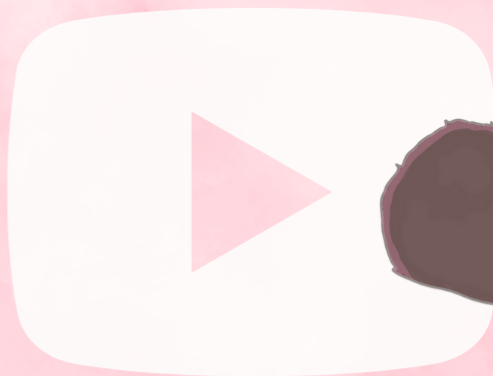




BEAUTIFULLY GREEN

Beauty Vloggers' Assessments of Sustainable
Cosmetic Products: A Qualitative Content
Analysis

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Date: 02.02.24
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Abstract

Background and Aim. As regular consumers face difficulties in assessing sustainable products, they often turn to product reviews by social media influencers, such as beauty vloggers, to make more informed purchase decisions. Beauty vloggers provide consumers with reviews of cosmetic products and are considered experts in the beauty domain. However, it is unclear how they assess product sustainability, given that their expertise is focused on cosmetic issues rather than sustainability. Therefore, this study examined the following research question: How do beauty vloggers construct their assessment of sustainable cosmetic products?

Methods. A qualitative content analysis was conducted on a sample of 37 product review videos from 32 content creators. Examining beauty vloggers' review content allows for the identification of beauty vloggers' assessments across multiple modalities, providing a comprehensive picture of their assessment construction. Using a thematic analysis, including an inductive and deductive coding approach, this study aimed to uncover the assessment criteria, strategies, and perspectives of beauty vloggers when reviewing sustainable skincare products.

Results. The study identified four main findings. First, beauty vloggers used a reductionistic approach to assessing sustainability. Second, beauty vloggers relied uncritically on brand claims when assessing sustainability, treating them as unexamined descriptors. Third, beauty vloggers primarily focused on reviewing cosmetic attributes rather than sustainable attributes. Lastly, beauty vloggers employed audio-visual strategies to assess and demonstrate packaging sustainability.

Conclusion. Beauty vloggers hold uncritical and restrictive views on sustainability. They do not behave as experts on the topic. As the sample's generalizability is limited due to the significant standard deviation of video views, future research should aim to examine different

groups of influencers, such as macro-influencers or more knowledgeable vloggers, to determine whether assessment processes differ for different groups of influencers.

Keywords: YouTube, product reviews, social media influencers, beauty vloggers, sustainability, skincare products, cosmetics.

Acknowledgements

This master's thesis is a representation of my abilities, reflecting the skills and knowledge that

I have obtained over the past years. I would like to thank my grandparents and parents for supporting me in pursuing a university education. Moreover, I would like to thank myself for always believing in me and, in moments of doubt, demonstrating perseverance and confidence to persist. Finally, I would like to express my gratitude to my support system of friends and my supervisors, especially Ruud Jacobs, for their encouragement, motivation, and input throughout this process. Their support has enabled me to submit a thesis that I am beyond proud of. Thank you!

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Introduction

In recent years, the sustainable cosmetic market has experienced rapid growth. Sustainability has become increasingly important, as growing environmental awareness has facilitated concerns with sustainable consumption choices (Bom et al., 2019). The detrimental effects of synthetic and chemical ingredients in cosmetic products (see Vale et al., 2022), as well as their association with deforestation and unfair trade (Bom et al., 2019), have resulted in increased demands for sustainable alternatives. Consequently, various brands have shifted towards incorporating sustainable product attributes, thereby extending the market for sustainable product choices. For instance, the cosmetic brand *L'Oréal* has adapted to the sustainability movement by changing its product packaging to “recyclable, reusable, and compostable plastic” (Statista, 2020, p.1).

To ease the identification of sustainability, brands often use sustainable cues to make sustainable initiatives more salient to consumers (Granato et al., 2022). Nonetheless, consumers are often confronted with unbalanced and incomplete information when purchasing products, as producers have more knowledge about their products than they share with their consumers (Brach et al., 2018). This is particularly true for sustainable products. While some brands genuinely implement their sustainability claims into their practices, others engage in greenwashing, where their green claims do not align with subsequent behaviour (de Jong et al., 2020). A study by Horne (2009) showed that consumers are often exposed to an overload of information and products, and lack access to reliable, easy-to-understand information on the environmental performance of products. As a result, identifying sustainable cosmetic products can be challenging for regular consumers.

Moreover, to assess sustainable cosmetic products, a certain expertise is required. Green cosmetics are considered credence products due to attributes that cannot be easily assessed during normal use (see Darby & Karni, 1973). Regular consumers require more information to evaluate these products, but often lack the necessary expertise to obtain

accurate insights on such items (Darby & Karni, 1973). For example, consumers might be able to easily assess the smell and price of cosmetics but need a level of expertise to confirm that products are indeed made from recycled materials.

Consumers often turn to product reviews from social media influencers (SMIs) to make better decisions when purchasing products, such as green cosmetics. Khoirotunnisa's (2023) literature review discovered that influencers play a significant role in consumers' decision to buy environmentally friendly products. Beauty product reviews often assist consumers in their decision-making process by providing them with additional information about products (Aventajado, 2023), thereby enabling them to make more informed product choices (Nurniati et al., 2023). In this way, product reviews offer consumers information beyond that provided by brands.

A beauty vlogger is a type of social media influencer (SMI) who has a certain expertise in the beauty domain (Chen & Dermawan, 2020) and creates beauty tutorials or product reviews, while providing insights on cosmetic products (Ramadanty et al., 2020). These influencers evaluate products based on their attributes, service quality, consumption processes and overall perception, including a discussion of their subjective experiences and opinions about products (Chen & Farn, 2020). They also provide product recommendations that positively influence their audience's decisions to purchase these items (Tobon & García-Madariaga, 2021). Thus, beauty vloggers are regarded as experts on cosmetic issues, and their reviews provide consumers with a means of assessing beauty products, such as green cosmetics.

However, it is unclear how beauty vloggers assess the sustainability of cosmetic products, given that their expertise is mainly centred on beauty topics. As mentioned before, green cosmetic products are considered credence goods and require expertise to assess (see Brach et al., 2018; Darby & Karni, 1973). Understanding how beauty vloggers assess green cosmetics gains added importance as these influencers have a significant impact on

consumers (Khoirotunnisa, 2023), advising them on their purchasing decisions, not only on cosmetic issues but also, in the case of green cosmetics, on sustainability issues. There are environmental and social consequences to guiding consumers in their choice of sustainable products. While recommending a product that is truly sustainable has a positive environmental and social impact, recommending unsustainable products is detrimental to the environment and people, as consumers are encouraged to buy harmful items. It is therefore important to understand how beauty vloggers assess sustainable cosmetic products, as their recommendations have a significant impact on consumers' sustainable consumption and therefore also on the environment and society.

