

to current scientific knowledge about priming and sustainable consumption. According to experts, investigations within this subject improves understanding in consumer decision making, by studying how priming can potentially relate to established views and provide responses to the prime can provide insight on the relation to consumption preferences (Kim, Tanford, & Book, 2020; Cornelissen et al. 2008). The results from this study can potentially uncover the factors that may or may not inhibit sustainable consumption. By considering respondent characteristics, it gives us an idea of the factors that make people more or less likely to consume sustainably.

The societal relevance of the investigation is that it can benefit those that wish to market sustainable products. Knowing whether priming information relates to climate change can be beneficial for the promotion of sustainable products. Also, in a more general way this study can also provide insight on how priming can be used practically when marketing certain products and how its relation to certain criteria of a product. Peattie (2001) argues that there is a large potential for organizations to participate in sustainable marketing, stating that if there was a large quantity of consumers who are worried about the threat of climate along with information in regard to eco-friendly companies being founded, those organizations could capitalize on those consumers as he terms it 'tapping into green demand'. Although the article was written eighteen years ago, he does raise a fair point. With the importance of tackling the climate impact only growing as the years pass, there potentially could be a shift in demand that companies practicing sustainable methods could benefit from. It would be relevant for the companies to know what market segments that can reach using these tactics. As the significance of sustainability grows, it is likely that consumers hold these attributes at a higher standard, which can ultimately influence consumer choices (Kim, Tanford, & Book, 2020). Another important reason for doing this study is that it allows for an insight of. How a sustainable product is perceived Because people look for

different things in products, so by focusing primarily on sustainability, it is likely that primarily a certain type of person will be attracted. Or that people will be discouraged from buying sustainable products, because they feel that sustainability will be at the expense of other qualities they value higher in products.

Below, in the first section contains the literature review in which sustainability relevant information on sustainability, research that studies those that consume sustainable products and their shared traits, marketing and its relationship with sustainability, and priming will be provided along with the hypothesizes formulated using the studies as a reference. This is succeeded by the second section which contains the methodology and explanation of the experimental design. After this comes the results section where the hypothesizes will be tested using the answers from the survey. Lastly, this investigation will end with conclusions explaining the results followed by limitations and future research ideas.

2. Literature Review

The present review of literature is designed to define, operationalize, and explain the central concepts within this study, starting with the concept of sustainability and its development through the years. Following this, the subject of sustainable consumption along with the characteristics of those who practice it will be explored. Third, general marketing techniques and marketing of sustainability will be discussed. Following this, a conceptualization of priming using state-of-the-art literature is provided. Lastly, hypotheses for the present quantitative investigation based on this review are formulated.

2.1 Sustainability

2.1.1. What is sustainability

The term 'sustainability' was first used in the Brundtland Report, titled '*Our Common Future'*, which was designed to address the potential dangers of climate change (WECD, 1987). This report defined the term 'sustainable development' as a type of development that satisfies the needs of the current generation, without potentially sacrificing those of future generations. Products that adhere to this sustainable development principles, or 'Sustainable products', do not contribute to an increase in greenhouse gases emissions, and their producers consider the potential consequences of climate change when creating their product. As our global population grows each year and the technological advances promotes and facilities consumption, this leads a strain and slow depletion of the resources of the planet and contributes greatly to increase in green-house gasses that puts a considerable burden on the planet (Guckian, De Young, & Harbo, 2017).

The question then arises; what makes a sustainable product? According to Ies (2008) a sustainable product holds properties that can be separated into four aspects. These are a) conditions of production, or the materials and resources used to make the product need to be sustainable and non-pollutant to the environment when compared to rival products ; b) the products performance or characteristics, this refers to if the product has short or long life span when compared to its production method c) if the products produces CO2 when compared to other substitute products, and d) the risks of exposure. Risk of exposure refers to the level of risk a product presents when consumed, for example how much it would pollute the environment when littered (Ies, 2008). Ljunberg (2007) mentions that although sustainable products impact on the CO2 levels and pollution cannot be zero, although if compared to similar or rival products it produces less CO2 levels when compared directly.

Policy makers, governments, and other organizations have recognized that it is difficult for a consumer to know how products were produced and have made efforts to make it easier for the consumer by introducing reliable schemes of environmental labeling (Rex & Baumann, 2007). These schemes are known as 'Ecolabels', which are information-based tactics that represent if the product can be considered sustainable and it allows consumers to choose products that have a lower impact on the environment (Rex & Baumann, 2007). According to Delamas, Nairn-Birch, and Balzarova (2013), the number of programs related to 'ecolabeling' has grown to over 400 firm across 197 countries and spanning 25 different industries.

However, a detriment to this exponential growth has been that due to the sheer breadth of this ecolabeling, the message has become somewhat blurred with each program communicating different factors they consider important for 'sustainability'. This has rendered the consumer has confused and somewhat skeptical of these labels (Delmas, Nairn-Birch, & Balzarova, 2013).

They found that the best received ecolabels are those with clear and simple messages towards potential consumers (Delmas, Nairn-Birch and Balzarova, 2013). Their paper utilizes the example of the Energy Star label used for electronics. After recognizing their message was becoming blurred, their label was revised and rebranded to increase its clarity and enjoyed substantial success. Before the redesign it was unclear what the label represented as it was a simple label with no explanation, after the redesign executives added scales and small graphs to communicate how much energy that device uses making it clear to the consumer if its sustainable or not (Delmas, Nairn-Birch, & Balzarova, 2013).

Ljunberg (2007) mentions 3 key areas that sustainability tries to tackle, the first being safeguarding the environment, which includes preserving the biodiversity of both plants and animals found on the planet, equity, tackling the poverty and providing equal distribution of natural resources to uphold society that treats people with equality, and lastly futurity, which means the effect of development is looked at critically in order to preserve resources for future generations. However, it must be mentioned that each type of product faces its own challenges when related to sustainability.

2.1.2. Types of sustainability products

As sustainability as grown in popularity over the years many different products have adapted sustainable methods of production, consumption, and distribution. According to Ang (2018) who wrote an article on the different types of new sustainable products have been adapted to a number of different industries, some examples included like vehicles made from recyclable materials, pollution-busting carpets, shirts made from materials that absorb Co2, beer that recycles dairy waste. Another type of sustainable that is gaining popularity are food products. This can take many different forms: hybrid meat products; plant-based substitutes; and meat and

fish made in sustainable farms (Vahonacker, van Loo, Gellynk & Verbeke, 2013). The commonality between them is that they highlight the role of the meat industry and its massive contribution to climate change due to its high level of CO2 levels which is common among sustainable products. In terms of this thesis has chosen to look at only one type of sustainable product being fashion products mainly being footwear.

When it comes to fashionable products, sustainable products usually come in the form of clothing made from ecological materials, second-hand clothing, and "upcycling" pieces (Park & Lin, 2018). Second-hand clothing are products that are sold outside of the place that they are made and are pieces that are usually donated rather than thrown away (Park & Lin, 2018). Recycling in this context is the process of remaking and converting worthless clothing or textile waste and converting into new goods of higher quality or of higher sustainable value through the work of design or workmanship (Cassidy & Han, 2013). Lastly, upcycling is when designers reconstruct a second-hand clothing item into a new piece. This method has proved popular and has allowed a new business model for sustainable fashion workers (Kim & Rha, 2014).

In relation to footwear a type of fashionable product, which is the focus of this investigation, how does one normally evaluate the criteria before they buy their preference? After mixed method investigation which included surveys and interviews, Lazarfield found that the display of the shoe has little effect on the appeal, citing that price is the aspects that holds the most weight to consumers, even if the consumer preferred the shoe before considering the 'bad' display the consumer will still buy the shoe (Fullerton, 1990). This could potentially mean that consumers weigh price as one the key factors when considering buying a product. Yet, it must be kept in mind that is article is written on a study completed around 90 years ago. It is a possibility that influential factors have changed with the times.

2.2. Marketing Sustainability

2.2.1. Defining marketing

Marketing is an inevitability in modern life, present in shops, on our phones, on public transport, on billboards, in magazines and newspapers, on television: the list is endless. However, the breadth of the term marketing makes its definition rather elusive. Bawa, Landwehrn, and Krishna (1989) define marketing as strategies that organizations use to gain a competitive edge to capitalize on profits, typically consisting of different tactics to increase their popularity within the market.

2.2.2. Sustainability Marketing: a brief review

Peattie (2001) highlighted in her study on green marketing that the term 'sustainability' may have garnered such extensive attention in recent years because it has highlighted the interdependence of different actors in our daily life. These players include the economy, society, and the environment.

