Vegan's Practices and Motivations in Clothing Behavior

Jiwoon Jeong · Jaehoon Chun*†

Dept. of Fashion and Textiles, Seoul National University

*Dept. of Fashion and Textiles, Seoul National University/
Research Institute of Human Ecology, Seoul National University

Received April 8, 2024; Revised (August 26, 2024; September 15, 2024); Accepted September 23, 2024

Abstract

Vegans, known for their stringent ethical standards concerning animal welfare and environmental concerns, exhibit a profound commitment to ethical practices. This study delves into the multifaceted motivational factors driving the practices of vegans, while concurrently scrutinizing the distinctive clothing behaviors specific to veganism across various phases of the clothing life cycle. These behaviors encompass the domains of clothing acquisition and utilization, laundering and maintenance, as well as disposal and discard. This research reveals the pervasive integration of vegan principles throughout these stages, underscored by discernible shifts in clothing-related behaviors subsequent to individuals adopting a vegan lifestyle. The core motivations underpinning these practices are rooted in a collective aspiration to safeguard animal welfare, mitigate environmental pollution, and curtail the generation of waste. In contrast to previous research, this study concentrates its focus on discrete facets of clothing behaviors within the context of veganism, providing nuanced insights into the intricacies of vegan practices. By elucidating the intricate interplay between motivations and clothing life cycle practices within the realm of veganism, this research augments our comprehension of the underlying motivations that drive vegan lifestyles.

Key words: Veganism, Vegan fashion, Vegan lifestyle, Motivation, Clothing behavior

I. Introduction

In 2018, Vogue Australia featured Emma Watson for their March issue's cover. The distinguished actor and activist wore a design by Stella McCartney, a known vegan fashion designer. In her article, Watson discussed her views on sustainable fashion and voiced her opinion calling for more "thoughtful fashion" (Watson, 2018). Veganism has entered the public consciousness in recent years as a cultural phenomenon along with the rising awareness of climate change and the popularity of sustainable living (Cherry, 2006). Veganism can be narrowly defined as voluntarily giving up consuming animal products, as well refusing

†Corresponding author E-mail: kingkem2@snu.ac.kr to treat animals as products rather than a living being (Suddath, 2008). Vegans abstain from consuming goods that have resulted in animals being mistreated, whether via slaughter or forced labor (Radnitz et al., 2015). In broader understanding, veganism condemns and rejects all sorts of animal abuse for the benefit of human convenience, opting instead to utilize a cruelty-free lifestyle (Bastian & Loughnan, 2017; Visak, 2007).

Veganism is motivated by a variety of factors, most commonly for health benefits, animal rights, environmental benefits as well as religious beliefs (Greenebaum, 2012). Vegan diet is widely considered healthy for its exclusion of animal products (Dyett et al., 2013; Key et al., 2006; Lindbloom, 2009; Sabaté & Wien, 2010). When properly continued, vegan diet can help

treat both type 1 and type 2 diabetes (Craig, 2009; Jenkins et al., 2003). It is also harmless to pregnancy and completely able to provide sufficient nutrients (Sebastiani et al., 2019). In his book, Marcus (2000) discussed the pros and cons of eating meat with experts from a variety of fields, including cardiologists, nutritionists, population analysis specialists, as well as farm owners. He gathered data and research on the detrimental effects of eating animals on human health, the ecological environment, and the survival of animals that share our planet with humans and came to the conclusion that veganism should indeed be practiced to enhance human health and the survival of the natural environment. Additionally, he said that maintaining a plant-based diet is not just a healthy eating habit but also an ethical and practical way of life.

Vegan consumers aim to eliminate further contributions to the growth of the factory farming industry (Beck & Ladwig, 2021). Partaking in Veganism is also motivated by the goal of reducing the number of animals being born to make goods in the first place (Gruen & Jones, 2015). This has to do with vegans' aversion to farming systems that pollute the environment (Cooper, 2018). Growing crops to feed livestock, cleaning up the waste on farms, and watering the livestock all consumes a large amount of clean water (Marlow et al., 2009). Producing 113 grams of beef requires around 1,750 liters of water (Mekonnen & Hoekstra, 2012). According to the United Nations Convention on the Fight Against Desertification, only 136 kilograms of grain are eaten directly per human, including bread and cereal, with the remainder being used into feeding livestock.

Vegans condemn the maltreatment of farm animals and encourage non-vegans to sympathize with them in the same way they do with their domestic pets (Janssen et al., 2016; Katz & McPherson, 2020). The moral concerns have many times been proven to be the motivating force for not only to start a plant-based diet, but also for a long-term lifestyle shift to veganism. A survey found that simply expressing the moral questions of meat consumption to meat eaters is "sufficient to initiate behavioral changes in meat consumption"

(Berndsen & van der Pligt, 2005). Furthermore, vegetarians with strong ethical motives were more likely to become vegans (Jabs et al., 1998). The "single most important motive" for being vegan is a "moral concern for the treatment of animals" (Cole & Morgan, 2011; McDonald et al., 1999). It is also notable that motivations for practicing veganism have shown to expand and strengthen overtime. Fox and Ward (2008) studied the motivations of 18 plant-based individuals and discovered that although their plant-based diet began primarily as a means of caring for animals and to improve their own health, respondents revealed that as they continued their diet, their motivations and values started to diversify, with an increasing amount of attention being paid to environmental concerns. In a similar vein, Rozin et al. (1997) undertook an investigation into the transformative journey individuals undergo when transitioning from omnivorous diets to vegetarianism. The study revealed a diverse array of motivations among vegetarians, with some attributing their choices to health considerations, while others articulated a moral and religious underpinning for their aversion to meat consumption. The study further discerned a progressive shift in dietary preferences, where a simple initial aversion to meat evolved into a broader avoidance encompassing a spectrum of animal-derived products including fish, dairy, and eggs.

Current studies on veganism tend to be focused on food, health benefits, and animal welfare (Micheletti et al., 2016; Wright, 2021). The latest representation on veganism is characterized by cultural lifestyle and political consumerism that reflects one's ethical choices (Espinosa & Treich, 2021). Nevertheless, there is an apparent research gap in how veganism affects different areas of life other than diet, especially on what vegans wear to follow their strict lifestyle. Why this study seeks to recognize veganism lifestyle and its relation to clothing behavior, primarily relates to the possibility of understanding the motivation of vegans. Veganism, being a practice of abstaining and restricting, demands high levels of self-discipline and selfcontrol (Dean, 2014), all of which requires a continuous reinforcement of motivation that serves as an internal compass that affects an individual's actions (Francione, 2012). With this background, this study defined "vegan practices" as "the similar acts that vegans take in reflections to their values and beliefs on veganism." This study examined various clothing habits according to vegan's daily practices, such as how vegans buy clothes, what they wear, how they wash and store their clothes, and how they dispose of their clothes, in order to determine the connections between clothing behavior and veganism.

The goal of this study was to examine the elements that prompted the initial trigger for practicing veganism in the first place, as well as the numerous motives that drive vegans to sustain their lifestyle. In addition, this study aimed to fill the gap in the literature on correlation between clothing behavior and motivated behavior of veganism. From this, we generated two main research questions. What is the vegan-specific clothing behavior that appears in each stage of the clothing cycle? Which factors work as motivations for vegans' clothing behavior? This study suggests that the investigation of vegans' clothing behavior is an act of recognizing veganism as a motivating, multi-dimensional lifestyle, thus helping to broaden the understanding of veganism as a conscious way of living.

II. Literature Review

1. Vegan in Fashion

Vegan fashion has been characterized in several research. Vegan fashion regularly include textiles such as acrylic, bamboo, cotton, hemp, linen, modal, nylon, rayon, spandex; and exclude any animal materials such as angora, cashmere, suede, leather, shearling, silk, and wool (Minh & Ngan, 2021).