Literature reviews conducted by Lima and Brandão (2022) and Kanaveedu and Kalapurackal (2022) highlighted that previous studies have largely focused on the characteristics of SMIs and their impact on consumer behaviour. Similarly, studies on SMIs and sustainable product consumption have concentrated on the impact of influencers on decision-making processes of consumers (see Khoirotunnisa, 2023). Only a qualitative case study conducted by Zhang and Lee (2023) has recognised the significance of beauty vloggers' product review processes. Their study examined strategies employed by the British beauty vlogger *Zoe Sugg* to enhance viewer engagement. Nevertheless, these studies failed to consider beauty vloggers' assessment strategies, particularly in relation to sustainability, thereby disregarding its importance in consumers' purchasing decisions. Therefore, it is essential to investigate how beauty vloggers construct their reviews of sustainable cosmetic products in order to capture their perspective on product sustainability.

In the present study, a content analysis was conducted to examine the content of beauty vloggers' product reviews rather than interviewing them. This captures vloggers' product narratives, including the perspectives, arguments, and strategies they use to assess sustainable cosmetic products in their review videos. Hence, this study offers a new perspective on influencer marketing by recognising beauty vloggers' product reviews,

including their assessment strategies, as an influential factor in the customer journey towards sustainable cosmetics consumption. Therefore, this study examined the following research question: *How do beauty vloggers construct their assessments of sustainable cosmetic products?*

Theoretical Framework

This chapter presents the theoretical underpinnings of the study of beauty vloggers' assessment of sustainable skincare products. First, the sustainability will be described in relation to products, brands, and marketing, illustrating its complex nature. This is followed by a discussion of the unique positioning of social media influencers between brands and consumers, and beauty vloggers. Lastly, several sub-questions will be formulated to understand the potential factors that impact beauty vloggers' assessment processes, drawing on the Theory of Planned Behaviour and the Expectancy Disconfirmation Theory.

Sustainable Cosmetics, Brands and Marketing

People have developed an environmental consciousness, resulting in an increased awareness regarding sustainability (Ottman, 2017). Given this shift, many consumers altered their sustainable consumption practices, for example, by increasingly purchasing sustainable products, such as green personal care products (Ottman, 2017). The United Nations Brundtland Commission defined sustainability as "meeting the needs of the present without compromising the ability of future generations to meet their own needs." (United Nations, 1978, p. 41). This simplified definition represents an interconnected and multi-dimensional construct, comprised of three main pillars, namely environmental accountability, social solidarity, and economic effectiveness (Purvis et al., 2019). Sustainability is a key consideration in the design phase of sustainable cosmetic products, affecting all stages of the product lifecycle. This can be achieved by making sustainable choices in sourcing, manufacturing, and disposal processes. For example, traditional ingredients can be replaced with sustainable alternatives,

manufacturing processes can be designed to reduce water, and post-consumption initiatives can include recycling, reusing, or refilling packaging (Martins & Marto, 2023).

Realising sustainability in products is not a unidirectional practice. The social, economic, and regulatory landscape allows for considerable variability in sustainable practices and performance among companies (Howard-Grenville, 2005). Brands' sustainable activities can vary from changes to the products, the manufacturing process, the packaging, as well as advertisement (Shil, 2012). Besides that, brands can differ in the extent to which they embed sustainability in their practices (Howard-Grenville, 2005). While some companies aim to integrate sustainable practices holistically, making all processes more sustainable, others might choose to implement sustainability by producing green alternatives alongside their regular products. Howard-Grenville (2005) states that there are considerable differences in sustainable performance even within a single company. While some company divisions demonstrate excellent sustainable performance, others still operate at deficient levels. Therefore, brands can significantly vary in their degree of sustainability, as there is no universal standard of what constitutes it.

Besides that, brands have different motivations for incorporating sustainability into products. Some brands have voluntarily adopted sustainable practices. For example, individual values and beliefs inspire management styles, thereby shaping brands' sustainability from the inside out (Howard-Grenville, 2005). In contrast, other brands have incorporated sustainable practices in response to external pressures, such as governmental regulations, consumer demands, or competitive pressure (Howard-Grenville, 2005; Shil, 2012). For instance, several large corporations, such as Coca-Cola and Wal-Mart, have faced criticism from activist groups such as Greenpeace for their inadequate sustainability efforts (Ottman, 2017). Therefore, brands have different motivations for implementing sustainable initiatives. Some are driven by internal goals, while others respond to external incentives.

Brands use green marketing initiatives to communicate their sustainable practices to consumers. Green marketing can be described as strategies related to the promotion of products and/or services based on their sustainable contribution (Reddy et al., 2023). Marketers utilise various forms of communication to convey information about sustainability to consumers. For example, they communicate environmentally friendly messages through text-based references, thereby demonstrating their sustainable activities in a written format. Next to this, nonverbal instruments elicit implicit association with eco-friendliness by incorporating green cues, thereby operating as associative claims. Products depict graphical representations of natural sceneries (Grebmer & Diefenbach, 2020), or make use of colour choices to influence consumers' consumption behaviour. For instance, Starbucks makes use of a green logo to signal its sustainable tendencies to consumers (Lim et al, 2020). Consequently, brands use various marketing- and product elements to communicate sustainable contributions to consumers, thereby making them more salient.

However, these marketing elements do not always capture the products actual sustainable performance. TerraChoice (2010) identified various types of greenwashing, where brands mislead consumers with their sustainability claims. Brands might use ambiguous claims that are easily misunderstood, or irrelevant claims that create the impression as if sustainability has been implemented but are in fact unimportant in practice. For instance, the claim "all natural" does not necessarily imply that a product has an environmental contribution (TerraChoice, 2010). Further, such claims might not be able to account for the variations and intentions that brands have had in realising sustainability, as described above.

Nevertheless, as brands often have more knowledge about their products than consumers do (Brach et al., 2018) and as a certain expertise is required to assess sustainable product attributes (Darby & Karni, 1973), consumers often have to rely on brands' sustainability claims. So far, only the European Union has taken measures against misleading advertisements by prohibiting brands from using generic environmental claims without proof

of recognised excellent environmental performance (European Parliament, 2024). However, while the law addresses the issue of greenwashing, it does not consider the significant variability that brands demonstrate. As noted above, brands can take different pathways to achieve sustainability, with considerable differences in intentions and demonstrated levels of sustainability. While companies use communication tools to highlight their sustainable initiatives, these are often insufficient to communicate the nuances of their sustainable performance. Hence, identifying products' actual degree of sustainability is a difficult process due to its complexity.

Social Media, Influencers and Marketing

Nowadays, social media are an integral part of individuals' everyday lives, making it an effective tool to reach a variety of people. The term social media describes "all web-based technologies [...] that enable people to connect, share, communicate and co-create content online" (Pedersen et al., 2014, p.114). Social media applications like Facebook, Instagram, Twitter, and YouTube are widely used virtual platforms. YouTube, for instance, is the world's biggest online video platform (Ceci, 2023), accounting for approximately 75 billion visits per month worldwide (Bianchi, 2023). Such platforms allow users to communicate regardless of time and location (Pedersen et al., 2014), thereby reaching larger audiences as opposed to conventional media tools (Dwivedi et al., 2015).