Kemper and Ballantine (2019) distinguished between three types of sustainable marketing: Auxiliary Sustainable Marketing (ASM); Reformative Sustainability Marketing (NSM); and Transformative Sustainable Marketing (TSM). The difference of these perspectives lies in what area they apply their sustainable marketing methods. In ASM, sustainability is applied in every facet of the marketing mix, which includes the social, environment, and economic aspects of both consumption and production (Kemper & Ballantine, 2019). With regards to RSM, its focus is on limiting the use of planets natural resources and minimizing the inequality between developing and developed nations. These techniques are most often applied in attempt to change current business practices voicing change to benefit those being exploited (Kemper & Ballantine, 2019). Lastly, TSM is implemented by institutions who are responsible

for helping organizations that have difficulty transitioning into a sustainable business model (Kemper & Ballantine, 2019). For this investigation Auxiliary Sustainable Marketing will be the main focus as the prime for the experiment will explain that sustainability will be implemented in not only production but distribution as well.

Polonsky (2011) when conducting an in-depth analysis of transformative sustainable marketing reached the conclusion that people (primarily from Western cultures) have trouble considering long-term and inclusive practices that place value to the environment because their own interests, needs, and convenience comes first. The current way of thinking directly translates into policies that focus on individual behaviors, much like this study and its focus on priming. Polonsky (2011) goes on to explain that in order for the majority of the population to participate in sustainable consumption there needs to be systematic changes coming from the government and policy because as individuals, people (or at least in the West) will act out of their own self-interest.

In sum, sustainable products are typically made from recyclable resources, which means they come from repurposed materials, this leads people to believe that there might be certain trade-offs in the areas of performance or price (Peattie, 2001). Due to this association, it is the job of marketers to make consumers aware that these are misconceptions (Polonsky, 2011). Herva, Alvarez, & Roca (2011) explain that some fashion companies, mainly footwear organizations are implementing a method of production called eco-design, which is when environmental concerns are integrated with the products development and overall design. When a product is created using Eco-design, companies consider all the potential impact on the environment in every stage of the lifecycle of said product, with having the overall objective of

meeting the satisfaction of the consumers desires and needs of the consumer (Herva, Alvarez, & Roca, 2011).

2.2.3. The Consumers of Sustainability Marketing

Now that the concept of sustainability has been clarified, the study now turns to the characteristics of a "sustainable consumer". There appear to be two main lines of research, one that focuses on distinguishing those sociodemographic factors (age, education level, and political ideology) linked to sustainable consumption, or psychological aspects that could be associated with sustainable consumption (Berenguer, Corraliza, & Martin, 2005; Luchs & Mooaraian, 2012; Dietz, Stern, Guagnano, 1998).

This aligns somewhat with a study that pinpointed multiple factors that were important in identifying an individual practicing sustainable consumption including a) social and environmental values; b) sociodemographic variables and c) psychological factors (Gilg, Barr, & Ford, 2005). According to Gilg Barr, & Ford (2000), sustainable consumers when compared to normal consumers place higher importance to social and environmental values, tend to be highly educated and receive higher income and lastly show a tendency to be more empathetic.

However, McDonald and Oates (2006) found that investigations attempting to find the characteristics of sustainable consumer has often resulted in contradictory findings. In the subsequent section, theoretical arguments for different characteristics will be explored, along with their limitations in order to develop relevant characteristics for the present study.

Peattie (2001) found that the notable factors that distinguished sustainable from non-sustainable consumers was their knowledge and concern for the ecosystem, and their belief that one person can make an influence on the impact of the environment. This is intuitive: it is logical that an individual that understands their impact on the environment would subsequently behave

in a consistent manner with that understanding. However, Berenguer and their colleagues (2005) uncover the opposite of what Peattie found, those individuals in their study that expressed higher levels of interest towards the state of the environment showed low levels of sustainable behavior.

Liverani (2009) explains this however by stating that concern for global warming does not automatically translate to an understanding of its causes, nor the necessary responses to make a difference. This implies that while we may have an understanding of climate change, we may not be aware of maladaptive behavior contributing to this both economically and environmentally. Reversely, Cornelissen, Pandelaere, Warlop, and Dewitte, (2008) found that some consumers do not view themselves as environmentally conscious, despite the fact they partake in sustainable behavior. Their investigation uncovered that some consumers do not view themselves as environmentally aware despite that the fact they the consume sustainably because they did not know the behavior is environmentally friendly (Cornelissen et al., 2008). For example, if a person has a habit of turning off a light when not using it, although this behavior is considered sustainable, not everyone who does this explicitly knows that they are participating in sustainable behavior. Results from study done by Chekima, Chekima, Syed Khalid Wafa, Igau, & Sondoh (2016) show that gender and educational level have a positive significant effect on sustainable consumption. They suggest that sustainable actions and motivations are found more times among the highly educated and woman in particular. In a survey conducted in Hungary, by Zsóka, Szerenyi, Szechy, & Kocsis (2013), they found that the respondents who had attended university had obtained more knowledge about the environment and exceptionally aware of the need for sustainable consumption when compared the high school respondents.

Ribiero, Veiga, & Higuchi (2016) found thorough their investigation that the main personality traits that are directly linked to sustainable consumption and behaviors are openness

to experience, agreeableness, altruism, and conscientiousness. However, it was unclear if these personality traits influence each other as certain traits like frugality mediate the effect on sustainable consumption (Ribiero, Veiga, & Higuchi, 2016).

Morrison & Beer (2017) when investigating the demographics of European environmental consumption found that the relationship between age and environmental consumption holds an inverse U shape, which means that awareness initially rises as age increases and reach a peak in the late middle stage of life and after goes down with the older people are. According to their findings, the most likely to participate in sustainable behavior are middle aged.

Another factor that piqued the interest of experts was the role of gender on sustainable consumption. According to early investigations on the relationship between gender and sustainable consumption showed women to be more concerned with environmental issues than their male counterparts (Zelezny, Chua, & Aldrich, 2000). However, when examining the differences between gender in more detail, the relationship between gender and sustainable consumption the relationship seems to be more complicated than it originally seemed.

Luchs and Mooaraian (2012) modeled a study in an attempt to uncover the underlying factor that accounts for gender differences in behavior. They found that certain personality traits such as agreeableness and openness to experience are moderated by gender. In other words, gender serves as a distal predictor for sustainable consumption, as women are more likely to have the personality traits that predicted sustainable behavior. Zelezny, Chua, & Aldrich (2000) in their systematic review examined N=13 investigations of environmentally responsible consumption and found that n=9 showed women to have higher levels of pro-environmental attitudes along with behavior while the other 4 did not show high levels of pro-environmental

attitudes. In their experiment, their results demonstrated that this tendency is even found amongst children.

However, not all experts agree there is a relationship between gender and sustainable consumption. Davidson and Freudenberg (1996) when conducting an in-depth study on the gender differences in environmental concerns, demonstrated that differences in environmentalism between genders are completely widespread in both the United States and the rest of the world. Hirsh (2010) investigated whether certain personality traits had any relation to concern for the environment, he concluded that gender did not moderate the relationship but reaffirmed that personality traits were what predicted environmental concern. Although consistent with previous research, Hirsh never tested whether gender served as a mediating variable between the relationship between environmental concern and gender (Luchs & Mooaraian, 2012).

Aschemann-Witzel and Zielke (2015) also mention that price is an influential factor that affects decision making when it comes to consumption, but it related to how many resources an individual has. If an individual has a low amount of resources like income, high prices signify that they must make a sacrifice, while if an individual has a high amount of resources the high prices signify a higher quality (Aschemann-Witzel & Zielke, 2015). This means that when a person with limited resources is presented with a sustainable product with a higher price, since it has no direct utility to them it is not worth the sacrifice in price. Some consumers are hesitant to buy sustainable products because they perceive these products as more expensive because of their method of production, and this perception directly effects the willingness to pay for the product (Kim & Rha, 2014)

Nevertheless, price in relation to sustainable products is sometimes paradoxical. Potential consumers voice that they desire accessible prices for sustainable products, but when put into practice people relate low prices to inferior quality products, and thus do not consume them (Aschemann-Witzel & Zielke, 2017). When pricing a sustainable product, an organization must consider that when pricing a product too low it brings negative associations to the product, whilst having to consider keeping the price accessible to everyone. Prices can influence customer purchasing behavior based on certain economic factors like price consciousness, willingness to pay and economic background (Aertsens, Verbeke, Mondelaers, & van Huylenbroeck, 2009).

In sum, according to the experts, sustainable consumers share common traits like high education level, a high level of interest for the environment, often women, receive higher income and lastly show a tendency to be more empathetic. In additional some experts believe factors like age and price can also influence sustainable consumption.

2.3 Priming as sustainable marketing tool

2.3.1 Defining Priming

The idea behind priming is simple: introduce an individual to a first stimulus, and it will have an effect on the second stimulus that is presented. In other words, the theory of priming explains that processing a first stimulus influences the perception of a subsequently encountered stimulus (Janiszewski & Wyer, 2014) Or, to put this into a more concrete example, priming a person specific words like ‘fun’, before they pick a place to eat which can lead to an increase of choosing a ‘fun’ restaurant for dinner (Laran, Janiszewski, & Cunha 2008). This phenomenon sees use when trying to elicit ‘good behavior’ without explicitly directing an individual to do so.

