

## **The Exploration of Greenwashing in the Beauty Industry**

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### **Abstract**

The cosmetics industry consists of three prominent categories: skincare, haircare, and makeup. These classifications have gained substantial attention over the last decade for their popularity with consumers. Not only are companies growing and expanding their portfolios, but there is also a visible shift in start-ups succeeding with their grassroots visions as well. One theme that is seen in latest brands (with long-standing industry moguls following suit) is the movement towards a green model prioritizing the environmental consciousness of the brand as a primary goal. Terms such as green, clean, and natural are adjectives being used to describe existing or developing products. In response, consumers are showing a desire to buy in to products that are falling into these “green beauty” categories. While this is a positive step for greater sustainability, there is also a conflicting issue happening at the same time, a practice known as greenwashing. Greenwashing is a deceptive series of actions (or practices) that induces consumers to think they are making a productive choice based on environmental attributes that will provide them with better alternatives while contributing less environmental damage when in fact the green product claims may be false. To study the issue of greenwashing and consumer behavior in the personal care industry, over 200 individuals were surveyed about their

purchasing decisions, their knowledge of greenwashing, and preferences of personal care products. The results of this data collection highlighted themes of environmental intention, brand loyalty and recognition, and the education of greenwashing as a consumption value.

### **Keywords**

Greenwashing; Sustainability; Environment; Consumer Behavior; Cosmetics

### **Introduction**

The sustainability agenda has made its way into the personal care industry. Everyday products have become the catalyst for introducing environmental sustainability in a new way. Consumers want a tangible way to make better decisions when analyzing their consumption and a corrective response is adapting the way they purchase products. It makes sense that a consumer faces pressure to make behavioral changes to align with the green movement, but there are barriers that limit their ability to make that transition easily. However, there is a strong belief that green impact through environmentally focused behaviors matter [1]. Although the pressure is present in consumers, this also extends to companies being able to provide that sought after market to its' consumers. Yet it is also their job to decrease a consumer's green confusion in order to adequately trust the organization [2]. However, to understand how cosmetics are defined, regulated, and supported one must first look at the U.S. Food and Drug Administration (FDA) and the legislation that effect personal care products presently.

The FDA is the body of governance that oversees cosmetics. Currently, under the FDA the Federal Food, Drug, and Cosmetic Act (FD&C Act) [3] is codified into Title 21 Chapter 9 of the United States Code [4]. The FD&C Act defines cosmetics as, “articles intended to be rubbed, poured, sprinkled, or sprayed on, introduced into, or otherwise applied to the human body for cleansing, beautifying, promoting attractiveness, or altering the appearance” [3]. However, under this act, the FDA does not require the registration of cosmetics, but has the authority to remove them if they are falsely represented by one of two offenses. In the 21 U.S. Code Chapter 9 – Federal Food, Drug, and Cosmetic Act Subchapter VI Section 361 specifies that organizations selling cosmetic products are instructed to prevent the sale of adulterated cosmetics which must not contain poisonous or deleterious substances, be putrid, contaminated, injurious, or contain an unsafe color additive. Following suit in Section 361 specifies avoiding the sale of misbranded cosmetics, which must avoid false or misleading information that violates the purpose of the product. Any information included on any packaging must also be conspicuous and understood by an ordinary individual. Supporting these two sections in Code 21, the Fair Packaging and Labeling Act (FPLA) was also designed to prevent further unfair and deceptive packaging to bridge the FDA and Federal Trade Commission (FTC) [5]. The FDA and FTC coordinate efforts to combat misleading advertising. Furthermore, the FTC has a set of instructions to provide added guidance when advertising environmentally friendly products known as the “Green Guides”. The first issue was published in 1992 and has undergone three revisions with the most recent one in 2012. It is speculated that 2022 will be the year for another update. The guides explain the FTC’s current views on environmental claims and apply to any attribute of the product, package, or service that applies to marketing [6]. In order to correctly market a product, the company must have substantiation to support the claims being made. Substantiation is

defined as including competent and reliable scientific evidence consisting of tests, analyses, research, or studies that yield reputable results that are generally accepted in professional fields [6]. However, when a company makes an environmental claim, it is often through the descriptors that marketers use such as green, clean, sustainable, natural, and environmentally friendly. The difficult detail that the Green Guides leave out is defining any of these adjectives to support a single objective definition. It is therefore open to interpretation to define what an environmental term means. That raises the question of whether companies are creating intentional and truthful claims to describe their product or service.

Advertising is all about claims and is knowingly the most integral part of a product's success. Advertising paired with product performance, elicits reactions that prompt a consumer to take action to buy a product. In a leading industry like cosmetics, it is a hot place for environmental advertising. The emergence of green beauty has presented innovation for manufacturers and benefits to marketers. Since 2017, sustainable claims in personal care have increased by 238% [7]. Companies are creating distinct brand images through social responsibility because it is part of the social paradigm [8]. It is a strategy that brings attention to green psychological variables such as, 'green brand image,' 'green trust,' 'green loyalty,' 'green satisfaction,' 'green brand equity,' and 'green purchase intention' [9]. Consumers want to have more access to environmentally friendly products, and by default companies should be prepared to address those things. When they do this, they immediately differentiate themselves in the market, making what their company or brand has to offer greener than their competitors [10]. The emphasis on sustainable consumption has been a driver for environmental development and plays a vital role in the decision making of companies [11]. Companies are accommodating those demands to offer environmentally friendly alternatives [12]. The relationship between

sustainability and consumerism goes hand in hand, but few have addressed green product behavior [13].

Responsible consumption has been described through four elements: abstention: refraining from or consuming less; attitude: seeing excess consumption as negative; awareness: choosing product on their ecological qualities; and alternative: identifying substitutions to traditional consumption [14]. It is also challenging to target product consumption and the green changes without reasonable standards to support and report those changes ethically and accurately. Data shows that humans are seeking out sustainable products more often, but sustainable products lack validation, so proving that consumers are buying ‘greener’ is subjective.