The interactive way of communicating has revolutionized the role of the consumer. Rather than being passive recipients of marketing messages, consumers take on an active role in initiating discourses with companies and users (Pentina & Koh, 2012). In the form of user-generated content, users can create and distribute reviews and recommendations by providing information about products and services (Sulthana & Vasantha, 2019). In doing so, users' knowledge and experiences are made available to the public, thereby transforming from personal knowledge into collective knowledge (Razmerita et al., 2009). This dynamic

exchange of information has resulted in consumers exerting control over marketing communications by distributing viral messages about products (Pentina & Koh, 2012).

Moreover, it has allowed consumers to actively impact and manage the decision processes of the masses (Vrontis et al., 2021). As a result, traditional consumer-brand relationships have changed as individuals do not solely function as consumers, but also as mediators of brand messages.

Some regular consumers have developed into social media influencers. Due to the scalability and rapid dissemination of social media, some regular users have built a significant following and are now seen as a source of advice for their followers (Vrontis et al., 2021). Hence, they have developed into impactful individuals who exert power on social media (Chang et al., 2020), also known as social media influencers. Social media influencers can be described as “independent third-party endorser[s] who shape audience attitudes through blogs, tweets, and the use of other media channels” (Freberg et al., 2011, p. 90). Using social media channels, influencers create content on various topics related to fitness, fashion, books, and beauty (Nandagiri & Philip, 2018). For example, beauty vloggers have focused on reviewing beauty products in the form of video blogs (i.e., vlogs), sharing their opinions, user experiences and product information with consumers (Chen & Dermawan, 2020).

Social media influencers are opinion leaders, who pass on their messages to consumers. Due to their social prestige, superior status, as well as their appeal or expertise, social media influencers act as opinion leaders, having a strong impact on consumers' attitudes and behaviours (Rybczewska et al., 2020; Vrontis et al., 2021). As consumers seek risk-mitigating strategies in their decision-making, opinion leaders act as risk-reducing agents by providing reviews and recommendations (Tobon & García-Madariaga, 2021). Nunes et al. (2018) found out that consumers accept (persuasive) messages conveyed by opinion leaders on social media due to considering them as a reliable and useful source of information. Supporting that, a study concluded that 50% of millennials worldwide perceived influencer

recommendations as more appealing than regular advertising, while 36% trusted influencer recommendations more than traditional advertising (Dencheva, 2023). Consequently, social media influencers can be considered as impactful intermediaries, guiding consumers in their decision-making processes beyond regular marketing initiatives.

SMIs' influential position on social media has resulted in becoming intermediaries between brands and regular consumers. Drawing on the *Two-Step Flow of Communication Model* by Katz and Lazarsfeld (1955), most people form opinions based on the influence of opinion leaders. In addition to the actual content provided by mass media, opinion leaders pass on their understanding of the information provided to their followers. Consequently, messages are mediated by opinion leaders, flowing from mass media to opinion leaders to the public (Katz & Lazarsfeld, 1964). Applying this to the present context, consumers are not only influenced by green marketing messages of the mass media (e.g., advertisement and/or marketing) but also by opinion leaders. Here, consumers' responses to marketing messages are impacted by SMIs, passing on their subjective interpretation and understanding of brands' green marketing messages to consumers. A literature review by Khoirotunnisa (2023) concluded that social media influencers yield a significant influence over consumers' intention to purchase green products. Ultimately, SMIs hold substantial agency over marketing messages, acting as a powerful bridge between marketers and consumers (Chang et al., 2020), shaping and co-creating brands' green marketing messages based on their subjective assessments of products.

As a result, the position of SMIs as opinion leaders has created an intermediary between brands and consumers due to their ability to modify marketing messages, thereby shaping consumer responses to products. Consequently, SMIs' subjective understanding of marketing messages and products has a significant impact on consumers' decision-making processes. Examining SMIs' understanding of sustainable cosmetic products is therefore crucial, as it is an intermediate step in understanding the customer's journey towards green

product consumption. Therefore, the present study investigates social media influencers' assessment of sustainable cosmetic products, focusing on beauty vloggers.

Beauty Vloggers

A beauty vlogger (BV) is a type of social media influencer who focuses on creating and uploading video content about beauty products. BVs have a certain expertise in the beauty domain and proactively seek information on various products while sharing opinions, user experiences and product information, such as price and ingredients, with other consumers (Chen & Dermawan, 2020). In the form of YouTube videos, they “provide demonstrations, recommendations, reviews, or a combination of the three on various types of products, such as cosmetics, hair care products, nail products, skin care products, and perfume” (Chen & Dermawan, 2020, p. 102). Various BVs have an increased level of influence. This level of influence is determined by BVs' wide follower- or fanbase (Sharma & Khanchandani, 2021), resulting in an increased influence on consumers' purchase intention (Chen & Dermawan, 2020). As a result, BVs are an important source for consumers, aiding them in their decision-making process through the provision of product reviews.

Beauty vloggers engage in a process of creating video content, involving prior preparations, adjustments, and rework (Stein et al., 2020). As opposed to amateur vloggers, who often create videos in an improvised and non-edited manner, professional vloggers often edit their content based on pre-written scripts. For example, vloggers edit their material ex-post by inserting jump cuts or stock footage (Stein et al., 2020). In doing so, beauty vloggers organise and structure their video content, aiming at managing their overall self-impression, while reviewing products for their viewership (Olsson, 2019). This results in staged content (del Rio Carral et al., 2022), in which BVs intend to be a “voice of reason”, focusing on presenting themselves as logical and compelling individuals (Olsson, 2019). Hence, BVs create highly prepared and edited narratives to present a coherent story (Stein et al., 2020).

Literature partly describes BVs as regular consumers who unbiasedly evaluate products. Thus, it is implied that they are not affiliated with certain brands (Chen & Dermawan, 2020), and provide end-consumers with honest feedback on cosmetic products (Ramadanty et al., 2020). However, while some videos might include voluntary endorsements, others are controlled by companies promoting brands' messages in exchange for monetary rewards (Sharma & Khanchandani, 2021). De Veirman and Hudders (2019) discovered that consumers were more sceptical of influencers when they disclosed their sponsorships, indicating that they had a persuasive motive for their endorsements. Compared to no sponsorship disclosure, disclosing sponsorships led to consumers recognising influencers' content as an advertisement, thereby perceiving them as less credible (De Veriman & Hudders, 2019). Thus, BVs might be either sponsored or unsponsored, compromising their autonomy in creating and shaping narratives about products. This does not go unnoticed by consumers, who view influencers who disclose sponsorships as less credible than creators whose videos do not include sponsorship disclosures.