The concept of priming was first used by Higgins, Rholes, and Jones in 1977. They conducted the original investigation into how subtle stimulation of certain traits in a context can

lead to an influence in social judgments in unrelated contexts. Their research showed that when students were provided with positive descriptions of their teachers before meeting them, the students would relate them to the positive traits they were initially provided with (Higgins, Rholes, & Jones, 1977).

Priming is most often applied in the context of providing individuals with a certain stimulus, with the intention to stimulate a specific idea or attitude. However, more recent research demonstrates that the effects of priming can be moderated by prior attitudes held by an individual (Cameron, Brown-Ianuzzi, & Payne 2012). This could for instance take the form of nudging someone into considering a product that is made from sustainable materials and highlighting the communal benefits of this action.

Harris and their colleagues in 2009 studied the effect of priming in food advertisements on television in relation to eating habits. The study found in that priming in TV advertisements has a notable impact on diet choices and can therefore have health consequences on those that watch these advertisements. The experiment was designed to separate children into two conditions: one with cartoon shows that involved food, and the other condition was the control where they were shown cartoon without food products. The participants were then given a snack to eat while they watch the show. The results showed that the children that watched the cartoon related to food ate 45% more when compared to the control group. This means that the children when watching the cartoon were primed to think about food which led them to eat the snacks that were provided to them.

Priming studies relate to mental associations that are triggered in a discrete, inconspicuous way, this coincides with the aim of this investigation as the aim is also to trigger sustainability in a group of consumers without making the attempt too obvious.

2.3.2 Sustainability Priming

She and MacDonald (2014) aimed to apply priming theory to sustainability. For their investigation, three conditions were implemented. First, one group of participants had to rate a sponge on how sustainable or unsustainable it was. The second group filled in a survey that addressed their views on climate change, while the final condition was a prime-free control group. After these tasks were completed, participants were asked to pick between a range of bread toasters differing in their levels of sustainability (She & MacDonald, 2014).

Their results showed that priming participants led them to pick a more sustainable bread toasters when compared to the group that was not primed, who chose a less sustainable product (She & MacDonald, 2014).This implies that the first two conditions with sustainability priming were correlated to more sustainable choices in relation to the bread toaster (She & MacDonald, 2014).

These results indicate that priming does in fact influence choice preferences in relation to product evaluation. This goes in line with Tate, Stewart, & Daly (2014) who also conducted a study on priming in relation to sustainable consumption found that those primed with an environment protection goals assessed products more positively than compared to the control group who was not primed with the environment protection goal. In another study done by Biel, Dahlstrand and Grankvist (2005) they primed participants using a cow poster and found that the participants that saw this poster before they shopped bought more sustainable products, it was explained that the cow poster elicited a mental image relating to nature which influenced the consumers to consume more sustainably.

However, it must be kept in mind that sustainable attributes are hard to communicate, as they relate to forms of production, they are hard to differentiate from other factors, unlike other

factors such as durability, price, or aesthetic (She & MacDonald, 2014). It must be up to the organization to clearly communicate these attributes. She and MacDonald (2014) stated that an issue that sustainable products face in the market is that most of their favorable features for example being made from recycled plastics, or decreased energy usage are most often hidden from the customer. Because of this, people fail to understand the benefit of the product. These strategies of priming are those of marketers who aim for consumers to buy their product.

The present study's aim aligns with She and MacDonald, in that it too measures the potential influence of priming on sustainability as such, similar results are anticipated.

2.4 Research Question & Hypotheses

In order to answer how are products perceived differently when they are perceived to be sustainable and what are the characteristics of those influenced by the prime. Based on the review of literature above, four hypotheses were formulated.

2.4.1 Hypothesis 1

As aforementioned, priming is applied by providing individuals with a certain stimulus, with the intention to stimulate a specific idea or attitude (Cameron, Brown-Ianuzzi, & Payne 2012). This is the reason why this particular method was selected for the present study, as it aims to uncover what groups of individuals were more susceptible to the stimulus, which in this case is sustainability. Therefore, the first hypothesis was formulated as such:

> *H1: Respondents who are exposed to the sustainable prime, show a more positive opinion of the collection of shoes than respondents who are exposed to one of the other two primes.*

As studies by experts show that priming and positively influence sustainable behavior (She & MacDonald, 2014; Tate, Stewart, & Daly, 2014; Dahlstrand & Grankvist, 2005)

2.4.2 Hypothesis 2

As mentioned above, sustainable products are typically made from recyclable resources or repurposed material) which can lead potential consumers to believe that there might be certain trade-offs in the areas of performance or price (Peattie, 2001). This leads to the second hypothesis:

H2: Respondents who are exposed to the sustainable prime, will rate the shoe collection as cheaper than respondents who are exposed to one of the other two primes.

As the prime will explain that shoes shown in collection are made from 'fake' leather and recycled materials, this can lead the participants to think that the shoes are of lower quality and hence a lower price.

2.4.3. Hypothesis 3

Cameron, Brown-Ianuzzi, and Payne in 2012 showed that the effects of priming in relation to behavior can be moderated by prior established attitudes an individual has. This means that those individuals that already show an interest in preserving the environment will likely be more susceptible to the prime and rate the shoe more positively. The expectation is that those that value the environment tend to consume sustainably (Gilg, Barr, & Ford, 2005). Therefore, the expectation is that their general opinion on sustainable products is more positive.

Hence, the third hypothesis was formulated:

H3: Respondents who have a more positive attitude towards sustainability score higher on their general opinion of the shoe collection when exposed to the sustainable prime.

In reference to the study by Peattie (2001) who conducted an analysis on sustainable consumers, found that the one of the notable factors that distinguished them from non-sustainable consumers was concern and interest for the ecosystem.

2.4.4. Hypothesis 4

Results from study done by Chekima, Chekima, Syed Khalid Wafa, Igau, & Sondoh (2016) demonstrate that the level of education of the participant has a positive significant effect on sustainable consumption. They propose that sustainable actions and motivations are found more times among the highly educated. In a survey conducted in Hungary, by Zsóka, Szerenyi, Szechy, & Kocsis (2013), they found that the respondents who had attended university had obtained more knowledge about the environment and exceptionally aware of the need for sustainable consumption when compared the high school respondents. Which is the reasoning for the fourth hypothesis:

H4: When shown the sustainability prime, respondents with a higher education level will show more positive judgements about the shoe collection.

2.4.5. Hypothesis 5

Chekima and their colleagues (2016) showed that women have a higher likelihood to practice sustainable consumption. This aligns with earlier studies such as Zelezny, Chua, & Aldrich, (2000) who tested the relationship between gender and sustainable consumption and showed women to be more concerned with environmental issues than their male counterparts. This leads to the fifth hypothesis:

H5: When shown the sustainability prime, women will judge the shoe collection more positively than men.

Due to this tendency shown by experts it can be predicted that women will rate the sustainable product more positively.

3. Methodology

To answer whether priming individuals with sustainable options has an effect on their product preference or choice in relation to consumption, a quantitative experimental design was chosen for this research project. The aim of this study is to inquire whether the means of the answers of the different groups differ based on the condition they were placed in. This methodology allowed the study to control the order in which stimuli were perceived by participants, in order to witness the presence of a priming effect (Cameron, Brown-Ianuzzi, & Payne 2012).

An experimental design allows for sustainability to be primed subtly, without being too obvious in its attempt, to avoid external stimuli to interfere with the individual such as for instance social desirability.

A survey using Likert Scales was also used that allowed quantifying consumer preferences using regression analysis and mean comparison can be done between conditions, which allows the researcher to uncover any possible correlations between the criteria being studied (Bryman, 2008). Another reason why this method was chosen was to interpret a sizable sample, which in this case was 150 people, to test whether priming has any influence on consumer preferences based on any significant results. This method is more suited to study larger groups of people.

3.1. Participants

This investigation used a sample size of 150 United States citizens. This number is chosen because it is considerable enough to be a sample of the population without sacrificing time and cost as more the researcher would have to wait for more people to respond. The data was collected on the 21st of April 2020.

Considering this research has no criteria except for being American, the data used in this investigation was collected on Mechanical Turk. This platform run by Amazon lets researchers produce and distribute simple tasks, for example surveys. Americans were chosen as the participants needed to share a nationality to make sure that the nationality or culture may not influence the results.

Mechanical Turk boasts a diverse and substantial workforce that is made up by around 100.000 users from over 100 countries (Buhrmester, Kwang & Gosling, 2011). These people were chosen as they have experience filling out these types of tasks which made data collection quick and easy. The participants were compensated as they merit a reward for completing the survey of which the minimum wage was calculated according to the 10 minutes spent completing the survey which was $1,50 per person. Once the 150 filled out the survey the results were then analyzed using the statistic program SPSS to find any possible links between the dependent and independent variables.