The term "vegan fashion" can also refer to clothing that supports environmental protection by using sustainable or recyclable materials (Jeong & Chun, 2022). However, not all vegan materials are eco-friendly. Some non-animal materials have the potential to seriously harm the ecosystem. This is demonstrated well in the manufacturing of rayon, also known as viscose.

Because it is composed of cellulose, which is a vegan material, the rising usage of this fabric — largely due to fast fashion — has a negative impact on the environment, including deforestation and the release of hazardous chemicals into the soil, air, and water (Ting & Stanger, 2021). Approximately 60% of today's clothes are plastic (Resnick, 2019). Fur is frequently fake, genuine leather and "pleather" (a combination of "plastic" and "leather") belong to the same group, and polvester is often used instead of natural silk. Although necessary, alternatives to raw materials with animal origins might provide difficulties. This is true of plastic-based alternatives used often to make vegan leather, such as polyvinyl chloride (PVC) and polyurethane (PU). They are not biodegradable and are created from oil, a non-renewable resource, which contributes to the increase of plastic in the seas. Aside from PVC and PU, other plastic-based products such synthetic leathers, polyester, polyamide, and nylon, as well as textiles derived from recycled plastic, also contribute to the issue (Slater, 2003). The operations of coating, drying, curing, bleaching, dyeing, finishing, and operating energy-guzzling machinery all contribute to the production of several harmful greenhouse gas emissions in textile mills (Meenaxi & Sudha, 2013).

The switch to synthetics is excellent for animals that have long been used as fashion props, but since these materials are frequently derived from crude oil, it may be much worse for the environment. Because synthetic textiles can be made considerably more quickly and inexpensively than natural ones, the fast fashion industry increasingly prefers them (Gupta & Gentry, 2018). A fifth of the world's wastewater is now produced as a result of the chemicals used in the production of these textiles, many of which are generated from fossil fuels (Niinimäki et al., 2020). While these materials indeed align with vegan principles, it is imperative to acknowledge that their environmental footprint over their lifecycle can engender persistent ecological harm. To attain a comprehensive understanding of the multifaceted nuances inherent to vegan fashion, it becomes indispensable to consult the definitive elucidations of vegan fashion proffered by preeminent vegan organizations.

PETA and Farm Sanctuary, despite their questionable methods at times, are undoubtedly two of the most influential pro-vegan animal rights organizations with a reputable history that have continued to work for environmental movements since its inception. On each of their official websites, both organizations are providing various information on veganism as well as guidance for vegan fashion. They each compiled a list of vegan fashion brands they deemed credible, by closely researching the brands, their designers, materials, manufacturing methods, fair-trade and labor among other aspects. Farm Sanctuary is a non-profit group that rescues and takes care of animals from factory farms and slaughterhouses. On their official website, vegan fashion is described as "clothing and accessories made without the use of animal-derived materials". They described animal-derived fabrics as animal skin and hair, then suggested vegan alternatives such as cotton, linen, hemp, as well as synthetic fabrics including polyester and rayon. In addition, they created a 'Vegan Fashion Shopping List' page, certifying a wide variety of vegan fashion products, from clothes to accessories providing links to their shopping websites. PETA described veganism as "not eating, using, purchasing, or using anything that is made of animals". They created a web page called "How to Dress Vegan" to break down facts about vegan fashion into different steps as: "what to wear", "where to buy", and "what to avoid". PETA have also created a "PETA Approved vegan" certification mark on their own accord to classify vegan apparels. The main criteria for earning a certification label for vegan fashion products is that they must not contain materials derived from dead animals or animal by-products. as well as refrain from participating in animal experimentation during the manufacturing process (Yoh, 2018).

According to the interpretations given above, vegan fashion can be simply described as the fashion that is ethical and honors all living beings. Therefore, in this study we define vegan fashion as ethical and sustainable products that are free from animal-based ma-

terials, possibly manufactured with plant-based or alternative textiles, and are also free from cruelty, which eliminates products made with unfair labor and trading. More specifically, this study's own definition of vegan fashion items is those that have been manufactured without the use of animal parts nor have affected animals during the manufacturing process, items that were made without exploiting humans or animal labor, as well as being environmentally conscious. 'Clothing items, which reflect the values of veganism' is a succinct summary of this analysis.

2. Clothing Life Cycle and Veganism Practice

This study divided the clothing life cycle into three phases: buying and wearing clothes-washing, taking care of clothes-disposing and discarding clothes. Although the production phase marks the beginning of the consumption life cycle, this research has chosen to start with the buying phase because the subject at hand is entirely related to vegans' perspective as a fashion consumer. The objective of this chapter is to establish the clothing behavioral patterns in detail. This may entail purchasing clothes, taking care of clothes, as well as various efforts to dispose of clothes. This part is crucial for examining how vegan's daily practices continue to span during the entire clothing life cycle.

Buying clothes is not only a consumption activity, but from the consumer's viewpoint, it is also the start of the clothing life cycle (Kwon & Choo, 2014). Clothing can be purchased for a variety of reasons: to satisfy needs or wants, to meet cultural expectations such as gift-exchanging, to achieve or maintain a certain social image, for emotional enjoyment, or simply to cure boredom (Lee, 1992; Tigert et al., 1976). Choosing and buying clothes is the critical step in the clothing life cycle, for it is the very first stage, as well as the prerequisite stage (Yoo & Rhee, 1998). The right choice will lead to a more productive and cost-effective clothing life cycle (Kim, 2007), while unreasonable clothing purchases, such as impulse buys, is an unethical consumer behavior that may lead to clothing waste (Cha & Kim, 2014; Han, 2009). Clothes are also

a high-involvement product since it is used almost every moment of every day, thus requiring a significant amount of decision-making prior to purchase (O'Cass, 2004). With all these factors in mind, this study examined the buying and wearing habits of vegans during the first phase of the clothing cycle. We predict a significant behavioral pattern due to clothing's high level of involvement in lifestyle.

The next phase of the clothing life cycle includes washing and taking care of clothes. This includes washing clothes according to their color and material, repairing them by sewing back fallen buttons or torn hem, and storing the clothes properly (Laitala et al., 2020). Taking good care of clothes can make the clothes last longer and is a cost-effective, environmentally sustainable behavior (Harris et al., 2016). Inadequate laundry methods have a significant detrimental impact on the environment. About 5% of a household's energy use goes into washing clothing, which also uses tons of detergent and hundreds of millions of cubic meters of water annually (Kruschwitz et al., 2014). In general, increasing the volume of detergent improves washability, but above a certain dosage limit, the washability does not greatly improve, which is both economically and environmentally burdensome, since it consumes more water and energy during rinsing (WRAP, 2012). This stage of the life cycle is likewise associated with the most significant environmental repercussions (Fletcher, 2008). Using suitable detergents and washing at lower temperatures not only prolongs the life of the clothes (Claudio, 2007), but is also an environmentally friendly behavior.

This study will look at vegans' washing and caring habits of clothes in order to better understand their approach toward veganism practices. As established by previous literature, vegans are highly motivated by animal-friendly, ethical, and environmental lifestyle. Therefore, understanding how vegans handle clothing items on a daily basis will help to see a behavioral pattern related to those motivations.