Theory of Planned Behaviour

BVs' decisions regarding a product can be explained by the Theory of Planned Behaviour (TPB). The TPB is a theory predicting intention towards performing a certain behaviour based on three distinct components: attitudes, perceived behaviour control, and subjective norms (Ajzen, 1991). A previous study by Kim and Chung (2019) confirmed that TPB significantly predicts the purchase intention for organic cosmetic products. Thus, in the following TPB will be used to identify attitudes, perceived behavioural control and social norms that might be of importance to BVs' assessment of sustainable cosmetic products.

As research on the TPB in relation to social media influencers and sustainable products is limited, this section primarily draws on consumer research. The TPB intends to capture cognitive processes and states, affecting subsequent behaviour. BVs' content is often

staged as they position it into a logical compelling narrative (del Rio Carral et al., 2022; Olsson, 2019). This might make it difficult to capture BVs' attitudes, perceived behavioural control and subjective norm. Yet, although reviews are often in a format where internal processes are difficult to capture, it might be that BVs' strategically instrumentalize their own attitudes, subjective norms, and perceived behavioural control in their assessment processes.

Attitudes

The decisions BVs make are based on their attitude impacting their behaviour intention towards sustainable products. Attitude describes the extent to which a person has a favourable or unfavourable assessment towards a certain behaviour (Ajzen, 1991). A study by Kim and Chung (2011) found that consumers who are conscious about their appearance have positive attitudes towards buying organic cosmetic products, resulting in intending to purchase such products. Through the consumption of cosmetic products, consumers achieve a certain satisfaction of appearance-related needs including beauty and care (Todd, 2004). Here, chemical-free cosmetic products are of interest to consumers who aim to enhance their appearance and maintain their youthfulness (Tirone, 2007, as cited in Kim & Chung, 2011). Besides that, organic products are perceived as healthier than their conventional counterparts due to their absence of pesticides and chemicals (Wier et al., 2008). Therefore, green cosmetic products seem to be important to consumers valuing appearance due to health and appearance-enhancing benefits.

Appearance is an inevitable part of beauty vloggers' activities due to their focus on creating beauty content. Beauty vloggers are opinion leaders in the beauty domain (Rybackowska et al., 2020), functioning as a source of advice on appearance-related topics for their followers. A qualitative study by Ding et al., (2019) found that vloggers' appearance is crucial to build trust with their audience, facilitating vloggers' persuasive influence. This is supported by Ramadanty et al., (2020), emphasising the importance of source attractiveness in

accepting vloggers' persuasive messages, such as recommendations and opinions about products. Hence, being attractive or enhancing their appearance is necessary for BVs to become a trustworthy source of advice. As a result, BVs might focus especially on appearance-related arguments when evaluating green cosmetic products due to the importance of appearance and attractiveness. Consequently, the following sub-question was formulated:

Sub-question₁: How do beauty vloggers use arguments regarding appearance and attractiveness when assessing sustainable cosmetic products?

Besides appearance-related attitudes, attitudes towards sustainable products might be a general predictor of BVs' assessment of such products. Ajzen (2020) states that attitude is based on the presence of certain beliefs concerning the likeliness of consequences. In other words, a person subjectively assesses the probability that executing a behaviour in question results in a certain outcome and/or experiences. In the present context, an individual might (not) have the belief that sustainable cosmetic products contribute to saving the planet. A study by Costa et al. (2021) identified that positive attitudes towards sustainable products are associated with sustainable purchase intention. In this context, Cheung and To (2019) highlight the role of environmental consciousness in influencing attitudes towards eco-social benefits. Here, consumers' concerns for the environment impacted the purchase intention for green products due to benefits of environmental and social nature. For instance, consumers were aware that buying green products contributes to society by supporting green organisations.

These studies demonstrate that attitudes towards green products are an important factor in shaping behavioural intentions or subsequent behaviour towards sustainable consumption. Applying this to the present study context, the assessment processes of BVs might be influenced by their attitudes towards green products. For example, a BV with a positive attitude towards sustainable products might evaluate them more favourably than a

BV who does not believe that sustainable products contribute to sustainable change. As this study employed a content analysis, capturing such attitudes might be difficult. However, it is possible that BVs use their attitudes to justify or inform their audience about the reasoning behind certain assessment decisions. Therefore, the following sub-question was formulated:

Subquestion₂: How do beauty vloggers incorporate attitudes towards sustainable products when assessing sustainable cosmetic products?

Subjective Norm

Next to attitudes, the TPB introduces subjective norms as a concept predicting behaviour towards green products. Subjective norms can be defined as “the feelings of social pressure from others that are important to a person’s performance in some way” (Sun & Wang, 2019, p. 862). As some BVs have a wide follower- or fanbase (Sharma & Khanchandani, 2021), BVs’ social environment is extended compared to regular consumers. As a result, BVs’ social environment does not only contain their close environment; rather their followership on YouTube also represents important contributors to BVs’ performance.

BVs create social expectations that affect the degree to which they influence their followers. Most BVs have created a certain media personality, which develops over time into a human brand. A human brand describes a “well-known person who has brandable features, such as a unique personality or ability [...] (Ki et al., 2020, p. 3). BVs might be known for certain characteristics, such as their areas of expertise or points of view. For instance, BVs’ audience might expect beauty-related content, including BVs’ unique perspective on green cosmetic products. Hence, this might create a certain pressure to conform to their established persona (Saoudi, 2020).

A study by Ki et al. (2020) showed that SMIs who satisfied viewers’ needs were perceived as having stronger emotional bonds with their followership. Here, having an inspirational persona fulfilled viewers’ needs for desire and ideality, as influencers

contributed to discovering interests and new ideas. Moreover, a stronger emotional bond between SMIs and viewers resulted in greater power over their followership in terms of product- and endorsement acceptance. Here, followers experience a sense of closeness and familiarity, leading to para-social relationships with the influencers. This creates a sense of trust, which positively affects followers' purchase intention (Reinikainen et al., 2020). Thus, BVs' media persona elicits social expectations and needs. Satisfying these wishes affects the relationship between BVs and viewers, determining BVs' level of influence. Consequently, viewers' expectations and needs might be important when evaluating sustainable cosmetic products, potentially shaping BVs' assessment of such products.

However, BVs differentiate themselves from conventional human brands due to executing two-way interactions with their followers. BVs actively respond to followers' comments, while incorporating audiences' opinions into their content. These reactions facilitate the engagement activities of followers. For instance, followers leave likes, share BVs' content, or leave further comments. Based on such interaction patterns, BVs build intimate relationships with their followers (Kim & Kim, 2022). This kind of viewer engagement is important for BVs, as it determines BVs' performance on YouTube. View count, number of subscribers and social interaction on channels are the most important elements impacting BVs' video popularity (Hoiles et al., 2017). As a result, two-way interaction based on audience engagement is crucial for BVs' performance, potentially influencing their assessment of green cosmetic products. As a result, the following sub-question has been formulated:

Sub-question₃: How do beauty vloggers incorporate their own subjective norms, as well as viewers' needs, viewers' expectations, and viewers' engagement into their assessment of sustainable cosmetic products?