3.2. Procedure

The survey was made using *Qualtrics*, an online survey program, which was subsequently uploaded to Amazon's Mechanical Turk (M-Turk). Before the actual experiment began, a short description of the project was given along with informing the participants about the anonymity of the survey and asking for their consent to participate. The participants were reassured that all the information used within the survey was and is confidential and would only be used for this study and that participating in this investigation is completely voluntary and they can withdraw at any moment if they so wished.

The participants randomly assigned to one of three conditions, separated by three primes: Luxury; Comfort; or Sustainable. Each of these primes contained descriptions of who made the

shoe and for what purpose. The primes were shown alongside the collection of shoes and included either a luxurious description, a sustainable description, or a comfortable condition. The participant was then asked to rate on a Likert scale how much they agreed with certain statements regarding the shoes they just saw. With questions regarding their general opinion of shoe. Examples include whether they like the shoes, whether they seemed comfortable, weird, unique, classy and whether they would wear them, if they look like shoes they already own, whether is they look beautiful and whether or not they look plain. In the final section of the survey, the participants were asked about their demographics. These questions consisted of asking participants about their age, gender, and educational level.

3.2.1. Images of shoes

Alongside the primes, participants were provided showcase of 6 picture shoes of androgynous shoes, with no brand names or connotations. This was done in the attempt to eliminate factors like preconceptions of the shoe due to brand and potential gender differences. The shoes were chosen based on not fitting an exclusive description, the photos of the shows could fit any of the three primes. Three black shoes and white shoes were shown to cover preferences for both black and white shoes to participants while also preventing any influence of color preference on the perception of the shoe. The shoes were chosen carefully as different types of shoes could cause the participants to think the showcase was fictional possibly affecting the answers of the participants.

3.2. Independent Variables

3.2.1. The Luxury Prime

When constructing the luxury prime, it was kept in mind that the prime must communicate aspects of prestige and reputation. Therefore, the fake designer name ‘Alexander Scott’ was used

along with a detailed description of his style of shoemaking. This helped make the prime more believable to the participants. The prime was shown to the participants as followed:

"You will get to see the new male and female collections brought to you by Alexander Scott. We would like to know what you think of these collections. Coming from a family of prominent shoemakers, California based designer Alexander Scott lives and breathes luxury footwear. In his collections, he uses leather to showcase elegance in both female and male footwear. In recent years, the brand has become a household name, featuring styles that are elegant and sleek. Taking inspiration from the casual style of loafers and sneaker wear, in the present collection Scott adds his own twist, leading to highly wearable, yet distinctive designs."

All of the primes remain consistent in the location in order to avoid any impact on the participants answers. Words like elegance, sleek, and luxury were used in order to emphasize that this shoe is meant to be perceived as luxurious.

3.2.2. The Comfort Prime

In the second condition, emphasis was placed on the comfort of the shoe. The prime was shown in this manner in the survey:

"You will get to see the new male and female collections by Sole Mates. We would like to know what you think of these collections. California based company Sole Mates' central philosophy is that a shoe should be designed for comfort. The company specializes in footwear that feels good around your feet, but still looks elegant. Sole Mates has become a household name in comfortable footwear. Ergonomically shaped in various length and width sizes and made out of breathing materials, the shoes are designed to fit any and all feet. A cushioned sole construction

that adapts to the wearer's foot ensures perfect comfort, no matter what the shape of your foot is."

The specific words eliciting the comfort prime here were 'comfort', 'breathing materials', and 'cushioned'. This specific phrasing was chosen in an attempt to communicate to the participant the importance placed on comfort placed by the footwear company. Highlighting the fact that the shoe can fit any size of feet and comes with a padded sole.

3.2.3. The Sustainability Prime

Lastly when presenting a sustainable shoe, a brand name was also used, and it was noted to include descriptions that relate to eco-friendly production practices and to highlight that it does not compromise the resources of future generations. The prime was shown in the following manner:

"*Based in California, ZeaPatos ensures that all their shoes are made from sustainable materials. As leather takes a significant toll on the environment, due to the amount of land needed for its production, ZeaPatos uses a corn waste-based lacquer as an alternative resulting in less pollution for the environment. The soles are made from specially processed recycled plastics. The company ensures zero carbon emissions in their production and distribution processes. This collection comes in a sleek and elegant design, showcasing that there are alternatives to products that do not pollute the planet."*

This prime first highlights that leather takes a significant strain on the environment and provides an alternative that is sustainable, communicating clearly that the benefit of buying this shoe.

3.2.4. General Shoe Consumption

After the primes were given along with shoe collection, 12 questions of control variables were tested. The first group of questions refer to the participants overall shoe consumption habits. Based upon five-point Likert Scale, participants were asked to measure how often they buy shoes, how many shoes they owned, how much they considered they spend on shoes, and whether they considered themselves to spend more or less money on shoes compared to the average person. These types of questions were used in previous studies to assess the effect of the prime on preferences (She & McDonald, 2014). These questions were asked in order to see whether the number of shoes a person has can influence whether they are susceptible to a certain prime. Specifics were also asked in order to have a more concrete idea of what their spending habits on shoes are. Participants were asked to rate on five-point scale (ranging from never to very frequent) how often they buy certain shoes, for example dress shoes, sports shoes, high heels, boots, flipflop, and casual shoes. Participants were then asked to scale how much they think they spend on all the types of shoes.

The participants were then asked to rank different attributes of shoes based upon their importance to them. Five were included, which were: comfort, look/design, price, brand name, and quality. This allows some inquiry of how a prime can affect someone due to their preference. This question was included because different people may look for different things in a product and this may have an effect on how much they will be affected by a certain prime. This goes in line with the finding made by Cameron, Brown-Ianuzzi, and Payne in 2012, whose results showed that the effects of priming in relation to behavior can be moderated by prior established attitudes an individual has. The next question is a seven-point Likert Scale were participants are asked to rate on how much they agree with the statement: the appearance of a shoe is an

important. This question aims to uncover how much participants really value the appearance of a shoe.

3.2.5. Demographics

Questions about the participants demographics were asked which included their gender, age, and education level. As studies mentioned gender and education level were influential factors when studying sustainable consumer (Zelezny, Chua, & Aldrich, 2000; Peattie, 2001; Chekima, Chekima, Syed Khalid Wafa, Igau, & Sondoh, 2016). A regression analysis was done with the questions relating to the shoes to uncover any significant correlations.

When asked what education level the participants were in, the question was replicated from the United States census, where they clarify each level of education with 14 different levels of education. The reason for this detailed distinguishing between educational groups is to prevent misattribution of level (Kominski & Siegel,1993). For example, if a person attended university for 2 years but did not receive a diploma, that person would be attributed as a high school graduate even though he or she received 2 years of university education. This is important because as mentioned before, receiving university education seems to be influential in sustainable and should be distinguished from receiving a diploma (Zsóka, Szerenyi, Szechy, & Kocsis, 2013). To simplify things the education level was modified into 2 different groups, those that continued a form of education after high school and those that did not.

Along with socio-demographic questions, the next series of questions covered the subject of the participant's interests. The field of interests included science/technology, sports, economics, music/arts, and environment/sustainability. This question was included because if a participant is already interested in the environment it would be interesting to see if there is any

effect of the prime on this group of people. Using interactions and testing to see whether the primes can mediate the effect of certain independent variables.

At the end of the survey a question was added referring to whether the participant caught on to what the survey was trying to do. This question was added because it is important to inquire whether knowing about the priming and the design of the experiment and influence its result.

3.3. Dependent Variables

There are three dependent variables that were tested in the analysis. The first variable is a general opinion about the showcased product. This general opinion was measured with six Likert scale statements with answering categories ranging from 1 to 7 (1 = strongly disagree and 7 = strongly agree). The questions within the survey represent those preferences in a quantified manner. The statements used show a Cronbach's Alpha of 0.87. This means that answers to the questions are related. For this reason, the questions were averaged out to simplify things. Three examples of statements used are as follows: *"To which extent do you agree with the following statements about the collection? - I like these shoes"; "I think these shoes are comfortable"; "I would wear these shoes".*

Next to the general opinion, the price perception of respondents was measured. This was done by providing a scale to the participant where they must score what they think the shoe is priced on a scale of ten. This question was asked in attempt to see if the primes have any influence on price perception. The next question directly asks the participant whether they would buy the shoe or not, based upon a 5-point scale ranging from definitely not to definitely will. This question allows a direct comparison between the primes to see if a certain prime elicits more intention to consume.

The last question asked the participants how much they would spend in relation to how much they typically pay for shoes. This question was implemented to see if the prime has any influence on the consumer's willingness to pay. Based upon a five-point scale, the participants are asked whether would spend much less than normal, a little less, about average, a little more than average, or much more. These questions aim to how much the participants value the prime, if a participant were to pay less, they probably do not value the prime and the opposite is the case when they value the prime, they were assigned in.