The framework of this research study parallels an extensive Turkish study where 20 women were interviewed on their personal care products by understanding their thoughts and factors that created their perceptions of green claims that focused on natural and eco-friendliness. Eight themes were revealed in their findings: perceived greenwashing, perceived green image, price perceptions, environmental concern, green trust, skepticism, perceived risk, and purchase intention [15]. The primary goal of this research is to understand to what extent consumers know what greenwashing is, do they locate practices encouraging environmental language, does it influence their decision, what brands are they most likely to identify with, and if they view a need for additional regulation.

## **Methodology**

In 2019, a first questionnaire was constructed by the author to observe the purchasing behavior of college aged women. This questionnaire was titled “Health and Beauty

Questionnaire” and was executed on Instagram through purposive sampling as it allows the targeting of specific attributes of an audience and is inexpensive [16]. The objective of this first questionnaire spotlighted women attending the University of Oklahoma in Norman, Oklahoma from ages 18-23 who held membership in the Alpha Iota Chapter of Delta Gamma. This questionnaire had fourteen questions, and forty women completed it. Takeaways of receptivity, interest, and lack of current information on greenwashing and its’ effect on consumer behavior led to the creation of a more comprehensive 2020 survey.

A second Institutional Review Board (IRB)-approved survey from 2020 was created with Qualtrics software and was distributed through social media. It was designed to capture consumer behavior in the cosmetics industry and determine if environmental factors influence the way they bought products, with an emphasis on qualitative factors aimed at brands, marketing tactics, and specific environmental language.

The advantage of utilizing social media is the ability to distribute surveys quickly and to many people. The method followed the format of a study in Indonesia, which was conducted to assess dating relationships amongst young adults aged 20-25 by looking at their hashtag use (#RelationshipGoals) across different platforms by distributing their research survey through Instagram, Facebook, Twitter, and Pinterest [17]. This survey was distributed similarly by inviting participants via Facebook, Instagram, and GroupMe. Participants were self-selected and were not compensated for their time.

The survey was twenty-eight questions long and took on average fifteen minutes to complete. The first five questions were aimed at ensuring that each participant met the requirements for survey admittance: consent, gender [identity], age, state of residence, and if they partake in at least one of three cosmetic routines [hairecare, skincare, or makeup application].

The reasons an individual would have been excluded from a survey included if they did not consent to the survey, if their age was under eighteen years old, if they did not live in the United States, or if they did not engage in one or more routine (having a routine meant you have a daily/weekly occurrence using one product or multiple products within the haircare, skincare, or makeup application category).

The survey's questions were separated into five sections: Demographics, Routine, Consumer Selections, Environmental Influences, and the Greenwashing Effect. Please see the survey in the supporting materials.

The survey was first distributed on April 8, 2020, and the final survey was taken on July 3, 2020. In that three-month period, there were 204 surveys completed. Participants' ages were 18-79 years old.

## **Results**

The following results from the 204 survey responses were classified into five sections: Demographics, Routine, Consumer Selections, Environmental Influences, and Greenwashing Effect.

### *Demographics*

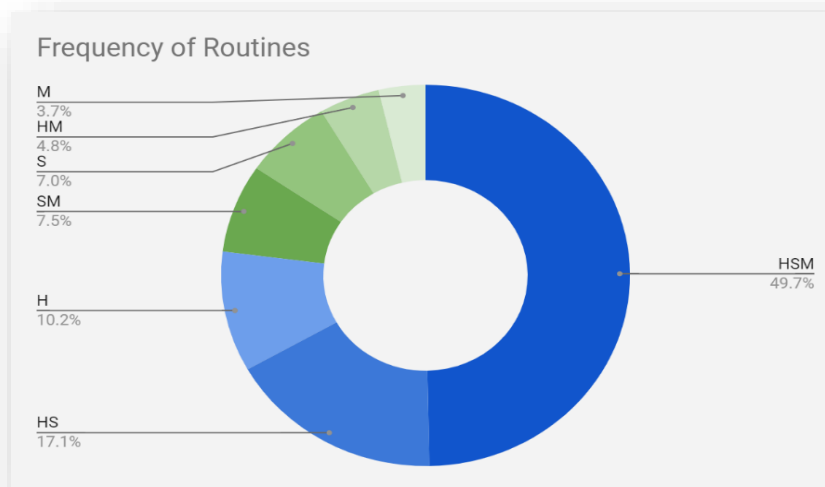
Gender identity of participants divided into 90% identifying as female and 10% identifying as male while none identified as non-binary. The range of age was represented by a minimum age of 18, the maximum 79, 21 represented both the median and mode, and the mean 32.14. The

requirement was that participants lived in one of the fifty states and the most common place of residence was Minnesota, followed by Oklahoma, Texas, California, and North Dakota.

### *Routine*

To complete the survey, the participants had to take part in at least one beauty-related routine. These routine options were haircare, skincare, and makeup application. Essentially, if a single product was used in any of the following, you would classify as having a routine. Multiple selection was allowed here. Having all three routines was the most common. The distribution of routines is shown in Fig. 1 where 50% displayed having all three and the remaining 50% had combinations of two routines, or only one routine.

Figure 1. Routine Frequency Distribution: Haircare, Skincare, and Makeup Application



(Based on 187 Responses)

### *Consumer Selections*

Questions 6-8 asked about popular brand names for each product type where participants were allowed to have unlimited selections. It is important to note that the selected brands were chosen



from multiple online blogs, magazines, and social media. Since these sources are not credited, the consensus was to choose the top 14 seen throughout these secondary sources. Fig. 2 shows each product separated into its own row to present the number of times it was selected by participants (count) and out of the total selections what percent breakdown it attributed out of 100%.