Clothing disposal is described as permanently discarding clothes when one chooses to relinquish possession of the garment, by abandoning, recycling, reusing, selling, and trading clothes (Bianchi & Birtwistle, 2012). Dispositional behavior was described as a combination of economic and altruistic behavior and can be divided into three categories: temporary disposal, permanent disposal, and recycling disposal (Harrell & McConocha, 1992). A temporary disposal method includes borrowing out, renting out or leasing the clothes, while a permanent disposal method is disposing, giving away, exchanging, or selling the clothes, along with recycling method which provides environmental benefits, effectively minimizing waste emissions, but also saving resources and energy in the process (Jacoby et al., 1977). This viewpoint in particular, which considers ethics, environmental sensitivity, and animal welfare is similar with the core values of veganism. Therefore, this study predicts a corresponding behavioral pattern to be found from vegans during the disposal phase, especially on the disposal of animal-derived clothes purchased before starting veganism.

III. Research Method

In phenomenological research, sampling should allow participants to have the same experience as the study issue and communicate their experiences well based on it. Purposive sampling is to choose a specific demographic that is knowledgeable about the research topic. 'Who can offer the most comprehensive and detailed answer to the subject?' is the most important criterion for selecting final participants (Merriam, 2009). Larsson et al. (2003) studied the motivation for practicing veganism and the conversion process to a vegan lifestyle for Swedish youth vegans. The above study conducted a preliminary survey of 30 yegans who have practiced veganism for more than 6 months and are willing to continue to practice in the future and conducted a qualitative research method of focus group interviews for 3 of them. In addition, Moreira and Acevedo (2015), who conducted a study that approached the relationship between veganism and resistance consumption in terms of values, motivation, and emotion, conducted a semi-structured questionnaire at a local vegan event in Brazil, and conducted two qualitative studies using a half-open questionnaire.

Participants for this study were drawn from active online vegan communities. We gathered participants (18 years of age or older) from all over the world who had been vegan for more than a year. By focusing on individuals who had maintained a vegan lifestyle for at least a year, we were able to select those with a deep understanding and commitment to veganism, reflected in their behaviors and insights.

The research was conducted in three distinct phases to ensure a comprehensive understanding of the participants' experiences. In the first phase, participants completed an online survey designed to assess their experiences with veganism and their perspectives on the subject. This survey, adapted from Rozin et al. (1997)'s research on vegetarians, was tailored to focus on clothing behavior instead of eating habits. <Table 1> provides the survey prompts that were adjusted accordingly. The survey used a 5-point Likert scale to gauge participants' attitudes, with higher scores indicating a stronger motivation for veganism and a more positive attitude toward its practice. (1 point =

"definitely no", 2 points = "usually no", 3 points = "I don't know", 4 points = "generally yes", 5 points = "definitely yes"). Higher total score indicates higher active motivation for veganism and positive attitude towards their practice. This step was crucial for selecting participants with the most insightful perspectives on practicing veganism, as it allowed us to identify those who scored above the mean and were thus likely to contribute significantly to the study. These participants were then invited to the next phase. <Table 2> shows the nationality characteristics and survey analysis results of final participant samples. Appropriate institutional review board (IRB) reviewed and approved the process. This works as a validation phase to select the candidates for the second phase.

The second step of the study involved conducting hour-long, in-depth interviews with a carefully selected group of participants who were identified in the first phase. To ensure that the insights gathered were rich and meaningful, we limited participation to adults aged 18 and over who had been practicing veganism for more than a year. This criterion was crucial, as it allowed us to focus on individuals who had already fully integrated veganism into their lives and could provide

Category	Survey items	Average	score	Standard deviation
pursuing an animal-protective lifestyle	Veganism reduces the suffering of animals.	4.760	4.640	.700
	Veganism saves animal lives.	4.520	4.640	
pursuing an ethical lifestyle	It is against my belief to hurt animals.	4.720		.499
	I feel responsible for protecting animals and the environment.	4.660	4.666	
	Treating animals as clothes and apparel is unethical.	4.620		
pursuing a healthy lifestyle	Wearing animal-derived clothing is bad for your skin than plant-derived clothing.	2.640	2.620	1.184
	Wearing animal-derived clothing is harmful to your skin.	2.600		
	Growing animals to make clothes is a waste of resources.	4.280		
pursuing an environmentally friendly lifestyle	Producing animal-derived clothing products is harmful to the environment.	4.640 4.533		.683
	Consumption of animal-derived clothing products is harmful to the environment.	4.680		
satisfaction of	I encourage my friends and families to try being a vegan.	3.460	2.010	1.072
a vegan lifestyle	I enjoy being a vegan.	4.360	3.910	

valuable firsthand knowledge of vegan practices. The interviews were designed to explore two primary components: the motivations behind the participants' veganism practices and their clothing behaviors throughout the different stages of a clothing item's life cycle, including buying, washing, and disposing. The interview process was semi-structured, allowing for flexibility in conversation while ensuring that key topics were covered. Each interview began with demographic questions such as age, occupation, gender, and educational background to contextualize the participants' experiences. Following this, participants were asked to share their personal experiences and motivations regarding veganism. We probed into what initially inspired them to adopt a vegan lifestyle and the reasons they continued to maintain it. This part of the interview was designed to uncover the deeper, personal values and beliefs that sustained their commitment to veganism. After discussing their motivations, the interview shifted focus to the participants' daily practices, particularly those reflected in their clothing behaviors. This included questions about their choices when purchasing clothing, their habits related to the care and maintenance of their garments, and their methods of disposing of clothing. These discussions provided insight into how their vegan beliefs influenced their decisions and actions in the context of clothing. With the consent of the participants, all interviews were recorded to ensure an accurate capture of their insights. The recordings were then transcribed, with nonverbal cues separately noted by the researcher to preserve the full context of the conversations.

The third step of the study involved an in-depth analysis of the qualitative data obtained from the interviews using the content analysis method. Content analysis is a systematic approach that involves deriving categories and themes from text through a process of reduction and inductive reasoning (Budd et al., 1967). This method was chosen because it allows for the identification of patterns and relationships within the data that are critical for answering the research questions. The initial stage of content analysis involved open coding, where the data most relevant to the research questions was identified and labeled (Hahn, 2008). This was followed by a second level of coding, where significant texts were categorized, and

Table 2. Demographic characteristics of the sample and survey analysis results

	Participants	Gender	Age	Nationality	Years of practicing veganism
1	A	M	23	South Korea	7 years
2	В	F	26	South Korea	4 years
3	С	F	26	South Korea	2 years
4	D	Non-binary	30	South Korea	5 years
5	E	F	20	South Korea	3 years
6	F	F	24	United States	2 years
7	G	F	23	United States	3 years
8	Н	F	24	United States	7 years
9	I	F	24	Australia	3 years
10	J	F	24	South Korea	3 years
11	K	M	25	United States	2 years
12	L	F	27	United States	5 years
13	M	F	25	South Korea	1 years
14	N	F	30	South Korea	2 years
15	О	F	27	South Korea	3 years

The minimum required average score is 2.5

the relationships between these categories were analyzed. The goal was to identify and group the data into meaningful categories that reflected the underlying phenomena being studied. During the category development stage, participants' motivations for practicing veganism were the first to be sorted into four primary groups: health benefits, animal protection, eco-friendly lifestyle, and ethical practices. These categories provided a framework for understanding the different reasons individuals were drawn to and maintained a vegan lifestyle.

At the thematic coding stage, the researchers focused on responses related to veganism practices at each stage of the clothing life cycle. These responses were extracted and categorized into a single dataset. Common themes within these categories were then grouped into subcategories based on similarities and differences in meanings (Gunawardena et al., 2001). This process resulted in the identification of three main categories corresponding to the three stages of clothing behavior (buying, washing, disposing), each with two subcategories representing different themes of veganism practices at each stage. In total, six subcategories were developed, providing a nuanced understanding of how vegan beliefs influence clothing-related behaviors. The final stage of the analysis involved a peer review process. This step was crucial to validate the relevance of the categories and the accuracy of the derived themes. In the data analysis phase, a rigorous peer review process was implemented to ensure the reliability and validity of the findings. Their feedback was crucial in verifying the consistency of themes and categories derived from the interviews. Peer review method ensures that the interpretations of the data were sound and that the findings were robust, contributing to the overall reliability and credibility of the study (Giorgi, 2009; Rourke & Anderson, 2004; Van Manen, 2016). This process involved multiple rounds of review, during which the reviewers critically assessed the coding and categorization to ensure coherence and relevance to the research questions. The iterative nature of this feedback strengthened the credibility of the results, ensuring that the conclusions accurately reflect the participants' lived experiences and motivations regarding their vegan practices and clothing behaviors.