Perceived Behavioural Control

Perceived behavioural control is the third antecedent of behavioural intention and refers to “the extent that people believe that they are capable of performing the behaviour in question” (Ajzen, 2020, p. 315). To put it differently, an individual has beliefs regarding the presence of a factor that might promote or hinder them from performing a certain behaviour. For example, such factors might involve necessary skills and abilities, monetary-, time- or availability resources, as well as support from other individuals (Ajzen, 2020). Hence, an individual might experience perceived difficulties when executing a certain behaviour.

Often, an individual takes into consideration past experiences and predicted barriers in relation to the behaviour (Ajzen, 1991). Several potential obstacles can be identified when buying green products. Caniëls et al. (2021) describe that sustainable products are usually more expensive than conventional alternatives. Being able to afford green products depends largely on the consumers' financial situation (Witek & Kuźniar, 2021). Next to affordability, consumers also want a certain convenience in terms of getting a product (Yusuf et al., 2019). Green products' limited availability represents a barrier to consumers, as products are often difficult to find in stores (Caniëls et al., 2021). Linked to that, consumers are often forced to drive to supermarkets or specialized stores farther away, resulting in a rather effortful and time-consuming experience (Barbarossa & Pastore, 2015). Having more variety regarding different types and brands of green products can result in positively impacting consumers' purchasing behaviour (Barbu et al., 2022). As a result, BVs might experience several inconveniences regarding price, availability, as well as time and effort when dealing with sustainable cosmetic products.

Another barrier concerns the opacity in terms of the extent of greenness involved in a sustainable product. Identifying a product's actual extent of sustainability is difficult and consumers need to analyse labels and claims concerning their relevance (Caniëls et al., 2021). Linked to that, environmentally conscious individuals perceive higher risks and uncertainty

when purchasing green products due to the potential risk that a product's performance does not align with its green claims (Wasaya et al., 2021). Hence, consumers experience feelings of risk and uncertainty when purchasing green products, as they could potentially make the wrong purchase decision (Wang, 2017).

Beauty vloggers have a certain expertise, guiding them in their product reviews. Ding et al. (2019) state that "expertise suggests that the individual has the ability and knowledge to make accurate and reliable statements" (p. 238). A study by Chebat et al. (2001) discovered that consumers with high knowledge process information more thoroughly. Similar results were found by Kumar et al. (2021) highlighting the role of consumer knowledge when processing information regarding green products. Here, high-knowledge consumers were better at processing complex information, while tending to rely on their thoughts and experiences during this process. For instance, past experiences with green personal care products influenced future purchase intention (Kim & Chung, 2011). As green product information, such as labels and claims, are often displayed in a particular format (e.g., bio labels, fair-trade labels), environmental knowledge and experiences are needed to process information about green products (Kumar et al, 2021).

Although BVs are quite different from ordinary consumers, they might behave similarly to high-knowledge consumers due to their expertise in the cosmetic domain. Their expertise and experiences with cosmetics might provide them with the necessary skills and knowledge to evaluate cosmetic products. However, it is unclear whether this expertise is sufficient to assess product sustainability, as sustainable products often present more obstacles than regular products. As a result, the following sub-question was formulated:

Subquestion₄: How do beauty vloggers incorporate their perceived behaviour control, obstacles, and expertise, related to prior knowledge and/or experiences, when assessing sustainable cosmetic products?

The Expectancy Disconfirmation Theory

When consumers are confronted with products, a certain response is elicited. The *Expectancy Disconfirmation Theory* describes that individuals hold different expectations when evaluating products (Filtenborg et al., 2017; Oliver, 1980). Here, individuals have prior anticipations when determining a product's performance. These expectations serve as a reference point for comparing actual experiences with a product (Filtenborg et al., 2017), leading to consumer (dis)satisfaction. Consumer satisfaction can be defined "as a post-consumption evaluation of a product or service in terms of positive or neutral or negative attitudes toward the product or service that results from favourable correspondence between consumers' expectations and experiences with a firm or its products and services" (Chan & Mansori, 2016, p. 17). Hence, satisfaction is achieved when expectations are met, while dissatisfaction is experienced when expectations exceed the actual product performance. As a result, expectations are an important factor influencing satisfaction.

Satisfaction has been associated with word-of-mouth activities. A study by De Matos and Rossi (2008) found that consumer satisfaction was positively linked to word-of-mouth activities. While satisfaction serves as a driver for revisiting- and recommendation processes (Sotiriadis & Van Zyl, 2013), dissatisfied consumers use word-of-mouth activities more frequently (Anderson, 1998) to release negative emotions, warn other consumers, or seek vengeance in the form of negative statements (De Matos & Rossi, 2008). Beauty vloggers' activities focus on reviewing and recommending products, thereby sharing their (dis)satisfaction with products with their audience. Thus, like ordinary consumers, expectations might be an important element in beauty vloggers' assessment, shaping their review activities.

Similar to the TPB, studies in the area of social media influencers are limited because the EDT is primarily applied in consumer contexts. Consumers and influencers might have different roles, with expectations playing different functions in their assessment processes. In

contrast to consumers whose expectations are crucial for post-consumption evaluation, BVs might carefully select their expectations for their review process, instrumentalising and verbalising them to create a logical and compelling narrative about products. Hence, while regular consumers might primarily use expectations to form post-consumption evaluations, BVs' might utilise them during their review processes. The following sections will discuss several factors that might influence BVs' satisfaction or dissatisfaction with sustainable skincare products. These factors include product attributes, product information, hedonic and utilitarian values, and individual predilections.

Product Attributes

Consumers have certain expectations regarding product attributes, determining whether they are satisfied with a product's performance (Levitt, 1980). These expectations are based on a set of product attributes that consumers expect to find in a product (Duan et al., 2018). Keller (1993) defines product attributes as “descriptive features that characterise a product [...]” (p. 4). In an evaluative process, individuals subjectively assess their satisfaction or dissatisfaction with a product based on these product characteristics (Oliver, 1993). For example, when purchasing a chocolate bar, a customer might expect a sweet taste and will be satisfied when this expectation is met (e.g., “This chocolate bar tasted like I expected it to taste.”). Consequently, consumers hold different expectations about product attributes, determining their satisfaction.

Often, these expectations are based on the importance of product attributes. In the context of online reviews, Wang et al. (2018) found that certain product attributes are essential for achieving satisfaction. This might be because some product attributes are linked to specific requirements individuals expect the product to fulfil. For example, people might aim for various attributes that are essential for solving a specific problem, such as a product's ability to reduce acne. Other attributes might be less fundamental to individuals' demands

(Brechan, 2006). Supporting that, Choudhury and Gulati (2020) investigated the importance of several product attributes in relation to consumer satisfaction. Satisfaction increased when essential product attributes were present, while the absence of such attributes caused dissatisfaction. In this case, a mobile phone was expected to have GPS. When the product lacked this feature, it resulted in decreased consumer satisfaction. Hence, similar to mobile phones, beauty vloggers might expect sustainable products to have certain attributes, affecting their satisfaction with the product.