3.4. Design

The main independent variables that are being tested are the primes. The primes luxurious and comfort were chosen as they are common to features that stray away from sustainability attributes. According to Alcantara, Artacho, Gonzalez, & Garcia (2005), who conducted a study on the most influential attributes of footwear on consumption found that the aspects of footwear consumers value the most narrowed down to perceived quality, gender and social context, aesthetics, and comfort. For this reason, comfort and luxury were chosen as control conditions as it would be intriguing to directly compare these important attributes to the growing popularity of sustainability. Since generally luxurious and comfortable shoes have the tendency to stray away from sustainable goals which was the main reason why they were chosen.

3.5 Data analysis

Once the 150 surveys were gathered, SPSS was used for the analysis. SPSS makes it possible to find any possible relations between the dependent and independent variables. The data that was gathered showed no incomplete surveys. There was no missing data. To prepare the analysis, firstly descriptive results on the dependent and independent variables were produced.

Additionally, a new variable was constructed named ‘positive perception’. out of 7 individual statements regarding respondent’s attitude towards the showcased products. The statements show a Cronbach’s Alpha of 0.87. This means that answers to the questions are related. For this reason, the questions were summed up to simplify things, and two questions were excluded. These questions were also summed together and labeled ‘negative perception’. After this, the primes were then separated into dummy variables to allow a regression analysis. This type of test was chosen because it allows a multi variate analysis.

During the experiment, the participants were asked to rate from 1 to seven on different nine different aspects of the shoes presented. In an effort to simplify things all the questions that relate to positive views of the collection of shoes were grouped together under one variable named positive perception. Seven questions were included under this variable which consisted of liking the shoe, comfortableness, uniqueness, classy, whether they would wear them, and beautifulness. The last two questions pertaining to whether the shoes looked weird or plain, were grouped under the variable, negative perception.

To compare the results of the answers between the different prime groups a comparison the means of the aesthetic questions on the showcased shoes between all three primes was done between the prime groups to see general differences between each group. After this an Independent Samples T-Test was done to test the significance of the difference between the primes. Analysis of Covariance (ANCOVA) was also conducted. This was done in order to test the main and interaction effects of the independent variable in this case prime condition, on the dependent variable which was the perception of the shoe, while controlling for the effects of a third variable, which could be education, gender, or general attitudes towards sustainability.

4. Results

4.1 Demographics

The final sample consisted of N=150 participants, with an almost equal random division between conditions: n=49 in the Luxury Prime condition; n=52 in the Comfort Prime condition; and n=49 in the experimental condition, the Sustainable Prime.

There was a skewed gender distribution within the sample, with 68% consisting of males (n=102) and 32% consisting of females (n=48). In terms of age, the participants ranged from 21 years old to 98, with the average being 39.3 (SD =12).

Education within the sample varied greatly, with participants ranging from having completed 12^{th} grade with no diploma, all the way to completion of Doctorate degrees (SD = 2). The majority of the dataset continued to study after high school with 84% choosing 1 or more years of college credits and above.

When asked about different interests on a scale from 1 to 7, technology and science scored the highest with μ= 5.80 (SD = 1.3), the lowest score was in fashion having a μ= 4 (SD = 1.8, while sustainability scored a 5.6 on average (SD = 1.7).

A correlation test between the demographic variables was done in order to uncover any underlying relationships that could potentially influence the results. The table below shows a significant relationship between age and women, which means that women that participated in this investigation had to tendency to be older when compared to the men. Table 1 also shows that there is a relation between education level and age.

Table 1: *Descriptive Statistics and Correlations for Study Variables*

Variable	n	M	SD	1	2	3	4
1. Age	150	39.3	12	-			
2. Education Level	150	7.25	4.8	0.204*	-		
3. Environmental Interest	150	5.57	1.7	0.08	0.092	-	
4. Gender [a]	150	1.32	0.468	.215**	0.063	-0.053	-

* Correlation is significant at 0.05 level (2-tailed).

** Correlation is significant at 0.01 level (2-tailed).

[a] 1= male & 2 = female

4.2. Hypotheses

4.2.1. Hypothesis 1

In order to address whether respondents who are exposed to the sustainable prime, show more positive opinion of the product than respondents who are exposed to one of the other two primes. A comparison of means between the groups was done to see if the answers regarding perception differed among to primed groups.

Those individuals in the luxury and comfort prime conditions scored an average of $\mu = 34.2$ (SD = 8.6) out of a possible total score of 49, while those in the sustainable prime condition scored $\mu = 34.4$ (SD = 8.7). In terms of negative perception, those in the luxury and comfort prime conditions as well as those in the sustainable condition scored an average of $\mu = 8.5$ (SD = 2.8; 2.7 respectively).

Independent Samples T-Test analyses demonstrated that neither differences in positive nor in negative perceptions of the shoes were statistically significant.

4.2.2. Hypothesis 2

The second hypothesis predicted that respondents who are exposed to the sustainable prime, will rate the cheaper than respondents who are exposed to one of the other two primes.

Table 1 demonstrates that those in the sustainable condition judged the shoes to be slightly lower than those in the luxury and comfort conditions, as shown in the table below:

Table 2*: Comparison of means of primes relating to price*

Prime Condition	M	N	SD
Luxury	7.71	49	2.291
Comfort	7.71	52	1.974
Sustainable	7.47	49	2.052

However, an Independent Samples t-test determined these differences to be statistically insignificant. $t(148) = .666$, $p = .5$.

4.2.3. Hypothesis 3

To see whether respondents who had a higher score on their attitude towards sustainability scored higher on their general opinion of the product when exposed to the sustainable prime an Analysis of Covariance (ANCOVA) was conducted. This was done in order to test the main and interaction effects of the independent variable (prime condition), on the dependent variable

(positive perception of the shoe), controlling for the effects of a third variable, in this case attitudes towards sustainability.

The results show there was a significant relationship between having a positive perception of shoes and attitudes towards sustainability with those people who were exposed to sustainable prime (2,144) = 10.3, p = <0.05. The partial Eta Squared value that signifies the effect size shows the value of .07 and compared with Cohen's guidelines in this case shows a weak effect. This signifies that 7% of variance of the relationship having interest in the environment and positive perception of the shoe was explained by attitudes towards sustainability. The data however shows an insignificant value for the interaction between attitudes towards sustainability and the sustainable prime and their effect on positive perception of shoes.

4.2.4. Hypothesis 4

The fourth hypothesis stated that when shown the sustainability prime, respondents with a higher education level will show more positive judgements about the product. As aforementioned, education level was modified into a binary variable: those that continued a form of education after high school (1) and those that did not (0). After computing the new variable, the means of answers were compared.

To test the positive perception when related to education level and the sustainable prime a hypothesis an ANCOVA was used again to test the main and interaction effects of categorical variables controlling for education level in this case. The results from the ANCOVA show no significant relationship between prime and perception controlling for education level.

4.2.5. Hypothesis 5:

The last hypothesis predicted that When shown the sustainability prime, women will judge the product more positively than men. In attempt to test this hypothesis, an ANCOVA analysis revealed that when controlling for gender, there was no significant relationship between prime condition and positive perception of the shoe. However, when looking at the correlations with age, the data shoes that there is a significant relationship between age and gender. Meaning that on average the women in the sample tend to be older than the men.

5. Discussion:

This study aimed to answer the question: are products perceived differently when they are presented as sustainable and if so, what are the characteristics of those influenced by the prime? Based on prior literature, 5 hypotheses were formulated. First, that those participants presented with a sustainable prime would elicit a more positive opinion on the shoe collection than participants presented with a luxury or comfort prime. Secondly, it was hypothesized that the sustainability prime would cause participants rate the shoe collection as cheaper than participants in the other two prime conditions. Third, participants with a high level of interest for the environment were expected to rate the shoe collection more positively when exposed the sustainability prime than participants in the other two conditions. Fourth, it was expected that participants with higher educational levels would rate the shoe collection more positively when exposed the sustainability prime compared to less highly educated individuals. Finally, it was expected that women would rate the shoe more positively when exposed to the sustainable prime compared to men. The results in general were not confirmatory of the hypothesis, with the exception of the third hypothesis for which evidence was found.

The first hypothesis stated that respondents who were exposed to the sustainable prime, would show a more positive opinion of the collection of shoes than respondents who are

exposed to one of the other two primes. Results showed no statistically significant relationship between the prime and perception of the shoes. These results imply that the general sample was not influenced by the sustainable prime when compared to the other two primes. This contradicts the research previously done. For example, She & MacDonald's (2014) results indicated that priming participants with environmental messages led them to pick a more sustainable options when compared to the group that was not primed, who chose a less sustainable product. However this does go in line with a point Polonsky (2011) made when conducting an in-depth analysis of transformative sustainable marketing, he stated that people primarily from Western cultures have trouble considering long-term and inclusive practices that place value to the environment because their own interests, needs, and convenience typically comes first. The current way of thinking directly translates into policies that focus on individual behaviors, much like this study and its focus on priming. Polonsky (2011) goes on to explain that in order for the majority of the population to participate in sustainable consumption there needs to be overarching systematic changes coming from the government and policy because as individuals, people (or at least in the West) will act out of their own self-interest because we lack the vision to see the whole picture.