IV. Results

1. Buying and Wearing Clothes

Many respondents said they often thought about the fabrics used in clothing and disputed whether certain fabrics could be considered suitable for vegans. Most of the respondents prioritized the absence of animal fabrics when looking for vegan clothing and mentioned it as their top priority, however this was not the only criterion.

"It would be nice if the clothes were also eco-friendly, but there aren't many like that, so I consider it vegan if it didn't directly use animal materials." (B, age 26, 4-year vegan)

Vegans responded that the lack of animal-derived material was just a basic requirement, and they also seek for clothes that were not created in a way that harms animals or had a detrimental impact on the environment.

"No animals involved in the production process, did the clothes use animal-derived material? or experimented on animals? If so, I don't consider them vegan." (A, age 23, 7-year vegan)

Although the degree of buying vegan fashion goods varied from vegan to vegan, the overall consensus among vegans was that valuing animal lives should always come first.

When it came to the buying and wearing stage of the clothing life cycle, respondents were quite prone to introspection, continually assessing and self-checking for both the matter of their purchase behaviors and the product itself. In terms of specific behaviors, participants had two opposing views on whether buying and wearing clothes that mimics the appearance of animal

skin-such as synthetic leather and faux fur-is an appropriate for vegans. Several were more optimistic and thought that by making high-quality vegan leather and vegan fur more widely available, thus making vegan-ism seem more approachable to non-vegans. They argued that creating more lifelike synthetic animal skin products will help veganism in the long run since they may eventually replace the market's actual animal-derived goods.

"Some people have asked me like, 'what kind of leather is that?', and I tell them, 'cause they don't realize I'm a veg an, and I tell them it's vegan leather. And they were convinced like, 'Oh, I couldn't tell'. The longer different companies work at it, the more convincing it is, and more options for vegan products there will be." (K, age 25, 2-year vegan)

On the other hand, even though the product was seemingly vegan, several respondents indicated they did not wear any clothing that resembled animal skin because they were worried about furthering the objectification of animals. They were against the act of dead animal's skin being perceived as a merchandisable object and responded that they "strongly dislike and altogether stopped buying" clothes that even look like animal skin regardless of what they are made from. Additionally, they were concerned with conveying the wrong kind of vegan message by wearing products that looked like animals.

"When I was a baby vegan, I used to have this bag made out of faux-fur, and one day someone asked me if it was gen uine fur. At that moment I felt like, honestly, I didn't know what to say. It's fake (fur), but it was embarrassing to feel like I contributed to the objectification of animals. Ever sin ce that incident I stopped buying clothes that looks like ani mal skin, even if it's vegan." (E, age 20, 3-year vegan)

The majority of respondents reported they started to buy less clothes after going vegan. Most participants claimed that they only thrift for clothes instead of buying new items. Those respondents claimed they are against the relentless manufacture of new fashion products thus avoiding further contribution.

"I don't buy new clothes. I usually go to thrift stores. There's a lot in the area that I'm in. I primarily go to thrift stores, I'll trade clothes with friends, or I make them myself." (H, age 24, 7-year vegan)

Some even expressed that personally they feel "buying new clothes is against the values of veganism" because they viewed it as "creating unnecessary waste" which harms the environment, thus the natural habitat of the animals. These respondents claimed that they consider thrifting a veganism practice.

"I usually thrift for my fashion. I think it's just overall better for the environment. It's better for human rights als o. And the amount of fashion waste on the planet is harmin g the environment with animals. I think it's all related." (F, age 24, 2-year vegan)

Participants were split on whether thrifting animal-derived clothes should be considered appropriate for vegans, although all of them agreed that it is still better than buying a brand-new item. Some stated that thrifting animal-derived clothes or wearing hand-medowns of such clothes is a valid veganism practice since it does not directly contribute to the killing of new animals. Furthermore, they considered thrifting and wearing hand-me-downs of animal-derived apparel a sustainable behavior.

"I know I personally would choose not to, just because I think there's other non-vegans that would choose to buy it, however I wouldn't judge another vegan for doing it, be cause they're not creating a demand requiring more anima ls to be killed, since it has already existed." (K, age 25, 2-ye ar vegan)

Those who opposed thrifting animal products, however, were divided into three different reasonings. Some believed that buying animal-derived clothes, regardless of the impact, is fundamentally against veganism.

"If you're vegan, you don't buy animal products. It's as simple as that. It doesn't matter if it's second-hand. Other wise, it's like you are saying it's fine to wear animal skin. You bought it second-hand because you still like it (animal-derived clothing). I don't think it's right to buy them even if it's thrifted. If you bought it second-hand, you have to ad mit that you were wrong. Or just say you are not a real vega n." (C, age 26, 2-year vegan)

Others emphasized the consequential aspect of purchasing second-hand leather and fur, claiming that the act still contributes to factory farming. They claimed that thrifting leather will end up creating a demand for second-hand animal materials, which eventually leads to the manufacturing of new animal apparel.

"My personal view is that it does influence the environ ment. Because things like real leather jackets are still in ve ry high demand and they're very expensive, so a lot of peop le go to thrift stores to buy leather jacket. So if I take that and buy that, that makes one more person who's looking for a real leather jacket, and that me and that my action did, down the road and directly, contributed to a new product being made." (H, age 24, 7-year vegan)

Finally, several vegans stated that they refrain from buying second-hand leather and fur because they found wearing and touching dead animal skin to be physically uncomfortable and emotionally disturbing.

"My parents have a couch at their house that's leather and I had them my entire life, and when I first went vegan that grossed me out so bad. Once I realized what it truly is and the process of how it got there. So I only sat on the floor, I wouldn't sit on the couch and I couldn't touch it. I just refu sed to sit on the couch because it was leather, and it was so gross." (G, age 23, 3-year vegan)

2. Washing and Taking Care of Clothes

Taking care of garments and washing them regularly allows the clothes to last longer, thus providing environmental and economic benefits. The partic-

ipants were questioned about how they maintain their clothing. Concerns regarding choosing the correct detergents were voiced by the majority of respondents.

"The detergents I use is all vegan. It's called Almacabi o, and as far as I know it's all plant-based. It washes good too." (D, age 30, 5-year vegan)

Most were using detergents with vegetable surfactants. The vast majority of respondents specifically mentioned that they have looked for detergents that weren't manufactured with animal testing. All respondents revealed they only started to care about their detergent usage after going vegan.

"I use vegan laundry detergent. It's called Dr. Bronner' s and I use that for laundry detergent. You can use it for dish es and stuff." (F, age 24, 2-year vegan)

Concerns about environmental impact on laundry were common throughout all respondents. Some respondents stated that they use detergents with organic certification labels, while others were more determined on using eco-friendly products. In addition, some respondents were highly concerned about using surfactant detergents and were using soap alternatives.

"For laundry detergent I don't really use any animal pr oducts, and I consider the environmental impact, and espe cially the marine eco-system. So I started looking for what' s the best eco-friendly way to wash my clothes, and I went out and bought a big sack of soap nuts. Which is like this berry that's grown in India, that has saponin in their skin, so when they are dried and put into hot water, they actually can be lathered up into a soap." (I, age 24, 3-year vegan)

For several respondents, even the impact of laundry on the environment was a consideration. Many claim that the impact of laundry detergent usage on the environment, as well as the durability of clothing has led to a decline in the frequency of doing laundry.