Figure 2. Product Selection and Percentages of Most Preferred Brand Name by Product Type

Haircare Brand	Count	Total %	Skincare Brand	Count	Total %	Makeup Brand	Count	Total %
Pantene	33	14.30%	Neutrogena	50	19.20%	Maybelline	62	16.70%
Biolage	25	10.80%	Cetaphil	49	18.80%	Covergirl	42	11.30%
Dove	24	10.40%	Aveeno	32	12.30%	L'Oréal	36	9.70%
Tresemme	22	9.50%	Olay	22	8.50%	Bare Minerals	34	9.10%
Redken	18	7.80%	Clean & Clear	21	8.10%	Neutrogena	34	9.10%
Head & Shoulders	17	7.40%	Clinique	20	7.70%	NYX	28	7.50%
Bed Head	15	6.50%	Mary Kay	15	5.80%	E.L.F.	25	6.70%
Not Your Mother's	14	6.06%	Rodan & Fields	15	5.80%	Clinique	24	6.50%
Herbal Essences	14	6.06%	Biore	13	5%	MAC	22	6.00%
Garnier	13	5.60%	Simple	7	2.70%	Revlon	19	5.10%
Suave	12	5.20%	Lush	6	2.30%	Lancôme	12	3.20%
Matrix	9	3.90%	Curology	5	1.92%	Estee Lauder	12	3.20%
L'Oréal	8	3.45%	Pixi	4	1.50%	Rimmel	10	2.70%
Earth Beauty & Planet	7	3.03%	Proactive	1	0.38%	Urban Decay	10	2.70%
Other*	(49)	-	Other**	(39)	-	Dior°	2	0.50%
Total (without other)	231	100%	Total (without other)	260	100%	Other***	(41)	-
						Total (without other)	372	100%
*Other* - Question 6 OGX (8) – 16.32% Aveda & Aussie (5) – 10.20% each Joico, Pureology, Moroccan Oil, & Living Proof (3) – 6.13% each Monat, Big Sexy, Renpure, Lush, Prose, & Shea Moisture (2) – 4.08% each Aqualine, Kenra, John Frieda, Loma, It's a 10, Surface, Briogio (1) - 2.04% each			°Other° - Question 7 CeraVe (8) – 20.52% The Ordinary (3) – 7.70% Soap & Glory, Burt's Bees, L'Occitane, L'Oréal, Tula, Glossier, Arbonne, Bare Minerals, Dove, & Murad (2) – 5.13% each Aveda, Origins, Differin, Grown Alchemist, Fresh, 9, Beauty Counter, & Banila Co (1) – 2.56% each			°Other° - Question 8 Tarte (10) – 24.40% Morphe, Arbonne, Glossier, Color Pop, Mary Kay (3) – 7.32% each Too Faced & Physician's Formula (2) – 4.86% each Origins, Melaleuca, Lemon Grass Spa, Lip sense, Josie Maran, Hard Candy, Kevyn Aucoin, Beauty Counter, Caudalie, All Clean Beauty, Almay, & No 7 (1) – 2.44% each		

\* | \*\* | \*\*\*Other was not included in the final percentage calculation but noted for sub list below.

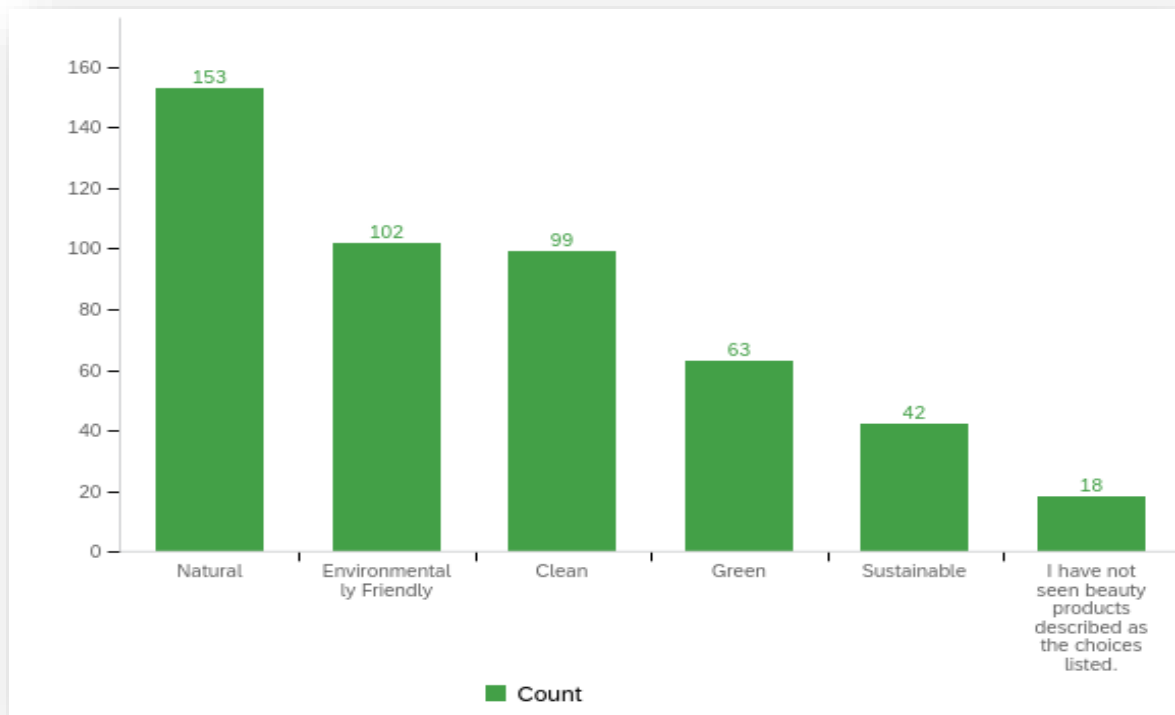
°The Makeup category included one extra unintentional option.