Furthermore, these results can be explained in several different ways. First, in reference to why there was no significant differences in the effects of the prime, was perhaps all three primes positively influenced all the participants. The averages in the positive perception questions were all relatively high, meaning that the majority of the participants had a high opinion of the shoe collection. This could perhaps be attributed to the primes, as all three primes were designed to promote consumption and contained positive connotations for the shoe collection. Priming triggers mental associations in a discrete, inconspicuous way, and causes the

participant to consider this aspect important (Higgins, Rholes, & Jones, 1977). In order to combat this problem in the future possibly a control group where participants are shown no prime, could be added to the experiment to allow the researcher to analyze if the prime has an effect by comparing it to the control group.

The second hypothesis predicted that respondents who are exposed to the sustainable prime, will perceive the product as cheaper than respondents who are exposed to one of the other two primes. Results showed a slight difference in the average scores of prices between the prime conditions. The sustainable prime had a slightly lower score then the luxury and comfort prime, although the result was statistically insignificant.

However, this result could again be explained by the sample size as the difference of price perception of the collection between the sustainable prime and the other primes was present but due to the amount of people it is difficult to say with certainty the prime was causing the difference in price perception. The data demonstrated there was an actual a difference in averages in price perceptions among the primes, that due to the sample size this relationship could not be considered significant. Using this assumption , this line of thought coincides with the findings provided by Peattie (2001), who in his study found that since sustainable products are stereotypically made from recyclable resources that are repurposed from older products, this can lead individuals to think that there might be certain trade-offs in the areas of performance or price.

Additionally, this is not to rule out the fact that this result could have also been influence by the individuals who were in the luxury and comfort condition who may have gaged their shoes' price point as higher, because of the prime they were given. Since both primes

communicated how special the shoes in the collection were perhaps this influenced the participants to believe the shoes would be at higher price point.

The third hypothesis expected participants who had a higher score on their attitude towards sustainability to score higher on their general opinion of the product when exposed to the sustainable prime. The results show there was in fact a significant relationship between perception of shoes and attitudes towards sustainability with those people who were showed higher interest in sustainability.

This goes in line with the investigation done by Peattie (2001) who conducted an analysis on sustainable consumers and found that the one of the notable factors that sets them apart from non-sustainable consumers was concern and interest for the ecosystem. And therefore, being exposed to a sustainability prime would have a positive impact on the way in which the consumers viewed the product

Another possible explanation could be that since the sample rated the fashion interest the lowest, the participants did not place much importance to how the shoe looked. This could mean that the prime could have been more influential as participants were not interested in aspects such as aesthetics or design, allowing them to rate the shoe collection higher. This goes in line with the study done by Lazarfield, who found that the display of the shoe has little effect on the appeal, even if the consumer preferred the shoe before considering the 'bad' display the consumer will still buy the shoe (Fullerton, 1990). In terms of this study, these findings imply the participants generally were not taking into account the way the shoes look themselves but judging the product on the mental associations brought by the primes.

The fourth hypothesis referred to education level and predicted when shown the sustainability prime, respondents with a higher education level will show more positive

judgements about the product. This could mean that those with higher levels of education were more susceptible to the prime, when compared to the individuals with a high school degree or lower.

This conflicts with the study done by Zsóka, Szerenyi, Szechy, & Kocsis in 2013, that found respondents who continued their education after high school had obtained more knowledge about the environment and were exceptionally aware of the need for sustainable consumption when compared the high school respondents had a small percentage placing importance to the environment. However, this study did not incorporate the use of primes and only studied underlying attitudes. As other experts note that attitudes towards sustainability do not always translates to sustainable behavior (Berenguer, Corraliza, & Martin, 2005).

However, it must be noted that the sample distribution of those that continued their education after high school and those that did not was uneven. Since the difference was so large this could have affected the ability to find a significant value in regression. The group in the sample that did not continue their education after high school was considerably small making it difficult to reach a significant value.

The final hypothesis predicted that when shown the sustainability prime, women will judge the product more positively than men. However, no such relationship was established between gender, prime and positive perception of the shoe.

Perhaps a possible reason could be explained by the findings done by Luchs and Mooaraian (2012), they proposed that it is fact personality traits that moderate the gender difference in relation to sustainability, as according to them women have a tendency to have personality traits that are linked to sustainable behavior. This goes in line with research done by Ribiero, Veiga, & Higuchi in 2016 that main personality traits that are directly linked to

sustainable consumption and behaviors are openness to experience, agreeableness, altruism, and conscientiousness. Although, it was unclear if these personality traits influence each other as certain traits mediate the effect on sustainable consumption, along with the fact that stereotypically women tend to have more prosocial personality traits (Ribiero, Veiga, & Higuchi, 2016).

5.1. Implications:

To outline, this investigation aimed to answer the question: are products perceived differently when they are presented as sustainable and if so, what are the characteristics of those influenced by the prime? By considering respondent characteristics, it gives organizations and marketers an idea of the factors that make people more or less likely to consume sustainably. As the planet's resources are becoming scare and the consequences of climate change are looming in the distance, as time passes it is becoming increasingly important for more individuals to consume sustainably. It is important to know which individuals would be consider these types of products in order to segment the market and promote the production of sustainable products. To attempt to tackle the main aim of this research project, 5 hypotheses were made based on literature presented above. The results in general were not confirmatory of the hypothesis except for one hypothesis showing a significant value.

The results from study show that perhaps priming for sustainable behavior is more complicated than initially perceived. Since the data did not show that the sustainable prime had a significant effect on the perception of the shoe, this could mean that using priming as a means to promote sustainable behavior may not the most effective method. The results from the survey

show a significant relationship between environmental interest and the sustainable prime on sustainable behavior. This makes sense that those that voice concern for the environment would be more open to consume a product that reflects their priorities. In order for sustainable consumption to be a common practice among the public, the results from this study show that firstly awareness of the problem and promoting interest in the environment might be the first step in promoting change.

As stated previously, with the importance of tackling the climate impact only growing as the years pass, there potentially could be a shift in demand that companies practicing sustainable methods could benefit from. It is likely that as time proceeds and consequences of climate change become more apparent, consumers will hold sustainable attributes at a higher standard, which can ultimately influence the way people consume causing the invisible hand of market to shift (Kim, Tanford, & Book, 2020). Until then, Polonsky (2011) raises a fair point saying that people in the West do not consider long-term and inclusive practices that place value to the environment because their own interests, needs, and convenience comes first. This is apparent as experts everywhere agree on the seriousness of climate change and its link the overconsumption of modern capitalism, but allows the underlying problems continue to grow (Guckian, De Young, & Harbo, 2017). Although there have been steps in the right direction, this study demonstrates that policies and attempts to market on the individual level is more complicated than just presenting them with relevant environmental information and expecting consumers to place importance to that immediately. As mentioned earlier, in order for the majority of the population to participate in sustainable consumption there needs to be systematic changes coming from the government and policy makers because as individuals, people will more often times than not act out of their own self-interest (Polonsky, 2011). Although not always because

of selfish reasons, there are other factors to consider as well when it comes to product consumption for example price, market information, and accessibility. With systematic changes coming from governments perhaps sustainable production and consumption can become the norm.

5.2. Limitations

One of the limitations that might have affected the results was the sample size. Because of financial reasons the sample size of 150 was considered since each participant was paid ($1.50). Due to the amount being on the smaller size it was difficult to assess whether a relationship between variables were significant. The sample had an unequal gender distribution of women: the number of males was almost double that of the number of females. This perhaps could have affected the results section when investigating gender differences. There was little variety in education since the majority continued their education after they finished high school.

Another limitation were the questions regarding the perception of the shoes. The survey format did not allow for in depth understanding of the what participants thought of the shoe after they were exposed to the prime. Although a Likert Scale is a standardized way of measuring opinions. A more in-depth explanation of how the participants views and feels about the product would have benefitted this research. Also, it would have benefitted the study to have added more to the questions of perception as those added were quite similar to one another.

Another limitation was that this investigation only experimented with footwear, and mainly one specific type of shoe. Due to time restrictions it would have been too complicated to add another type of product, although it would allow for some comparison on how the effects of the

prime influence the perception of the type of product. Possibly priming would work better for other types of products like transport, food, or electronics.

5.3. Future Research:

Future research should attempt to replicate this study using a larger sample as this study due to its sample size had difficulty finding significant values between relationships. Doubling or tripling the current sample size can allow the researcher to test more variables and can allow them to uncover more underlying relationships.