"I realized I don't have to wash my clothes after one sing

le use if it's still clean. And that goes towards more eco-con scious aspect of my life that I adopted since going vegan. Because laundry waste so much water, so if I could do less laundry as less often, why not." (K, age 25, 2-year vegan)

Another behavioral change was found in the degree of managing their clothes. Respondents found vegan clothes easier to maintain.

"I used to love Dr. Martens, so I used to buy a lot of shoe brushes and leather polishes. But now I have thrown them all away. Now it's really easy to take care of my clothes and shoes. Animal-derived clothes take a lot of work. But I don't have to care about all that now that I'm vegan, you know. I used to buy maintenance supplies for animal-derived clothing, but now it's just so much more convenient." (E, age 20, 3-year vegan)

3. Disposing and Discarding Clothes

From the consumer's perspective, getting rid of clothes is the final stage. Reasons for disposing of clothes may vary, from no longer being able to be worn, no longer needed, or simply to decrease the number of belongings. Regarding specific methods of disposal, it was clearly stated that several respondents went to great lengths to recycle and reuse their clothing rather than just throwing it away. Each and every participant stated they now aim to limit the amount of clothing waste they discard since going vegan. The majority of respondents either donated, sold, or traded garments with friends while getting rid of them. Respondents said that they would still not throw away the clothing if it couldn't be reused, but rather would upcycle it into things like washcloths, dishrags, mops, and even hair ties.

"My main method is donating it. When I dispose clothe s, I don't just throw it away either, I'll recycle it, I'll donate it, I'll find other ways to use it, like maybe I'll cut up like an old shirt and use it as a cleaning rag." (K, age 25, 2-year vegan)

A predominant theme among the participants pertained to the complex emotions associated with the act of relinquishing their clothing items. A significant portion of respondents articulated a profound sense of regret and disappointment, perceiving their actions as a squandering of valuable resources. These individuals manifested a deep-seated remorse for their perceived contribution to environmental pollution and a conviction that they had not fully maximized the utility of their garments.

"I feel like I'm just taking the lazier, easier way out. Like I haven't thought enough and I haven't researched enough to find a better place to send this, or ways to upcycle. It's not a good feeling at all." (I, age 24, 3-year vegan)

However, other respondents experienced positive emotions when discarding clothes. They confessed they were previously obsessed with shopping but experienced a shift in their relationship with clothes after going vegan, resulting in having a minimalistic approach on buying clothes. Specifically, they responded that owning more clothes have stopped making them feel happy, thus feeling liberated when discarding old clothes.

"Ifeel freer. I feel like I've got less going on. I definitely want to be a more organized, minimalist person one day. So when I donate something, I'm like, this is good work. Ge tting rid of things you don't want. It's good." (G, age 23, 3-year vegan)

Some participants said they got rid of the animal-derived clothes after they went vegan, even disposing of not only animal-derived products, but also synthetic garments that resemble animal skin as well. Some even expressed feeling emotionally distraught, revealing they felt guilty whenever they saw the clothes they used to wear.

"I slowly cleared them out. I think it took me a year to clear them out. I used to love leather skirts, or fur baguette bags, but I got rid of them after going vegan. I just felt so guilty about owning those unethical stuffs." (E, age 20, 3-y ear vegan)

However, more than half of respondents revealed they did not dispose of the animal-based garments they had previously purchased. Some also stated that they were still wearing the clothes because they are still wearable. These participants believed that throwing away a functional item would be wasteful and objected to creating extra waste by purchasing replacements. They claimed that since animals had already sacrificed their lives for the items to be manufactured, it would be better to keep using them for as long as possible.

"I didn't get rid of anything. It's basically from then on I always tried to be more conscious while shopping. It was n't like I went through and got rid of stuff. I kept it because I was like, I already have it. What do I have to gain by gettin g rid of this, or who am I helping by getting rid of this." (L, age 27, 5-year vegan)

Contradictorily, some of the participants who kept their animal-derived clothes said they kept the clothes, but still refrain from wearing them, in concern of being mistaken as a non-vegan.

4. Veganism Practices and Motivations in Clothing Behaviors

Purchasing products devoid of animal ingredients seems to have been a basic requirement for vegans' daily practices during the buying stage. Another distinct purchasing pattern was a preference for used clothing. In which, some respondents expressed interest in reducing not only the number of animals killed but also the entire industrial system of breeding animals for use as commodities, which is similar to the conclusions of prior research (Bastian & Loughnan, 2017) on motivations for practicing veganism. Some vegans also showed distaste on items that resembled animal skin out of fear of appearing a non-vegan. This behavior has been demonstrated in the avoidance of

fake leather and fur items, as well as the avoidance of second-hand animal goods. This is consistent with previous findings that vegans view their values as identities (Braunsberger & Flamm, 2019; Larsson et al., 2003; McPherson, 2018), in that they are concerned about conveying the appropriate form of vegan message.

Within the laundering phase of the clothing life cycle, the predominant practice observed among participants was the adoption of vegan-specific laundry detergents. Rather than resorting to detergents featuring animal-derived ingredients, a substantial majority of respondents opted for formulations enriched with vegetable-based surfactants. Furthermore, participants reported a noteworthy shift in their laundering habits since embracing a vegan lifestyle. This transformation encompassed a reduction in both the frequency and quantity of laundry undertaken, alongside a concomitant decrease in detergent usage. This is in line with the results of previous study which found that vegans aim to minimize pollution on a daily basis (Allen et al., 2000; Cooper, 2018). Laundry detergents come in a variety of forms, including powder, liquid, bleach, fabric softener, soap, and others. Surfactants in detergents, which are the principal cleaning ingredients, are released into sewage systems or directly into surface waterways after usage, and the majority of them end up in various environmental compartments such as soil, water, and sediment (Ivanković & Hrenović, 2010). All participants were concerned about the environmental consequences of washing clothes, but to varying degrees. Some participants claimed they simply use detergents with organic certification labels, while others stated that they were employing more radical alternative methods such as using soapberries. Some respondents stated that they always conduct additional internet research to confirm if a certain detergent product was produced without using animal testing before making a purchase. It was also shown that these habits were new lifestyle decisions that were made after becoming vegan.

Following their transition to a vegan lifestyle, a subset of respondents reported a heightened proclivity toward meticulous clothing maintenance, accompanied by an amplified inclination to perpetuate such practices. Notably, the magnitude of these behavioral shifts exhibited a positive correlation with the duration of respondents' engagement with veganism. This observed behavioral trend aligns with the longitudinal investigation conducted by Fox and Ward's (2008) study, wherein motivations for sustaining vegetarianism exhibited an expansion over time. Furthermore, these findings bear resemblance to the insights gleaned from the research conducted by Rozin et al. (1997) wherein a positive correlation was identified between the duration of adherence to veganism and the intensification of motivational factors underpinning this dietary choice.

Some respondents actively used alternate strategies like recycling, reusing, and repurposing throughout the disposal phase to minimize disposal. Vegans' views on how to dispose of previously owned clothing made from animals, however, varied. Some were eager to dispose them, admitting feelings of guilt and disgust from previously owning such products, while others preferred to keep them. The latter highlights the paradoxical element by still owning and wearing animal goods despite practicing veganism. The behavioral elements were motivated by the environmental implications of garment waste. These findings support earlier studies' discoveries about veganism not being a diet-specific behavior (Ploll & Stern, 2020), but rather an eco-friendly lifestyle that is intentionally adopted by one's decision. Vegans' hesitation to discard clothes, on the other hand, is in accordance with previous literature which found people in specific social settings which deems disposing useful objects to be irresponsible (Harrell & McConocha, 1992), tend to select more responsible disposal methods, such as donating and re-selling.