In the context of sustainability, most cosmetic brands take a holistic approach to incorporating sustainability into their product(s) (Ramli, 2015). In other words, brands address ethical, social, and environmental components of sustainability at the same time by incorporating several green product attributes. Green product attributes are particularly important for sustainable products, as these often incorporate various credence characteristics (Bangsa & Schlegelmilch, 2020). For example, green cosmetics might entail several ethical properties, such as animal welfare and green production processes (Schleenbecker & Hamm, 2013). In this context, a study by Granato et al. (2022) examined the use of implicit and explicit design cues in relation to sustainability. In an implicit process, product attributes provide meaning to consumers using cues that trigger associations with sustainability. In doing so, product attributes often highlight hidden elements of products, making sustainability more salient to the consumer, thereby increasing the perception of sustainability (Granato et al., 2022). As a result, product attributes, especially sustainable cues, serve as indicators for sustainability and could therefore be an important factor in BVs' assessment of sustainable skincare products.

Product Information

Besides attribute expectations, information plays an important role in consumers' satisfaction. Information satisfaction refers to "a subjective [dis]satisfaction judgment of the

information used in choosing a product” (Spreng et al., 1996, p. 18). To put it differently, consumer satisfaction is impacted by expectations based on prior information. Many sources of information are persuasive due to being controlled by marketers. Thus, information is often provided in a persuasive manner providing consumers with a variety of information prior to purchase (e.g., through advertisement). Consequently, this information impacts consumers' expectations, as well as their feelings towards the product (Spreng et al., 1996). For example, consumers might feel misled when marketers' information does not match the products' performance (e.g., “This chocolate bar did not taste like it was advertised”). Thus, external information sources might set expectations beyond persons' expected level of performance, resulting in different expectations based on the given information.

Some brands intentionally mislead consumers by using sustainable product cues or information, a practice that is known as greenwashing. Greenwashing can be defined as a “discrepancy between a brand's green claims and their actual environmental behaviour” (de Jong et al., 2020, p. 39). For instance, some brands make use of falsified and/or unverified sustainable labels to give the impression of being sustainable. Besides that, various brands, such as Dr Haushka Skincare or Burt's Bees, market themselves as natural, although their products do not rely solely on organic and natural ingredients (Emerald et al., 2016). As a result, although green communication tools serve as cues highlighting eco-friendliness to consumers, these elements might not accurately represent the extent to which sustainability has been realised in the product. Therefore, beauty vloggers might assess sustainable skincare products based on product information, for instance, to check for potential greenwashing practices.

Hedonic- and Utilitarian Values

Hedonic and utilitarian values are two types of perceived product values which play a role when consumers make decisions (Lin et al., 2018). Utilitarian value “accrues through

tangible and functional benefits experienced or anticipated by the consumer” (Lin et al., 2018, p. 433). Consumers evaluate products’ utilitarian value in a rational manner by examining their instrumental functionality. Here, utilitarian value is achieved by satisfying consumers’ functional needs (Lin et al., 2018). Ultimately, utilitarian attributes of cosmetic products are determined by their expedient features, including their ability to achieve the promised effects, for instance, regarding physical appearance. Keller’s (1993) functional benefits of products are similar to utilitarian value, as these benefits concern intrinsic advantages which are based on fundamental motivations such as physiological- and safety needs (Maslow, 1954). For example, the functional benefits of cosmetic products might be manifested by using unharmed ingredients.

Consumers’ decision-making process for hedonic products differs from that of utilitarian products. Opposed to utilitarian value, hedonic value automatically impacts consumer evaluation, while being rather subjective and symbolic (Lin et al., 2018). Hedonic motivations are often based on non-tangible attributes of products, including product identification, reputation, or social connection (Lin et al., 2018). Hedonic attributes incorporate the experience of pleasure and evoke emotional responses within consumers when interacting with the product. For example, using a hedonic product can create feelings of happiness in consumers (Maehle et al., 2015). Supporting that, Keller (1993) describes that products can incorporate experiential and social benefits. The former involves feelings that products elicit regarding sensory pleasure, variety and cognitive stimulation leading to satisfaction. In contrast to that, symbolic benefits represent the extrinsic advantages of a product. In the form of prestigious, exclusive, or fashionable products/brands, customers fulfil needs related to social approval, personal expression, and external self-esteem (Keller, 1993).

A study by Apaolaza-Ibáñez et al (2010) found that firmness, elasticity, younger appearance, hydrated and soft skin, as well as sensory and emotional pleasure led to women’s satisfaction with cosmetic brands. Hence, both utilitarian and hedonic values seem to be

important for the satisfaction of women with cosmetics. In the related but separate field of sustainable kitchen blenders, Luchs and Kumar (2017) found that consumers are generally more willing to trade off hedonic appeal than functional performance for sustainability. In other words, consumers responded more favourably to products that prioritized useful benefits over aesthetic appeal in favour of sustainability. Applying these studies to the present context, BVs might use arguments related to both values to express their (dis)satisfaction with sustainable skincare products, potentially being more satisfied when utilitarian value is realised.

Product Predilections

Apart from product attributes and utilitarian- and hedonic values, individual product predilections are important determinants of consumer satisfaction. Spreng et al. (1996) introduced the construct of desires in relation to consumer satisfaction, emphasising consumers' standards and aspirations. The concept of desires can be described as "motivational elements connected with individual personal goals" (Guido, 2011, p. 15 as cited in Peluso, 2011). Desires are based on product attributes or product benefits through which the consumer believes to achieve higher-order values (e.g., self-enhancement). Individuals engage in a comparative process during which they subjectively assess the extent to which the product's performance matches individual desires. Hence, every individual holds different desires regarding a product, affecting their satisfaction with a product. For instance, some individuals might value having a prestigious product to gain a reputational benefit over having the same product with primarily functional benefits (Spreng et al., 1996). As a result, desires might be an additional factor, building the foundation for BVs' assessment of products and leading to their satisfaction or dissatisfaction.

Although the concepts of desire and preference are closely related constructs, the meaning of the latter is ultimately different. While the evaluative nature of desire focuses on a

single object, the notion of preference involves a comparison between two alternatives whereby one is favoured over the other (Schulz, 2015). To put it differently, whereas the concept of desires focuses on a comparative process considering a *single* product, preferences refer to a comparison *between* two or more products, resulting in favouring one or more products over the other(s). Consequently, BVs' expectations might be impacted by product predilections, such as preferences and desires, determining their assessment of sustainable cosmetic products.