Also, an idea for a follow up research project should control for demographic factors to ensure they are even, this would be to avoid affecting the results in an unwanted way by making it difficult for the data to produce significant values for relationships. The researcher must make sure that the sample is representative of the population. Perhaps using a different data collection method would be best, perhaps a manual method to ensure that the demographics stay somewhat even, although that might take considerably more time and effort.

Another idea for an investigation could focus on what type of prime works best in promoting a certain behavior, as a prime could come in the form of an image, audio, video, or text. Along with this another aspect of priming to experiment on could be the type of message displayed. Comparing between positive messages, negative, informative, or goal – oriented could bring about relevant information for marketers and those attempting to promote sustainable behavior make it a more common practice among consumers.

A pivotal direction research needs to take is to uncover how to promote sustainable practices to those people that would not consider it. Studies most try to uncover the characteristics of those that have positive attitudes towards the environment and those that already have sustainable consumption patterns. To make sustainability a more common practice it must include

the majority of people not a segmented part with certain common traits. A relevant research product could be to study how to promote environmentally friendly behaviors to the general public.

Another relevant study could focus on personality traits and relating them to sustainability would be a good direction that research could take. Though there are investigations that exist on this already, there is a lack of consensus of how the nature of the relationship of personality traits and sustainability (Ribiero, Veiga, & Higuchi, 2016). Perhaps personality acts as a mediator for certain demographics, like education or age, a study uncovers these relationships and their natures would be a great contribution to the already existing information on the characteristics of sustainable consumers.

5.4. Conclusion

In sum, to answer the question how are products perceived differently when they are presented as sustainable and if so, what are the characteristics of those influenced by the prime? A quantitative experimental method was used by collecting 150 surveys were consumers were primed with one of 3 different conditions (luxury, comfort, or sustainability). The results from study show that perhaps priming for sustainable behavior is more complicated than initially perceived. Since the data did not show that the sustainable prime had a significant effect on the perception of the shoe, this could mean that using priming as a means to promote sustainable behavior may not the most effective method. The results from the survey show a significant relationship between environmental interest and the sustainable prime on sustainable behavior.

However, findings like the ones shown in this investigation are not uncommon. McDonald and Oates (2006) found that investigations attempting to find the characteristics of sustainable consumer have difficulty reaching a consensus because often time the investigations result in contradictory findings. All in all, findings of this study suggest that perceptions relating to

sustainability are more complex than just priming alone, and thus must be researched accordingly. As mentioned earlier, in order for the majority of the population to participate in sustainable consumption there needs to be systematic changes that allows the possibility of choosing a sustainable product easier for the consumer because the public will more often times than not act out of their own self-interest (Polonsky, 2011).

For sustainable consumption to be a common practice among the public, the results from this study show promoting interest for the enviornment of the problem might be the first step in promoting change. The results from the survey show a significant relationship between environmental interest and the sustainable prime on sustainable behavior. Perhaps showing the public and explaining that the economy like it or not depends on environment for natural resources to support these systems of consumption that we currently have, and if we continue to exploit these systems there might not be any resources for future generations.

Although there have been steps in the right direction, this study demonstrates that policies and attempts to market on the individual level are more complicated than just presenting them with relevant environmental information and expecting consumers to place importance to that immediately. Due to different factors like socioeconomic status and education blame cannot be placed on the individuals for consuming unsustainably because the economic system allows for unsustainable products to be readily available in the market.

Although the future does look bleak with the current systems of production and consumption continue to pollute our planet, there is still hope. Thankfully there are those that voice for change and continue to fight the systems in place. Hopefully some time soon more and more people join the cause and consider the impact they have within the system they live in.

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Appendix 1: Survey

Priming Survey

Start of Block: introduction

Q29

Thank you for choosing to participate in this questionnaire about shoes. In this questionnaire we will ask you what you think about a new shoe collection. There are no right or wrong answers. We are only interested in your genuine opinion. We will also ask you some general questions about your socio-demographic characteristics as well as your shoe preferences and consumption. We would like to stress you that all your answers are completely anonymous and will only be used for our investigation. The survey will take about 10-15 minutes to complete. You can stop at any moment by closing your browser window, but you will only be

paid upon full completion of the questionnaire. If you agree with these conditions, please indicate below and proceed to the next page.

- ○ I agree and continue (1)
- ○ I do not agree and will leave this survey (2)

End of Block: introduction

Start of Block: prime 1 - luxury

Q10

You will get to see the new male and female collections brought to you by Alexander Scott. We would like to know what you think of these collections.

Coming from a family of prominent shoe makers, California based designer Alexander Scott lives and breathes luxury footwear. In his collections, he uses leather to showcase elegance in both female and male footwear. In recent years, the brand has become a household name, featuring styles that are elegant and sleek.

Taking inspiration from the casual style of loafers and sneaker wear, in the present collection Scott adds his own twist, leading to highly wearable, yet distinctive designs.

End of Block: prime 1 - luxury

Start of Block: prime 2 - comfortable

Q26 You will get to see the new male and female collections by Sole Mates. We would like to know what you think of these collections.

California based company Sole Mates' central philosophy is that a shoe should be designed for comfort. The company specializes in footwear that feels good around your feet, but still looks elegant. Sole Mates has become a household name in comfortable footwear.

Ergonomically shaped in various length and width sizes and made out of breathing materials, the shoes are designed to fit any and all feet. A cushioned sole construction that adapts to the wearer's foot ensures perfect comfort, no matter what the shape of your foot is.

End of Block: prime 2 - comfortable

Start of Block: prime 3 - sustainable

Q32 You will get to see the new male and female collections by ZeaPatos. We would like to know what you think of these collections.

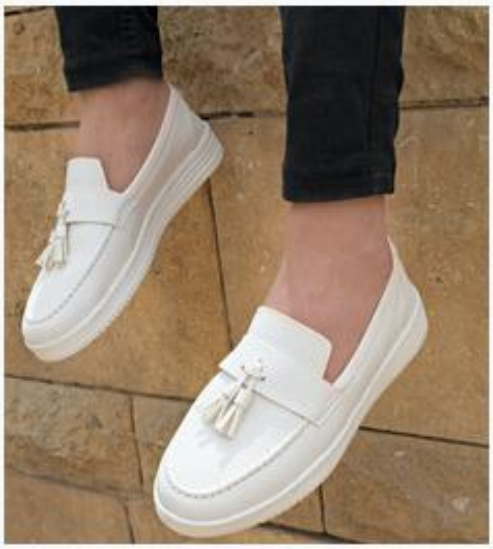
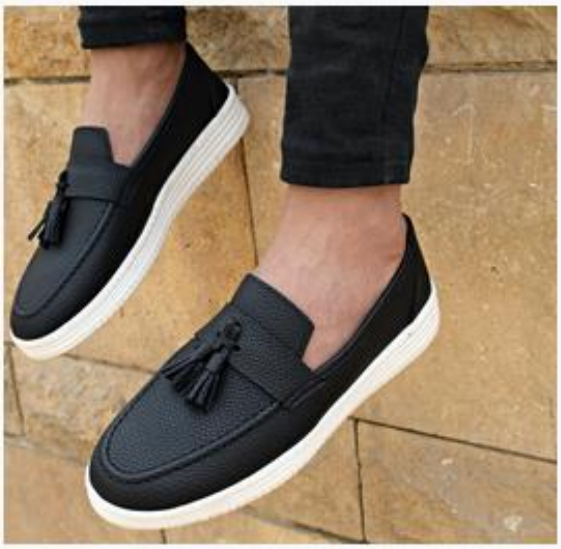
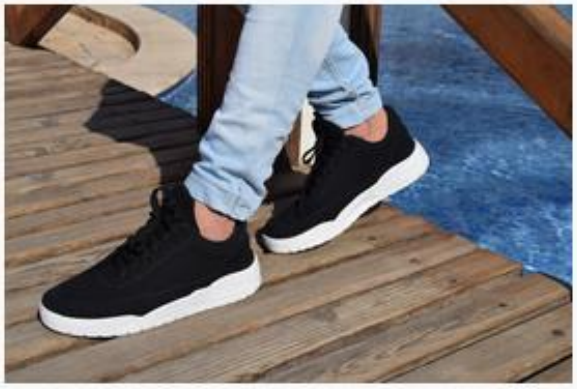
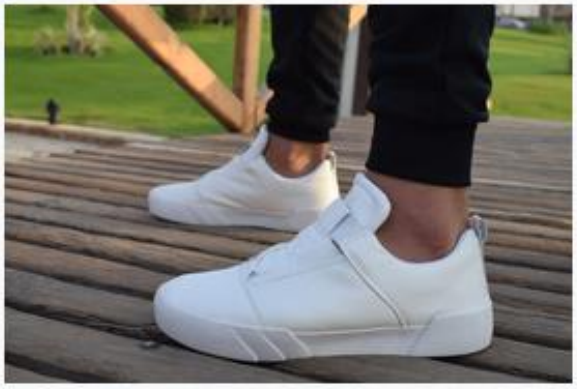
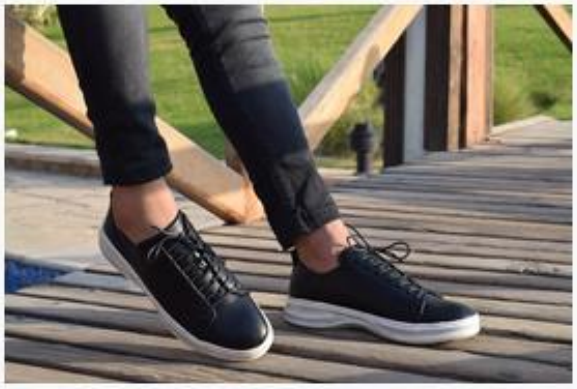
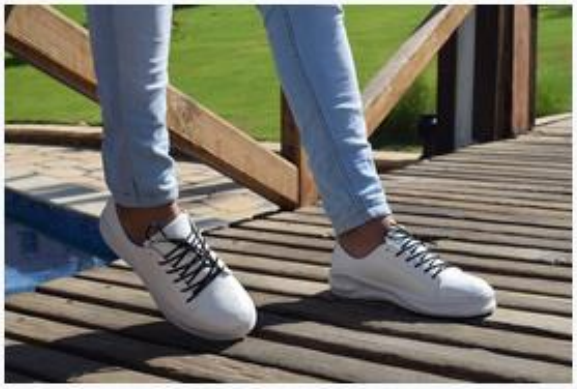
Based in California, ZeaPatos ensures that all their shoes are made from sustainable materials. As leather takes a significant toll on the environment, due to the amount of land needed for its production, ZeaPatos uses a corn waste-based lacquer as an alternative resulting in less pollution for the environment. The soles are made from specially processed recycled plastics.