V. Conclusion

Veganism is a rapidly growing paradigm, with an increasing number of vegans across the world. The enormous increase in the demand for vegetarian and

vegan meals over the last decade emphasizes the necessity of offering these items, making them an essential element of the gourmet sector and attracting a wider segment of people who follow this lifestyle (Aleixo et al., 2021). For veganism to be recognized as a valid lifestyle rather than just a diet trend, it is critical to uncover the practices and motivations of veganism in multiple areas of life. Although there is much literature on what vegans eat-or rather do not eat-there are yet not enough studies on vegans' clothing behavior with regards to veganism practices. This research was primarily conducted in South Korea, which naturally led to the majority of participants being from this region. While this provided valuable insights into vegan practices within the specific cultural context of South Korea, it also represents a limitation. The findings of this study may not be entirely generalizable to other cultural contexts where veganism may be practiced differently. Future research could benefit from including participants from a broader range of cultural backgrounds to explore how vegan practices may vary internationally.

Regarding the gender distribution of participants, the higher number of female participants in this study is in line with global statistics, which consistently show that women are more likely to adopt a vegan lifestyle than men. This result is not indicative of any recruitment bias but rather reflects the actual demographic trends within the global vegan community (Vegan Statistics 2023, n.d.). The data collected in this study corroborates these global trends, further validating the representativeness of our sample. Nonetheless, future studies could explore potential differences in motivations and practices between male and female vegans to provide a more nuanced understanding. Also, the study predominantly involved participants from specific regions, limiting the generalizability of the findings. In particular, the inclusion of more participants with extensive vegan experience from diverse cultural backgrounds would offer a broader understanding of how vegan practices influence clothing behaviors globally. Future studies should aim to incorporate experienced vegan consumers from various

countries, allowing for comparative analyses of how cultural and social differences shape vegan clothing choices. Expanding the cultural scope of research will deepen our understanding of veganism as a global phenomenon and its intersection with sustainable fashion.

Despite these limitations, this study makes a significant contribution to the growing body of literature on veganism by examining the specific practices and motivations related to clothing behavior. It highlights the distinct ways in which vegan principles influence daily practices beyond diet, providing a comprehensive understanding of veganism as a lifestyle. For future research, it is recommended to explore the impact of veganism on other areas of life, such as self-expression through fashion and personal identity. Additionally, investigating how veganism interacts with other ethical or sustainable practices across different cultures could offer deeper insights into the global vegan movement.

This research endeavor was undertaken with the principal objective of elucidating the practices of individuals adhering to a vegan lifestyle within the context of clothing life cycles. The investigation was meticulously structured to discern and categorize distinct clothing-related behaviors exhibited by vegans across various phases of the clothing cycles: buying and wearing clothes, washing, and taking care of clothes, disposing and discarding clothes.

Despite the apparent commonality in clothing consumption patterns among the study's vegan participants, it became evident that each individual vegan espoused a nuanced and personalized conception of what constituted "vegan fashion." Within the procurement phase, a notable reduction in the frequency and aggregate volume of apparel acquisitions was observed following the adoption of a vegan lifestyle. Predominantly, respondents directed their attention toward the provenance of clothing materials and the ethical underpinnings of manufacturing procedures. Furthermore, notable disparities emerged in perspectives regarding the acquisition and utilization of pre-owned clothing items that were previously

sourced from animal-derived materials. Concurrently, participants exhibited a heightened sensitivity toward the semiotic implications of their clothing choices, expressing concern about the potential transmission of non-vegan messages through their garments. In the realm of laundering practices, participants displayed an overarching apprehension regarding the impacts of detergent compounds on both animal welfare and environmental sustainability. This apprehension extended to considerations of the collateral consequences of garment laundering on animal life and ecological systems.

In summary, this study endeavors to contribute to the comprehensive understanding of vegan lifestyles, elucidating the intricacies of clothing-related practices and the multifaceted ethical and environmental considerations therein. Consequently, it emerged as a prevalent practice among participants to actively incorporate organic products, vegetable-based detergents, and natural alternatives within their laundry routines, reflecting a pronounced commitment to sustainability and environmentally conscious laundering practices. In the context of clothing disposal, respondents predominantly exhibited a proclivity for altruistic actions, including donations, giveaways, and sales of used garments, as opposed to mere disposal via conventional waste channels. These actions were underpinned by a collective commitment to mitigate the accumulation of clothing waste within the broader societal context. However, a noteworthy discord surfaced with regard to the disposition of pre-existing animal-derived clothing items within the vegan community. This discord manifested as a dilemma concerning whether to retain or discard such garments upon embracing a vegan lifestyle. A subset of individuals chose to dispose of these items, citing feelings of shame and discomfort associated with their continued possession, while others elected to retain them, guided by a desire to minimize waste, thereby reflecting an intricate interplay of ethical and pragmatic considerations.

In general, they mostly remained a positive outlook on maintaining their practices and were constantly being inspired by the conviction that their practices are allowing them to live an ethical lifestyle. This study also identified three primary reasons for adopting vegan clothing behaviors: a desire to lessen environmental pollution, wanting to effectively reduce clothing waste, and a desire to not contribute to the suffering of animals. Furthermore, the vegan motivations have been demonstrated to impact certain habitual behaviors.

Veganism is a more demanding lifestyle than vegetarianism, thus making it more challenging to follow depending on individual circumstances. Given how frequently animals are used today for industrial purposes, veganism may be harder to uphold within the situation. Veganism may also be more challenging to maintain due to public misconceptions associated with it and subsequent unfavorable perceptions. For future studies, this article proposes examining how practicing veganism affects one's fashion style and self-expressions. This research aims to be a resource that reflects vegan's daily practices in clothing lifecycle by empathizing with the lifestyle of vegans who continue to embrace and sustain their practices despite many challenges. This research also aims to aid the vegan fashion industry's growth by providing key elements of vegan consumers' clothing behavior.

1. Acknowledgement

This work is based on the part of MA thesis of the first author.

2. Ethics and consent

This research was conducted under the approval and supervision of Seoul National University Institutional Review Board (IRB Approval No: 2004/002-006) regarding ethical issues including consent to participate.

3. Availability of data and materials

Not applicable.

4. Conflicting interests

Not applicable.

5. Funding

Not applicable.

6. Authors' contributions

JW was responsible for data collection, interview and data analysis, as well as for the manuscript. JH was involved in the overall management of the study. All authors discussed the results and contributed to the final manuscript.

7. Authors' information

Jiwoon Jeona

Dept. of Fashion and Textiles, Seoul National University, Doctor's Candidate

Jaehoon Chun

Dept. of Fashion and Textiles, Seoul National University/ Research Institute of Human Ecology, Professor

References

Aleixo, M. G., Sass, C. A., Leal, R. M., Dantas, T. M., Pagani, M. M., Pimentel, T. C., Freitas, M. Q., Cruz, A. G., Azeredo, D. R., & Esmerino, E. A. (2021). Using Twitter® as source of information for dietary market research: A study on veganism and plant-based diets. *International Journal of Food Science & Technology*, *56*(1), 61–68. https://doi.org/10.1111/jifs.14743

Allen, M. W., Wilson, M., Ng, S. H., & Dunne, M. (2000). Values and beliefs of vegetarians and omnivores. *The Journal of social psychology*, *140*(4), 405–422. https://doi.org/10.1080/00224540009600481

Bastian, B., & Loughnan, S. (2017). Resolving the meat-paradox: A motivational account of morally troublesome behavior and its maintenance. *Personality and Social Psychology Review*, 21(3), 278–299. http://dx.doi.org/10.1177/108886 8316647562

Beck, V., & Ladwig, B. (2021). Ethical consumerism: Veganism. Wiley Interdisciplinary Reviews: Climate Change, 12(1), e689. https://doi.org/10.1002/wcc.689

Berndsen, M., & van der Pligt, J. (2005). Risks of meat: The relative impact of cognitive, affective and moral concerns. *Appetite*, 44(2), 195–205. https://doi.org/10.1016/j.appet.2 004.10.003

Bianchi, C., & Birtwistle, G. (2012). Consumer clothing disposal behaviour: A comparative study. *International Journal of Consumer Studies*, *36*(3), 335–341. https://doi.org/10.11 11/j.1470-6431.2011.01011.x

Braunsberger, K., & Flamm, R. O. (2019). The case of the ethical cegan: Motivations matter when researching dietary and lifestyle choices. *Journal of Managerial Issues*, 31(3), 228–246.