Based on the previous argumentation, stressing the relevance of product expectations, product attributes, utilitarian- and hedonic value, product predilections, as well as product information in the context of assessing sustainable cosmetic products, the following sub-questions were formulated:

Sub-question₅: How do beauty vloggers incorporate product attributes, product expectations, utilitarian- and hedonic value and product predilections regarding sustainable cosmetic products into their assessment?

Sub-question₆: How do beauty vloggers incorporate product information into their assessment of sustainable cosmetic products?

Summarizing the theoretical background of this study, the focus of the investigation into BVs' assessment construction of sustainable cosmetic products was with understanding the Theory of Planned Behaviour and the Expectancy Disconfirmation Theory from the perspective of beauty vloggers. On that basis, six sub-questions have been formulated. An overview of the sub-questions can be found in Table 1.

Table 1*Overview of the Formulated Sub-Questions*

	Sub-questions
1	How do beauty vloggers use arguments regarding appearance and attractiveness when evaluating sustainable cosmetic products?
2	How do beauty vloggers incorporate attitudes towards sustainable products when assessing sustainable cosmetic products?
3	How do beauty vloggers incorporate their own subjective norms, as well as viewers' needs, viewers' expectations, and viewers' engagement into their assessment of sustainable cosmetic products?
4	How do beauty vloggers incorporate perceived behaviour control, obstacles, and expertise, related to prior knowledge and/or experiences, when assessing sustainable cosmetic products?
5	How do beauty vloggers incorporate product attributes, expectations, utilitarian- and hedonic value and individual differences regarding sustainable cosmetic products into their assessment?
6	How do beauty vloggers incorporate product information into their assessment of sustainable cosmetic products?

Methods

Research Design

This study was conducted to determine how beauty vloggers construct their reviews of sustainable skincare products. To answer this research objective, a qualitative content analysis was performed by examining beauty vloggers' product review content on YouTube.

Examining their video content allows not only to capture their verbalised assessment processes, but also to take into account the different modalities beyond speech that might be crucial in their assessment constructions. For example, review videos also involve visual and interaction modalities. Other methodological approaches, such as interviews, ignore such important modalities and thus only capture beauty vloggers' assessment processes on a one-dimensional level. Thus, a content analysis approach allows for the identification of beauty vloggers' arguments and strategies across multiple modalities, providing a more comprehensive picture of their assessment construction.

Sampling and Data Collection

The qualitative content analysis targeted product reviews of sustainable cosmetic products uploaded on YouTube. For the data collection process, the digital data collection tool *YouTube Data Tools* (https://tools.digitalmethods.net/netvizz/youtube/mod_videos_list.php) was used to create a list of product reviews relevant to this study. Skincare products were targeted due to being the leading category in 2021, resulting in being one of the most profitable product categories (Petruzzi, 2023). Only English-speaking reviews were examined. Besides that, product reviews were selected that were released in 2022. In doing so, it was ensured that the videos, as well as the concomitant content, were up to date. Videos were sampled using the search terms “sustainable” OR “sustainability” AND “skin” OR “cosmetic” OR “beauty”. The term *green*, often used as a synonym for *sustainable*, was not utilised in this process. The reason for this was that the search term created irrelevant content that did not align with the research objective. For instance, some of the videos obtained only featured products that were green in colour or contained green tea as an ingredient. Based on these criteria, YouTube Data Tools generated a list of 384 videos.

To ensure that the video content aligns with the purpose of the study, the program Microsoft Excel was used to select videos based on video title including the terms “sustainability” OR “sustainable” AND “skincare”, OR “skin”, OR “cosmetic” OR “beauty”. Videos were taken into account with a time range between 61 seconds and 35 minutes. The minimum was chosen to exclude other video formats, such as shorts (i.e., short video clips of a maximum of 60 seconds) from the sample.

Besides that, videos were categorised and partially excluded based on a sponsorship risk assessment. The aim was to ensure, to the degree possible, that videos were not sponsored and/or associated with certain brands, thereby reducing the risk of assessment processes being controlled by brands. To comprehend the importance of identifying (undisclosed) sponsorships, an understanding of the current regulations on YouTube is needed. For instance,

the Federal Trade Commission (FTC) has released product endorsement guidelines aiming at prohibiting unfair or deceptive marketing activities. Thus, sponsorship disclosures need to be clearly and conspicuously addressed to ensure that it is noticed by consumers (Luong, 2020; Pfeuffer et al., 2020). Consequently, the disclosed sponsorships need to establish an apparent linkage between the endorser and the advertiser (e.g., “Company X gave me this product and here is what I think about it”). In the context of YouTube, the FTC requires sponsorships to be a prominent part of the actual video, rather than being stated in the video description only (Pfeuffer et al., 2020).

Nevertheless, such regulations are sometimes disregarded or misunderstood, resulting in SMIs not disclosing their endorsements. Some regulative measures are formulated in an ambiguous manner, leading to a gap between regulations and SMIs' actions that is open for interpretation. Moreover, measures rely solely on self-regulation of SMIs, as the FTC does not monitor SMIs' activities (Luong, 2020). As a result, although SMIs are legally bound to disclose sponsorships of affiliations, the current regulations do not prevent SMIs from undisclosed sponsorships.

Due to these regulative measures, selected videos were analysed regarding (undisclosed) sponsorships and/or affiliations prior to the actual data analysis to exclude sponsored videos and to transparently disclose whether videos included were at risk for sponsorships and/or affiliations. For that purpose, a risk-assessment scheme was established distinguishing videos into five categories: (1) relevant disclosed sponsorships, (2) affiliations, (3) high risk, (4) moderate risk, and (5) low risk. Videos were categorised based on several indicators which can be found in Table 2.

First, videos categorised as having relevant disclosed sponsorship were excluded from the sample. Here, videos contained direct statements that the content was sponsored by a cosmetic brand. It is important to note that only sponsorships *related* to the review of the product(s) were excluded from the sample. To put it differently, videos can be sponsored by a

company independent of the review. For example, if a video was sponsored by an automotive brand, which was considered unrelated to cosmetic products, it was included in the sample on the assumption that this sponsorship and/or affiliation did not affect BVs' assessment. Hence, only videos including sponsorships compromising their assessment were excluded from the sample. Moreover, certain videos involved product affiliations. These videos involved affiliative links to products that were shown in the video. In cases where videos had affiliations, only the non-affiliated video parts were included in the analysis. Videos that contained affiliated products only were entirely excluded from the sample. Due to having disclosed sponsorships relevant to the video content or product affiliations only, 44 videos were excluded from the sample.