When asked where they were most likely to purchase their products they responded with Target (27.93%), followed by Ulta (19.72%), Walmart (15.73%), Walgreens (9.62%), CVS (7.75%), Online (10.33%), and Other (8.92%) this was based off 425 total selections. The most frequent text responses for ‘Online’ were Amazon, while Sephora for ‘Other’. When asked what specific ingredients they look for, out of 73 responses, the top three responses were Natural (14), Sulfates (12), Alcohol (8), and Parabens (8). Following with a question of ‘Why do you look for these ingredients?’ the text responses indicated their desire to get the most benefits while avoiding harsh ingredients [alcohols, fragrances, acids] and keeping an eye out for their health and safety, to avoid allergies, sensitivities, or irritation they have to certain ingredients. Furthermore, many kept in mind the environmental pluses from being more conscious, and an overall sense of curiosity to look and see what gets listed.

### *Environmental Influences*

When asked which adjectives they see advertised the most out of ‘green’, ‘clean’, ‘environmentally friendly’, ‘natural’, or ‘sustainable’, ‘natural’ had the most selections (Fig. 3). Each descriptor was detectable from at least one participant, but there were also participants who had never seen products described in this way. Additionally, the adjectives were also coded to see in what combinations were the most common, and the sequence of ‘clean’ and ‘natural’ were the most named together amongst participants (Fig. 4).

Figure 3 – Adjectives used to advertise cosmetic products most seen.



(Based on 477 Selections)

Figure 4 – Combinations of Descriptors.

Code	Count	Percent
CN	26	13.90%
CEGNS	23	12.30%
EN	23	12.30%
N	18	9.63%
I	18	9.63%
CEN	16	8.56%
CEGN	14	7.49%
GN	7	3.74%
CGN	5	2.67%
E	5	2.67%
EGNS	5	2.67%
C	4	2.15%
CENS	4	2.15%
EGN	4	1.60%

CNS	3	1.60%
ENS	3	1.60%
CE	2	1.07%
EG	2	1.07%
CEGS	1	0.53%
CGNS	1	0.53%
G	1	0.53%
NS	1	0.53%
S	1	0.53%
Total	187	100%

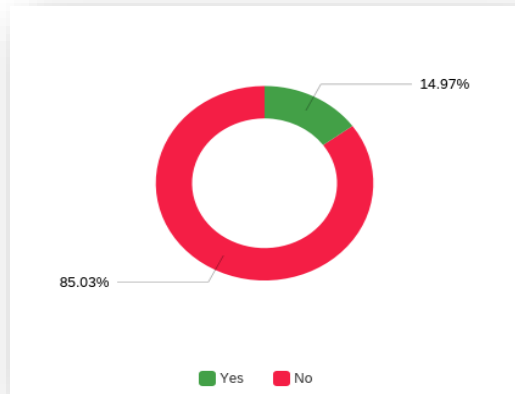
After showing if participants notice that language being used, they were asked if it influences their purchasing decision. Out of 187 responses, 52.94% indicated ‘Yes’ while 47.06% indicated ‘No’. For those that answered ‘Yes’, they were asked to explain more. These responses included a substantial explanation of supporting ethical consumerism, their interest in buying green/sustainable of top priority, wanting to do anything to help the environment, and verbiage is used to describe the product, they are more likely to buy it. For those that answered ‘No’, cost, performance, loyalty, confidence in their current product selections, and knowing the gimmick of marketing has no way of proving them to be true, kept them away from spending their dollars on products labeled as such. Additionally, participants also noted that through taking this survey, it was the first time they had been sparked to think about these issues.

When asked if participants believe they have sustainable products currently in their home, 70 participants responded to having these products in their home, 78 thought they might have something, and 40 did not think they have any. For those asked to list their products they believed to meet these qualifications, Aveeno, Bare Minerals, Arbonne, Aveda, and Love Beauty and Planet were the most recorded in this open response section.

## *Greenwashing Effect*

Participants were then asked if they knew what greenwashing was. 85% indicated they did not while 14% did. This was based on 187 responses.

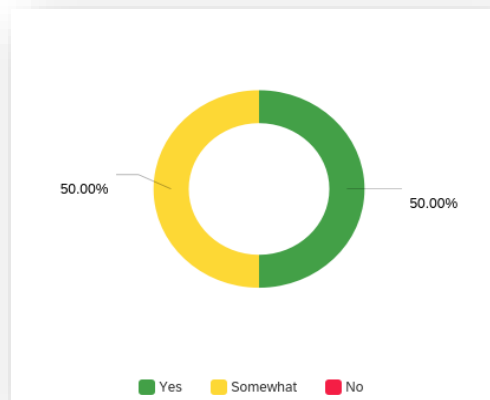
Figure 5 – Understanding of Greenwashing.



(Based on 187 Responses)

Of those who responded to 'Yes' to the previous question they were asked if greenwashing was a concern for them. 100% indicated 'Yes' or 'Somewhat' of concern for them.