Budd, R., Thorp, R., & Donohew, L. (1967). Content analysis

- of communications. The Collier-McMillan Limited.
- Cha, G., & Kim, M. (2014). A study on the effects of ethical consumption consciousness on purchase attitude of consumers: Focused on recycled apparel. *Journal of the Korean Society of Costume*, 64(5), 125–140. http://dx.doi.org/10.72 33/jksc.2014.64.5.125
- Cherry, E. (2006). Veganism as a cultural movement: A relational approach. Social Movement Studies, 5(2), 155–170. https://doi.org/10.1080/14742830600807543
- Claudio, L. (2007). Waste couture: Environmental impact of the clothing industry. *Environmental Health Perspectives*, 115(9), 448–454. https://doi.org/10.1289%2Fehp.115-a449
- Cole, M., & Morgan, K. (2011). Vegaphobia: Derogatory discourses of veganism and the reproduction of speciesism in UK national newspapers. *The British Journal of Sociology*, 62(1), 134–153.
- Cooper, L. L. (2018). A new veganism: How climate change has created more vegans. Granite: Aberdeen University Postgraduate Interdisciplinary Journal, 2(1), 16–24.
- Craig, W. J. (2009). Health effects of vegan diets. The American Journal of Clinical Nutrition, 89(5), 1627–1633.
- Dean, M. A. (2014). You are how you eat? Femininity, normalization, and veganism as an ethical practice of freedom. Societies, 4(2), 127–147.
- Dyett, P. A., Sabaté, J., Haddad, E., Rajaram, S., & Shavlik, D. (2013). Vegan lifestyle behaviors. An exploration of congruence with health-related beliefs and assessed health indices. *Appetite*, 67, 119–124.
- Espinosa, R., & Treich, N. (2021). Animal welfare: Antispeciesism, veganism and a "life worth living". Social Choice and Welfare, 56(3), 531–548.
- Fletcher, K. (2008). Sustainable fashion and textiles: Design journeys. In K. Fletcher (Ed.), Sustainable fashion and textiles: Design journeys (pp. 9175–917). Environmental Science and Technology.
- Fox, N., & Ward, K. (2008). Health, ethics and environment: A qualitative study of vegetarian motivations. *Appetite*, 50(2–3), 422–429. https://doi.org/10.1016/j.appet.2007.09.007
- Francione, G. L. (2012). Animal welfare, happy meat, and veganism as the moral baseline. In M. Kaplan (Ed.), *The* philosophy of food (pp. 169–189). University of California Press
- Giorgi, A. (2009). The descriptive phenomenological method in psychology: A modified Husserlian approach. Duquesne University Press.
- Greenebaum, J. (2012). Veganism, identity and the quest for authenticity. Food, Culture & Society, 15(1), 129–144. https://doi.org/10.2752/175174412X13190510222101
- Gruen, L., & Jones, R. C. (2015). Veganism as an aspiration. In B. Bramble, & B. Fischer (Eds.), *The moral complexities of*

- eating meat (pp. 153-171). Oxford University Press.
- Gunawardena, C. N., Carabajal, K., & Lowe, C. A. (2001). Critical analysis of models and methods used to evaluate online learning networks. American Educational Research Association.
- Gupta, S., & Gentry, J. W. (2018). Evaluating fast fashion: Examining its micro and the macro perspective. In G. M. Fletcher, & M. Tham (Eds.), *Eco-friendly and fair* (pp. 45–67). Routledge.
- Hahn, C. (2008). Doing qualitative research using your computer: A practical guide. Sage.
- Han, S. H. (2009). A study on the purchasing behavior and usage of environmentally friendly clothing and the disposal of clothing. *Journal of Korean Home Management Association* 27(3), 61–77.
- Harrell, G. D., & McConocha, D. M. (1992). Personal factors related to consumer product disposal tendencies. *Journal of Consumer Affairs*, 26(2), 397–417.
- Harris, F., Roby, H., & Dibb, S. (2016). Sustainable clothing: Challenges, barriers and interventions for encouraging more sustainable consumer behaviour. *International Journal of Consumer Studies*, 40(3), 309–318. https://doi.org/10.1111/ijcs.12257
- Ivanković, T., & Hrenović, J. (2010). Surfactants in the environment. Archives of Industrial Hygiene and Toxicology, 61(1), 95–109. https://doi.org/10.2478/10004-1254-61-20 10-1943
- Jabs, J., Devine, C. M., & Sobal, J. (1998). Model of the process of adopting vegetarian diets: Health vegetarians and ethical vegetarians. *Journal of Nutrition Education*, 30(4), 196–202. https://doi.org/10.1016/S0022-3182(98)70319-X
- Jack, T. (2013, May 30). The dirt on clothes: Why washing less is more sustainable. *The Conversation*. https://theconversat ion.com/the-dirt-on-clothes-why-washing-less-is-more-su stainable-11531
- Jacoby, J., Berning, C. K., & Dietvorst, T. F. (1977). What about disposition? *Journal of Marketing*, 41(2), 22–28. https://doi. org/10.1177/002224297704100212
- Janssen, M., Busch, C., Rödiger, M., & Hamm, U. (2016). Motives of consumers following a vegan diet and their attitudes towards animal agriculture. *Appetite*, 105, 643–651. https://doi.org/10.1016/j.appet.2016.06.039
- Jenkins, D. J., Kendall, C. W., Marchie, A., Jenkins, A. L., Augustin, L. S., Ludwig, D. S., Barnard, N. D., & Anderson, J. W. (2003). Type 2 diabetes and the vegetarian diet. *The American Journal of Clinical Nutrition*, 78(3), 610–616. https://doi.org/10.1093/ajcn/78.3.610S
- Jeong, J., & Chun, J. (2022). Sustainability practices and implications of fashion brands at the vegan fashion week. Fashion & Textile Research Journal, 24(4), 357–371. https:

- //doi.org/10.5805/SFTI.2022.24.4.357
- Katz, C., & McPherson, T. (2020). Veganism as a food ethic. In H. Meiselman (Ed.), *Handbook of eating and drinking: Interdisciplinary perspectives* (pp. 1137–1155). Springer.
- Key, T. J., Appleby, P. N., & Rosell, M. S. (2006). Health effects of vegetarian and vegan diets. *Proceedings of the Nutrition Society*, 65(1), 35–41. https://doi.org/10.1079/PNS2005481
- Kim, S. (2007). The transformation of clothing shopping orientation according to the purchase decision making process. Journal of Marketing Management Research, 12(3), 1–18.
- Kruschwitz, A., Karle, A., Schmitz, A., & Stamminger, R. (2014). Consumer laundry practices in Germany. *International Journal of Consumer Studies*, 38(3), 265–277. https://doi.org/10.1111/ijcs.12091
- Kwon, H. J., & Choo, H. J. (2014, February 13–15). The effect of boredom on clothing disposal behavior [Paper presentation]. Global Alliance of Marketing & Management Associations In 2014 Global Fashion Management Conference, London, United Kingdom.
- Laitala, K., Klepp, I. G., Kettlewell, R., & Wiedemann, S. (2020). Laundry care regimes: Do the practices of keeping clothes clean have different environmental impacts based on the fibre content? *Sustainability*, 12(18), 7537. https:// doi.org/10.3390/su12187537
- Larsson, C. L., Rönnlund, U., Johansson, G., & Dahlgren, L. (2003). Veganism as status passage: The process of becoming a vegan among youths in Sweden. *Appetite*, 41(1), 61–67.
- Lee, K. (1992). The effect of social status variables on clothing attitudes and buying behavior of Korean homemakers [Unpublished doctoral dissertation]. Yonsei University.
- Lindbloom, E. (2009). Long-term benefits of a vegetarian diet. *American Family Physician*, 79(7), 541–542.
- Marcus, E. (2000). Vegan: The new ethics of eating. Rowman & Littlefield.
- Marlow, H. J., Hayes, W. K., Soret, S., Carter, R. L., Schwab, E. R., & Sabate, J. (2009). Diet and the environment: Does what you eat matter? *The American Journal of Clinical Nutrition*, 89(5), 1699–1703. https://doi.org/10.3945/ajcn.2009.26736Z
- McDonald, B., Cervero, R. M., & Courtenay, B. C. (1999). An ecological perspective of power in transformational learning: A case study of ethical vegans. *Adult Education Quarterly*, 50(1), 5–23. https://doi.org/10.1177/074171399 22086885
- McPherson, T. (2018). The ethical basis for veganism. In T. Barnhill, M. Budolfson, & T. Doggett (Eds.), *The Oxford handbook of food ethics* (pp. 209–240). Oxford University Press.
- Meenaxi, T., & Sudha, B. (2013). Air pollution in textile in-

- dustry. Asian Journal of Environmental Science, 8(1), 64–66
- Mekonnen, M. M., & Hoekstra, A. Y. (2012). A global assessment of the water footprint of farm animal products. *E*cosystems, 15(3), 401–415.
- Merriam, S. B. (2009). Qualitative research: A guide to design and implementation. Jossey–Bass.
- Micheletti, M., & Stolle, D. (2016). Vegetarianism: A lifestyle politics. In M. Micheletti, & A. McFarland (Eds.), Creative Participation. Responsibility taking in the political worlds (pp. 127–147). Routledge
- Minh, N. T., & Ngan, H. N. (2021, September). Vegan leather: An eco-friendly material for sustainable fashion towards environmental awareness [Conference session]. AIP Conference, Ho Chi Minh City, Vietnam. https://doi.org/10.106 3/5.0066483
- Moreira, I. P. C., & Acevedo, C. R. (2015). Resistance to consumption and veganism: A study about motivations, values, and feelings. *Revista Gestão & Tecnologia*, *15*(2), 50–67. https://doi.org/10.20397/2177-6652/2015.v15i2.621
- Niinimäki, K., Peters, G., Dahlbo, H., Perry, P., Rissanen, T., & Gwilt, A. (2020). The environmental price of fast fashion. *Nature Reviews Earth & Environment*, 1(4), 189–200. https://doi.org/10.1038/s43017-020-0054-x
- O'Cass, A. (2004). Fashion clothing consumption: Antecedents and consequences of fashion clothing involvement. *European Journal of Marketing*, 38(7), 869–882. https://doi.org/10.1108/03090560410539294
- Ploll, U., & Stern, T. (2020). From diet to behaviour: Exploring environmental-and animal-conscious behaviour among Austrian vegetarians and vegans. *British Food Journal*, 122 (11), 3249–3265. https://doi.org/10.1108/BFJ-06-2019-0418
- Radnitz, C., Beezhold, B., & DiMatteo, J. (2015). Investigation of lifestyle choices of individuals following a vegan diet for health and ethical reasons. *Appetite*, *90*, 31–36. https://doi.org/10.1016/j.appet.2015.02.026
- Resnick, R. (2019, January 12). More than ever, our clothes are made of plastic. Just washing them can pollute the oceans. VOX. https://www.vox.com/the-goods/2018/9/19/1780065 4/clothes-plastic-pollution-polyester-washing-machine
- Rourke, L., & Anderson, T. (2004). Validity in quantitative content analysis. *Educational Technology Research and Development*, 52(1), 5–18. https://doi.org/10.1007/BF0250 4769
- Rozin, P., Markwith, M., & Stoess, C. (1997). Moralization and becoming a vegetarian: The transformation of preferences into values and the recruitment of disgust. *Psychological science*, 8(2), 67–73. https://doi.org/10.1111/j.1467-9280.1 997.tb00685.x
- Sabaté, J., & Wien, M. (2010). Vegetarian diets and childhood

- obesity prevention. *The American Journal of Clinical Nutrition*, *91*(5), 1525–1529. https://doi.org/10.3945/ajcn.2010. 28701F
- Sebastiani, G., Herranz Barbero, A., Borrás-Novell, C., Alsina Casanova, M., Aldecoa-Bilbao, V., Andreu-Fernández, V., Pascual Tutusaus, M., Ferrero Martínez, S., Gómez Roig, M. D., & García-Algar, O. (2019). The effects of vegetarian and vegan diet during pregnancy on the health of mothers and offspring. *Nutrients*, 11(3), 557. https://doi.org/10.3390 /nu11030557
- Slater, K. (2003). Environmental impact of textiles: Production, processes and protection. Elsevier.
- Suddath, C. (2008, October 30). A brief history of veganism. Time Magazine. https://time.com/3958070/history-of-veganism/
- Tigert, D. J., Ring, L. J., & King, C. W. (1976). Fashion involvement and buying behavior: A methodological study. Advances in Consumer Research, 3, 46–52.
- Ting, T. Z., & Stagner, J. A. (2023). Fast fashion-wearing out the planet. *International Journal of Environmental Studies*, 80(4), 856–866. https://doi.org/10.1080/00207233.2021.19 87048
- Van Manen, M. (2016). Phenomenology of practice: Meaninggiving methods in phenomenological research and writing. Routledge.
- Vegan Statistics 2023. (n.d.). Vegan Statistics 2023. Soylent.

- https://soylent.com/pages/vegan-statistics
- Visak, T. (2007). Vegan agriculture: Animal-friendly and sustainable. In W. Zollitsch, C. Winckler, S. Waiblinger, & A. Haldberger (Eds.), Sustainable food production and ethics (pp. 193–197). Wageningen Academic Publishers.
- Watson, E. (2018, February 20). Emma Watson introduces the March 2018 issue of Vogue Australia. VOGUE. https://www.vogue.com.au/fashion/news/emma-watson-introduces-the-march-2018-issue-of-vogue-australia/image-gallery/55 31be4141980e0597ead6372d08f09a
- WRAP. (2012). Valuing our clothes. The true cost of how we design, use and dispose of clothing in the UK. Working together for a world without waste. https://www.wrap.ngo/resources/report/valuing-our-clothes-true-cost-how-we-de sign-use-and-dispose-clothing-uk-2012
- Wright, L. (Ed.). (2021). The Routledge Handbook of Vegan Studies. Routledge.
- Yoh, E. (2018). Determinants of purchase intention for vegan fashion products: Application of the modified planned behavior model. *The Research Journal of the Costume Culture*, 26(2), 125–139. https://doi.org/10.29049/rjcc.2018.26.2.125
- Yoo, Y.-S., & Rhee, E.-Y. (1998). Concept and construct of problem recognition stage in consumer decision making process of apparel purchase. *Journal of the Korean Society of Clothing and Textiles*, 22(6), 760–771.