The company ensures zero carbon emissions in their production and distribution processes. This collection comes in a sleek and elegant design, showcasing that there are alternatives to products that do not pollute the planet.

End of Block: prime 3 - sustainable

Start of Block: Aesthetic Criteria - male

Q25

Q28

To which extent do you agree with the following statements about the collection?

	strongly disagree (1)	disagree (2)	slightly disagree (3)	neither agree nor disagree (4)	slightly agree (5)	agree (6)	strongly agree (7)
I like these shoes (1)	○	○	○	○	○	○	○
I think these shoes are comfortable (2)	○	○	○	○	○	○	○
These shoes look weird (3)	○	○	○	○	○	○	○
These shoes look unique (4)	○	○	○	○	○	○	○
These shoes look classy (5)	○	○	○	○	○	○	○

I would wear these shoes (6)	○	○	○	○	○	○	○
These shoes look much like shoes I own (7)	○	○	○	○	○	○	○
These shoes look beautiful (8)	○	○	○	○	○	○	○
These shoes look plain (9)	○	○	○	○	○	○	○

Q39

On a scale of 0 to 10, how expensive are these shoes according to you?

0 means that you think they are very cheap and 10 means that you think they are very expensive.

- ○ Very cheap 0 (1)
- ○ 1 (2)
- ○ 2 (3)
- ○ 3 (4)
- ○ 4 (5)
- ○ 5 (6)
- ○ 6 (7)
- ○ 7 (8)
- ○ 8 (9)
- ○ 9 (10)
- ○ Very pricey 10 (11)

Q41 At a reasonable price would you consider buying any of these shoes?

- Definitely will not (1)
- Probably will not (2)
- Might or might not (3)
- Probably will (4)
- Definitely will (5)

Q40 Compared to what you spend on casual shoes on average, how much would you be willing to spend on shoes from this collection?

- **Much less** than I usually spend on casual shoes (1)
- **A little less** than I usually spend on casual shoes (2)
- **About the average amount** I usually spend on casual shoes (3)
- **A little more** than I usually spend on casual shoes (4)
- **Much more** than I usually spend on casual shoes (5)

End of Block: Aesthetic Criteria - male

Start of Block: background questions - shoes

Q44

Thank you for your input.

We will now ask you some questions about your shoe preferences and purchasing behavior.

Q7 How often do you buy shoes on average (of any type, so including dress shoes, training shoes, casual shoes, sandals, ...)?

- ○ At least weekly (1)
- ○ About every 2 weeks (2)
- ○ About monthly (3)
- ○ Once in 3 months (4)
- ○ Twice a year (5)
- ○ Once a year (6)
- ○ Once every 2 years (7)

Q58 How many pairs of shoes do you own approximately (of any type, so including dress shoes, training shoes, casual shoes, sandals, ...)?

▼ 0 (1) ... 30 or more (31)

Q36 How much do you consider that you spend on shoes?

- ○ I don't spend any money on shoes (1)
- ○ I spend very little on shoes (2)
- ○ I spend a moderate amount of money on shoes (3)
- ○ I spend quite a bit on shoes (4)
- ○ I spend a lot on shoes (5)

Q31 If you compare yourself to the average person, do you think you spend more or less on shoes on average?

- ○ Much less (1)
- ○ Moderately less (2)
- ○ Slightly less (3)
- ○ About the average amount (4)
- ○ Slightly more (5)
- ○ Moderately more (6)
- ○ Much more (7)

Page Break

Q30 How often do you buy the following types of shoes?

	Never (1)	Rarely (2)	Occasionally (3)	Frequently (4)	Very frequently (5)
Dress Shoes (1)	○	○	○	○	○
Sports Shoes / Sneakers (2)	○	○	○	○	○
High Heels (3)	○	○	○	○	○
Boots (4)	○	○	○	○	○
Flip-flops / Sandals / Slippers (5)	○	○	○	○	○
Casual shoes / loafers (6)	○	○	○	○	○

Q11 What do you spend on average on these different types of shoes? Move the slider to indicate an amount between $0 and $1,000 (if you spend more than $1,000, then also put the slider at 1,000).

	0 1000
Dress Shoes ()	
Sport Shoes / Sneakers ()	
High Heels ()	
Boots ()	
Flip-flops / Sandals / Slippers ()	
Casual shoes / Loafers ()	

Q12

To you, what are the most important qualities when considering to buy **casual shoes** in particular?

Please assess these aspects relative to one another by clicking and dragging them. 1 means that you find an aspect the most important, 5 means that it's the least important (when compared to the others aspects).

_____ Comfort (1)

_____ Look and Design (2)

_____ Price (3)

_____ Brand name (4)

_____ Quality (5)

Q14 The appearance of a shoe is an important feature when considering to buy it

- ○ Strongly agree (1)
- ○ Agree (2)
- ○ Somewhat agree (3)
- ○ Neither agree nor disagree (4)
- ○ Somewhat disagree (5)
- ○ Disagree (6)
- ○ Strongly disagree (7)

End of Block: background questions - shoes

Start of Block: background questions - general

Q42 To end, we would like to know some things about who you are. We should stress that your answers will be processed anonymously.

Q1 What is your gender?

- ○ Male (1)
- ○ Female (2)
- ○ Other, please specify (3) _____

Q2 In which year were you born?

▼ 1910 (1) ... 2002 (93)

Q33 What is the highest level of education you have completed?

- ○ No Schooling Completed (1)
- ○ Nursery School (2)
- ○ Kindergarten (3)
- ○ Grade 1 trough 11, Specify (4)

_____

- ○ 12th Grade - No Diploma (5)
- ○ Regular High School Diploma (6)
- ○ GED - alternative credential (7)
- ○ Some College Credit, less than a year of credit (8)
- ○ 1 or more years of College Credit (no degree) (9)
- ○ Associates Degree (for example AA AS) (10)
- ○ Bachelor's Degree (for example BS, BS) (11)
- ○ Master's Degree (for example MA,MS, MEng, MEd, MSW, MBA) (12)
- ○ Professional Degree beyond a Bachelor's Degree (for example MD, DDS, DVM, LLB, JD) (13)

○ Doctorate's Degree (for example PhD, EdD) (14)

Q19 Rate how important you find the following subjects and fields. Please pick a number from 1 to 7 (1 means that you do not find it important in any way, 7 means that you find it highly important).

	Not important at all 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	very important 7 (7)
technology and science (1)	○	○	○	○	○	○	○
fashion (2)	○	○	○	○	○	○	○
sports (3)	○	○	○	○	○	○	○
economics (4)	○	○	○	○	○	○	○
music and the arts (5)	○	○	○	○	○	○	○
environmental sustainability (6)	○	○	○	○	○	○	○

End of Block: background questions - general

Start of Block: Block 7

Q56

We would like to thank you for taking this questionnaire.

Do you have an idea what we are trying to find out?

_____

Q57

Do you have any comments or suggestions?

_____

End of Block: Block 7