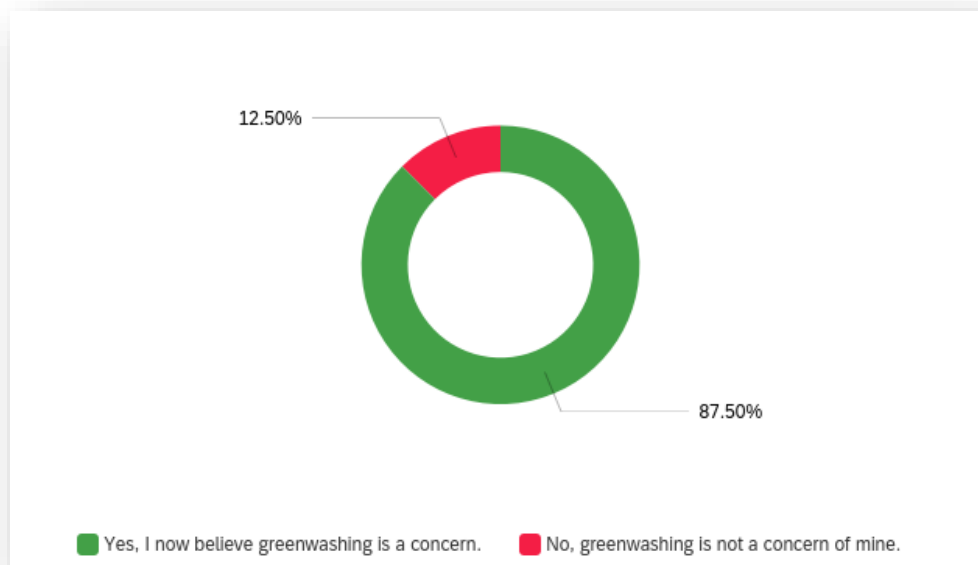
Figure 6 – Concern of Greenwashing for those who are Versed in Greenwashing.



(Based on 28 Responses)

Without moving past the participants who responded ‘No’ to the question of, “Do you know what greenwashing is?”, they were introduced to the definition of ‘greenwashing’. Greenwashing was defined as, “*A process of conveying a false impression or providing misleading information about how a company’s products are more environmentally sound. Greenwashing is considered an unsubstantiated claim to deceive customers into believing that a company’s products are environmentally friendly*” [18]. They were then asked if “After reading this definition, does it affect your level of concern about greenwashing in the beauty industry?” and 87% responded with, “Yes, I now believe greenwashing is a concern.” while 12% remained unaffected with “No, greenwashing is not a concern of mine”. This question had 160 responses.

Figure 7 – Defining ‘Greenwashing’ for Participants for participants who did not know what it was, followed with a question to ascertain their concern.

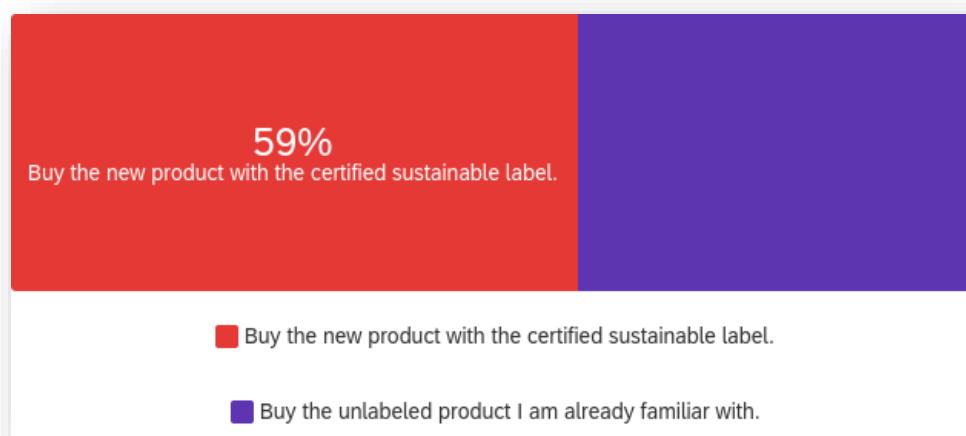


(Based on 160 Responses)

87% of 185 respondents would be in favor of labeling products based on their relative levels of sustainability; for example, implementing a graded scale of A through F (A=most sustainable; F=least sustainable) while 13% were not in favor of this.

Taking this thought a step further, they were asked if they would rather buy a product that is sustainably labeled, or if they would buy the unlabeled product, they are already familiar with. 59% would buy the new labeled product, and 41% would not.

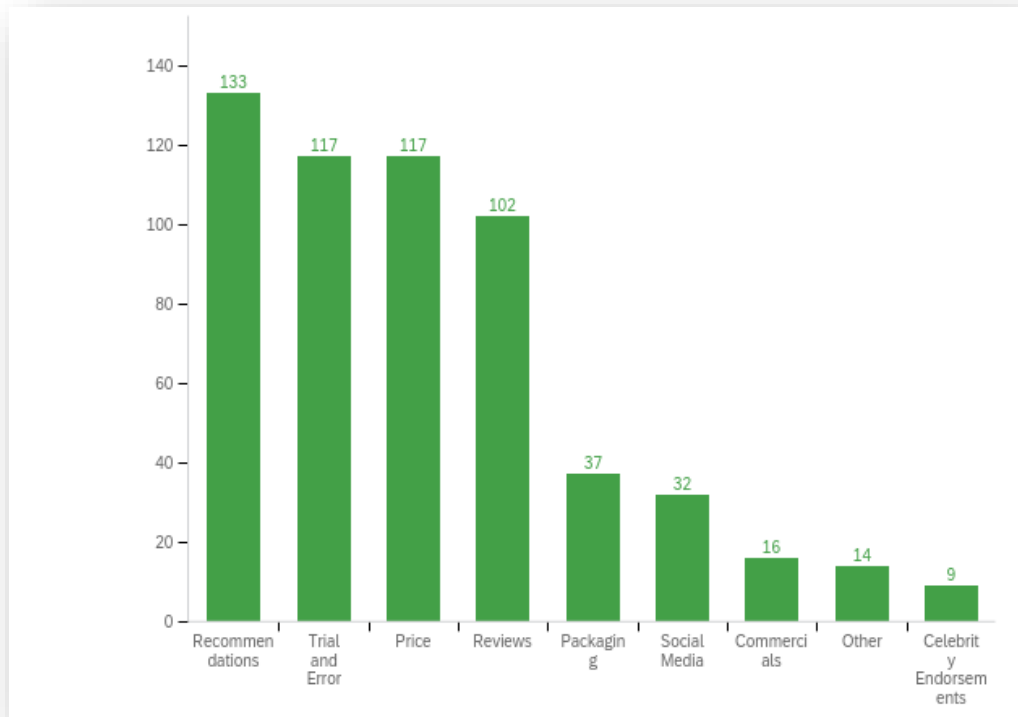
Figure 8 – Preference of Product by Label



(Based on 188 Responses)

Participants were most likely to choose their products based on recommendations closely followed by trial and error and price.

Figure 9 – How Participants decide on which products to use



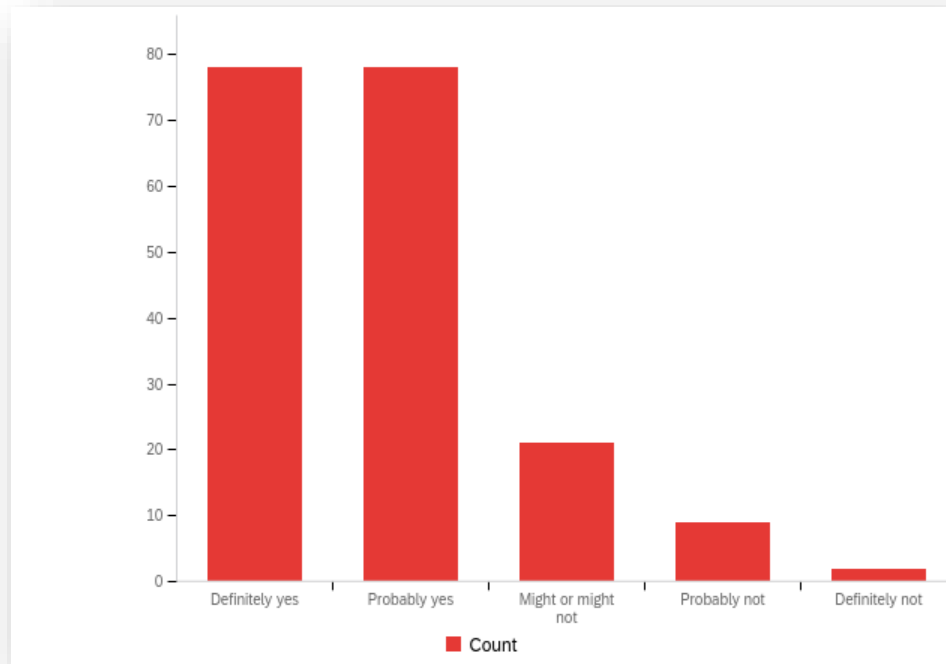
(Based on 577 Selections)

Although social media was not part of the top choices responded with, there was a question that asked how social media influences their decision to buy a product. The open response showed that the number of times the product is seen or used on social media is an indicator for leading them to take a second look at a product. Furthermore, influencers, celebrities, and close friends also impress these consumers to try those products.

The final question of the survey posed if there should be government regulation for of environmental outcomes for products in the beauty industry. 82% responded to 'Definitely Yes' or "Probably Yes.



Figure 10 – Government Regulation on Environmental Outcomes for Products



(Based on 188 Responses)

## **Discussion**

The sustainable sector of cosmetics is increasing in the beauty industry. The progression of sustainable beauty is fueled by the desire to understand what is in the product, how it contributes to their overall health and wellness, and the impact on the environment. As one knows, we are also humans that are part of the earth, and if harmonization cannot be met, sustainable growth will be difficult [19]. Cosmetic start-ups have an advantage when creating products that consider these features that consumers look for. They can make those products, while long-standing brands must modify or mold into the movement. This is more challenging because the pressure of altering a brand image can change the performance of a company. In this

research, it was found that consumers are aware of the rise in green products in the market, but their readiness to decipher messaging is underdeveloped. Consumers were driven by the value of green products, but in return lack the resources supplying them clarity of what defines “green”. While the Green Guides give general guidance to environment claims at large, they leave out cosmetic or personal care provisions. This gap leaves the responsibility to the company. The wide use of green jargon can be as comprehensive or vague as the creator defines it, this is known as the ‘Sin of Vagueness’ [20]. To avoid falling to this misdeed, companies have created unique definitions, ingredient “no-no” lists, logos denoting safe, clean, and sustainable products, “free-from” claims, and environmentally friendly formulations. These are all modes of innovation but are formed from an open landscape with few boundaries. These actions move the needle regarding environmentally responsible business model, but without consistency across parties, the harmonization is not met. A small group of these consumers were able to describe these shortcomings in the open response question when asked why environmental attributes do not influence their decision making; there’s an inability to know if the claims are truthful and substantiated. It is the FDA’s role to send out a “Warning Letter” if there is a significant violation, but with minimal existing rules in place for cosmetic environmental claims, the behavior will continue. 87% of participants agreed that rating products on their relative levels of sustainability would be beneficial while 82% believe there needs to be increased oversight from the government when products are channeling environmentalism. While third party certifications often increase trust, it is dependent on the messaging and reliance the logo has [21]. The Environmental Working Group, an activist group striving to educate consumers on the safest consumer product options currently has a system that rates products from “EWG Verified”, 1-10 (10 being the worst), but only considers ingredients as their measure of safety [22]. If the

consumer is looking to ingredients as their only concern, this route would be beneficial for their needs, but it still lacks factors such as ingredient traceability, responsible sourcing, manufacturing carbon footprint and much more.

This goes back to addressing the psychological variables such as a customer wanting to be associated with sustainable practices so that in return the consumer's needs are satisfied [9]. Consumers may have differing environmental intentions and require more evidence from a product distributor such as how transparent information can be found, if all conditions of a product must be sustainable, or simply just the packaging or claims. This is dependent on the individual intention of the consumer buying the product. Therefore, if a consumer creates a relationship with a business that sells them products, their loyalty is increased and their likelihood of buying that product repeatedly is more likely [23]. Adding in sustainable attributes, Oliver's research [23] showed 50% of consumers are going to be more willing to buy that product. It is known that these green products are often paired with a higher price tag and that was a reason that participants are more likely to stick with their familiar products. However as seen, most of the research audience was unaware of greenwashing practices in cosmetics. This conferred a limitation of this research. While participants may be familiar with green marketing, it does not mean they necessarily know what greenwashing is and if the differences were explained, survey takers may have been more familiar with greenwashing. They were aware that green language is being used, but it also highlights that distinguishing brand messaging is not a fundamental quality for all consumers. This presents the idea of sustainable prioritization that is commonly seen within businesses as they are forging triple bottom line initiatives, Environmental Social Governance (ESG) programs, or Corporate Social Responsibility (CSR)

plans. Every organization sets forth what they believe is the most important actions fit into their business strategy without delineating their ability to make profit [24].

When selecting the brand names of products that they use in their routines, all three (Haircare, Skincare, and Makeup Application) were led by front runners that have a consistent feature about them. All are owned by three of the largest parent companies in the world: Procter and Gamble, Johnson & Johnson, and L'Oréal. Operating with billions of dollars in revenue, they dominate the cosmetics industry. When participants were told to named products that they believe are sustainable in their household, they listed Aveeno (Johnson & Johnson), Bare Minerals (Orveon), Arbonne (Groupe Rocher), Aveda (Estee Lauder Companies), and Love Beauty and Planet (Unilever). Johnson & Johnson, Estee Lauder Companies, and Unilever are three of the top performing companies. Since their products are the most chosen, they have a greater opportunity to communicate clearer messaging surrounding environmental attributes. While start-ups do this well, they lack the scale of communication and brand recognition that these other companies have their foundation built upon. This is where brand loyalty and recognition emerge. While new brands excite consumers initially, consumers will opt for what performs to their liking, their price point, and if it works why would they change it.

Recommendations was chosen as the most effective way consumers choose their products. While this research was conducted prior to the peak of social media platforms like TikTok, haircare, skincare, and makeup influencer have risen to be the subject matter experts of the industry, sometimes even over credible research itself, but are from whom people learn of trends and hot products.

## **Conclusions**

The purpose of this study was to investigate greenwashing in the beauty industry and how it affects consumer behavior in both positive and negative ways. While many participants were unaware of the term ‘greenwashing’ and what it means, it was important that they were allowed to see the definition, comprehend the language, and then then re-asked if greenwashing was a concern. Because results showed they were more likely to say it was a concern for them. This shows that those consumers have the capability to adjust their subjective impressions with objective accuracy if given the opportunity. Surveys are created to assess present actions and behaviors, but researchers would learn more if they gave participants the ability to learn through the survey process and take away new explanations upon completion. Within this research, it was evident that environmental attributes influence consumers. Often, if they intend to buy a sustainably marketed product, they will opt for a label displaying environmental benefits, and will favor a graded system that evaluates holistic environmental profiles beyond sole product claims. The products they gravitate towards are more likely to be owned by large parent companies that take up a large market share in the personal care industry.

Moving forward, this research showed that participants can more critically evaluate green marketing if they have better knowledge about greenwashing, and therefore can judge whether the claims are valid. Companies should increase education to consumers through reliable information from angles such as packaging, website landing pages, social media posts, and harmonized efforts between organizations to create a dependable standard that can influence large governmental bodies like the FDA. The future of green cosmetics is opportunistic for companies, their power to reach the needs of consumers is greater than ever and the territory to

launch is wide. It is in the best interest to be proactive in the age of green cosmetics, because before you know it, it will be a priority for all and not just enthusiasts.

### **Acknowledgments**

I would like to express my heartfelt appreciation to Dr. Angela Person and Dr. Randy Peppler for supporting my research from ideation in 2019 to this present work. Without their selection of placing me in the OU Environmental Sustainability Working Group, I would have never gotten the opportunity to work on this research. Their consistent passion, belief, and pursuit for my research has sustained my progression to the point where I am at currently.

I would also like to thank my fellow researchers that were also part of the Environmental Sustainability Working Group Madeline Wade and Brooke Foster, for assisting in the survey distribution of this research.

Many thanks go to my colleagues at Revision Skincare, to my Regulatory Manager, Taylor Jensen, and Director of Regulatory and Quality Director Olufunke Bundo, for mentoring me in my first professional job and always embracing my perspectives. Furthermore, I express gratitude towards Revision Skincare supporting my registration and travel to IFSCC 2022 in London for this congress session.

### **Conflict of Interest Statement**

None.

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## **Supporting Material**

### **Green Beauty Survey 2020 Official Qualtrics Survey**

#### **Online Consent to Participate in Research**

##### **Would you like to be involved in research at the University of Oklahoma?**

I am Gabrielle Bittner from the Department of Geography and Environmental Sustainability and I invite you to participate in my research project entitled Green Breached through a social media platform. You must be beautiful. This research is being conducted at The University of Oklahoma Norman Campus. You were selected as a possible participant because you were at least 18 years of age to participate in this study.

**Please read this document and contact me to ask any questions that you may have BEFORE agreeing to take part in my research.**

**What is the purpose of this research?** The purpose of this research is to understand consumers' opinions on the beauty industry and if environmental factors influence the way they purchase products.

**How many participants will be in this research?** Approximately 200 people over the age of 18 will take part in this research.

**What will I be asked to do?** If you agree to be in this research, you will respond to a survey that will take approximately 10 minutes.

**How long will this take?** Your participation will take approximately 10 minutes.

**What are the risks and/or benefits if I participate?** There are no risks and no benefits from being in this research.

**Will I be compensated for participating?** You will not be reimbursed for your time and participation in this research.

**Who will see my information?** In research reports, there will be no information that will make it possible to identify you. Research records will be stored securely, and only approved researchers and the OU Institutional Review Board will have access to the records.

Data is collected via an online survey system that has its own privacy and security policies for keeping your information confidential. Please note no assurance can be made as to the use of the data you provide for purposes other than this research.

**What will happen to my data in the future?**

After removing all identifiers, we might share your data with other researchers or use it in future research without obtaining additional consent from you.

**Do I have to participate?** No. If you do not participate, you will not be penalized or lose benefits or services unrelated to the research. If you decide to participate, you don't have to answer any question and can stop participating at any time.

**Who do I contact with questions, concerns or complaints?** If you have questions, concerns or complaints about the research or have experienced a research-related injury, contact me at (612) 599-4661 or at [gabrielle.bittner@ou.edu](mailto:gabrielle.bittner@ou.edu) . You may reach my faculty advisors at [a@ou.edu](mailto:a@ou.edu) for Dr. Angela Person and at [rpeppler@ou.edu](mailto:rpeppler@ou.edu) for Dr. Randy Peppler.

You can also contact the University of Oklahoma – Norman Campus Institutional Review Board (OU-NC IRB) at 405-325-8110 or [irb@ou.edu](mailto:irb@ou.edu) if you have questions about your rights as a research participant, concerns, or complaints about the research and wish to talk to someone other than the researcher(s) or if you cannot reach the researcher(s).

Please print this document for your records. By providing information to the researcher(s), I am agreeing to participate in this research.

£      I agree to participate

£      I do not want to participate

**This research has been approved by the University of Oklahoma, Norman Campus IRB.**

**IRB Number: 11844**

**Approval date: \_\_\_\_\_4/8/2020\_\_**

**Q2 What is your gender?**

Male, Female, Non-Binary

**Q3 What is your age?**

**Q4 What state do you reside in?**

**Q5 Do you have a routine in one of the following?**

Haircare

Skincare

Makeup Application

None of the Above

**Q6 What haircare brands do you use? (can click multiple)**

Bed Head

Biolage

Dove

Earth Beauty & Planet

Garnier

Head and Shoulders

Herbal Essences

L'Oreal

Matrix

Not Your Mother's

Pantene

Redken

Suave

TreSemme

Other (fill in the blank)

**Q7 What skincare brands do you use? (can click multiple)**

Aveeno

Biore

Cetaphil

Clean and Clear

Clinique

Curology

Lush

Mary Kay

Neutrogena

Olay

Pixi

Proactive

Rodan and Fields

Simple

Other (fill in the blank)

**Q8 What makeup brands do you use? (can click multiple)**

bareMinerals

Clinique

Covergirl

Dior

E.L.F.

Estee Lauder

Lancome

L'Oreal

MAC

Maybelline

Neutrogena

NYX

Revlon

Rimmel

Urban Decay

Other (fill in the blank)

**Q9 Where do you purchase your products? (can click multiple)**

Target

Ulta

Walmart

Walgreens

CVS

Online; please indicate from which websites: (fill in the blank)

Other (fill in the blank)

**Q10 Are you a representative for a beauty product line?**

Yes (list which one)

No

**Q11 What led you to represent this beauty product line?**

Free Response Text

**Q12 Do you look at product ingredients before purchasing a product?**

Always

Occasionally

Never

**Q13 What ingredients do you look for?**

Free Response Text

**Q14 Why do you look for these ingredients?**

Free Response Text

**Q15 Have you ever heard beauty products described as ‘green’, ‘clean’, ‘environmentally friendly’, ‘natural’, or ‘sustainable’? If so, please mark which ones you have seen.**

Green

Clean

Environmentally Friendly

Natural

Sustainable

I have not seen beauty products described as the choices listed.

**Q16 If you are considering purchasing a product, does the fact that it is branded as green, clean, environmentally friendly, natural, or sustainable influence your purchasing decision?**

Yes

No

**Q17 How does it influence your decision?**

Free Response Text

**Q18 Why does it not influence your decision?**

Free Response Text

**Q19 Do you currently have any products that you would consider sustainable, green, or clean?**

Yes

Maybe

No

**Q20 Please list beauty products that you use that you would consider sustainable, green, or clean.**

Free Response Text

**Q21 Do you know what 'greenwashing' is?**

Yes

No

**Q22 Is greenwashing a concern for you?**

Yes

Somewhat

No

**Q23 Greenwashing is defined as followed, "A process of conveying a false impression or providing misleading information about how a company's products are more environmentally sound. Greenwashing is considered an unsubstantiated claim to deceive consumers into believing that a company's products are environmentally friendly." (Investopedia, 2020)**

**After reading this definition, does it affect your level of concern about "greenwashing" in the beauty industry?**

Yes, I now believe greenwashing is a concern.

No, greenwashing is not a concern of mine.

**Q24 Would you be in favor of labeling products based on their relative levels of sustainability for example, implementing a graded scale of A through F (A= most sustainable; F=least sustainable) that rates beauty products?**

Yes

No

**Q25 Would you rather buy a new product that is labeled as sustainable, or a similar unlabeled product that you are already familiar with?**

Buy the new product with the certified sustainable label.

Buy the unlabeled product that I am already familiar with.

**Q26 How do you decide on which products to use? (Can click multiple)**

Celebrity Endorsements

Commercials

Packaging

Price

Recommendations

Reviews

Social Media

Trial and Error

Other (fill in the blank)

**Q27 How does social media influence your decision to buy a product?**

Free Response Text

**Q28 Do you believe there is a need for government regulation of environmental outcomes for products in the beauty industry?**



Definitely yes

Probably yes

Might or Might not

Probably not

Definitely not