Table 2*Risk Assessment Categorisation of Video Sponsorship/Affiliation*

Category	Indicators
Relevant Disclosed Sponsorship	<ul style="list-style-type: none"> Written Statements (e.g., #ad, #advertisement, #sponsored, #sponsorship; uses affiliate links related to the assessed product(s)) Verbal statement (e.g., "This video is sponsored by Company X...")
Affiliations	<ul style="list-style-type: none"> Links marked with an Asterisk (*) Certain weblink structures associated with affiliate programmes (e.g., https://bit.ly/XXX).
High Risk; Moderate Risk; Low Risk	<ul style="list-style-type: none"> Exclusively positive connotation of a brand/company/products throughout the whole video and related sections (e.g., video description) The absence of negative connotations of the brand/company/products throughout the whole video and related sections (e.g., video description) Only a single brand/company/product is featured throughout the whole video and related sections (e.g., video description)

Videos classified as high, moderate, and low risk did not contain statements that the content was sponsored and/or affiliated by/with a certain brand/company/product. However,

high-risk videos showed *severe* risk due to fulfilling *all* indicators, while videos with a moderate risk fulfilled *at least one* of the indicators of being sponsored and/or affiliated. Videos that met *none* of the indicators of being sponsored and/or affiliated were classified as low risk. Although videos marked as being at high-risk showed signs of undisclosed sponsorships, they were still included in the sample. BVs' assessments might accurately represent their evaluation, although meeting the criteria for being at risk of undisclosed sponsorship/affiliation. For example, the lack of negative statements by BVs regarding a product might correctly reflect their assessments. Excluding these videos from the sample might distort the results due to only including videos involving positive *and* negative statements while disregarding videos of a solely positive nature.

As shown in Table 3, most of the videos used in the present sample had a moderate to low risk of being sponsored or affiliated, while videos with a high risk of sponsorship/affiliation were the least sampled videos. Hence, most of the videos in the sample did not show severe signs of containing undisclosed sponsorships or affiliations. As a result, it can be assumed that most sampled videos accurately represent vloggers' own assessments rather than reflecting brand-driven review processes.

Table 3

Results of the Risk Assessment Categorisation

	High Risk	Moderate Risk	Low Risk	Total
Frequency	5	19	13	37
Percentage	13.5%	51.4%	35.1%	100%

Even after applying the selection criteria, several videos did not align with the purpose of the study due to not fulfilling the aim of reviewing sustainable skincare products. These videos were also excluded, resulting in 37 videos remaining for the data analysis. A summary of the data collection process including its selection criteria can be found in Table 4.

Table 4

Selection Criteria Including the Videos Excluded and the Videos Remaining Throughout the Data Collection Process

	Sampling Process	Selection Criteria	Excluded Videos	Videos Remaining per Sampling Step
1	Identify Videos with <i>Search Terms</i> and <i>Filter Criteria</i> Using YouTube Data Tools	<p><i>Search Terms:</i></p> <ul style="list-style-type: none"> • Sustainability OR sustainable • Skincare OR skin OR Cosmetic OR beauty <p><i>Filter:</i></p> <ul style="list-style-type: none"> • Videos in English • Videos Released in 2022 	0	384
2	Apply <i>Selection Criteria</i> Using Microsoft Excel	<p><i>Selection Criteria:</i></p> <ul style="list-style-type: none"> • Video Title with the Following Search Terms: <ul style="list-style-type: none"> ○ Sustainability OR sustainable ○ Skincare OR skin OR Cosmetic OR Beauty • Videos with a Time Range Between 1min and 35min 	216	168
3	Manually Screening for Unsuitable Videos	<ul style="list-style-type: none"> • Videos Unrelated to the Study Aim (e.g., no sustainable product reviews) 	87	81
4	Manually Screening for Sponsored- and Affiliated Videos	<ul style="list-style-type: none"> • Videos Involving Disclosed Sponsorships Related to the Review or Product Affiliations Only 	44	37

The remaining videos were downloaded and transcribed. These videos were transcribed using the program *Amberscript*. This application enables the transcription of speech elements, but other video elements could not be transcribed by this program. Therefore, the researcher carefully watched each video, taking into account the elements beyond language that were relevant to vloggers' assessments, as described in the following section (see Operationalisation). The information from this observation process was noted in the transcripts at the relevant time stamp by indicating the main video modality involved and

a brief description of its nature. For example, when the beauty vloggers tapped product materials to create a particular sound, the comment was as follows: “*Audio: The beauty vlogger tapped the product container, creating a distinct glass sound*”. In this way, multimodal transcriptions were created containing information about the auditory and visual landscape involved in creators’ assessments.

The subjects of the present research (i.e., beauty vloggers) were pseudonymised to ensure confidentiality. The personal names and channel names of the subjects were replaced with artificial identifiers. The pseudonyms used in this process followed the creators’ channel names. The linking files, connecting artificial names and real names, were stored offline on a password-protected device. Brand names have been retained with their original names. In addition to that, sensitive data (e.g., address, contact information), as well as identifiable data (e.g., video title) were removed from the transcripts.

Based on this data collection process, the present sample consisted of 37 videos from 32 content creators (see Appendix A). Though none of the beauty vloggers stated their gender identity, 36 out of 37 appeared to be women based on their appearance. In total, 413.28 minutes of video material was analysed, including videos with a length between 1.57 minutes and 33.17 minutes ($M = 11.17$, $SD = 7.52$). Besides that, the views of the videos ranged from 6 views to 472,671 views ($M = 16,158$, $SD = 76,607.49$).

Operationalization

The present study primarily focused on beauty vloggers’ speech content, while additional information was used to underline their assessments of sustainable skincare products. Here, a combination of four video modalities was taken into account during the analysis: (1) audio information, (2) visual information, (3) textual information, and (4) metadata of the video. First, the audio information of a video includes, for example, the soundscape of the video (Park et al., 2023), as well as creators’ speech content. Secondly,

videos provide visual information, including images of individuals, objects, and sceneries, as well as facial expressions, gestures, and movements. Third, textual information can be described as representations of explicit nature, also referred to as data-containing information (Park et al., 2023). For instance, video descriptions included information in a textual manner. Focusing on video elements beyond beauty vloggers' speech element allows to capture beauty vloggers' reviews across various modalities that might contain relevant information on their assessment construction.

Castillo-Abdul et al. (2021) evaluated YouTube videos in the context of cosmetic procedures. Aligning with their elements of content evaluation, the following dimensions were used and adapted to the present study context, resulting in two dimensions: (1) strategies to establish content credibility and reliability, as well as (2) specific content about sustainable cosmetic products. Table 5 contains the codes and explanations for these elements, which were incorporated into the data analysis process.

Table 5

Adapted Content Evaluation Elements Used by Castillo-Abdul et al. (2021)

Dimensions	Code	Definition
Strategies to establish content credibility and reliability	Expert Guest	Inclusion of an expert on the subject
	Personal Expertise	Mention of relevant training, qualifications, publications on the subject
	Personal Experience	Explanation that the information is based on the personal experience
	Additional Sources	Inclusion of additional sources
Specific content about sustainable skincare products	Areas of Uncertainty	Mention of aspects about which the available information is uncertain.
	Action Mechanism	Explanation of how the product works
	Procedure	Depiction/Description of how to apply the product

Data Analysis

The present study used a combination of a deductive and inductive coding approach to analyse the data. Based on the established theoretical framework, a pre-defined set of codes

was established. This established codebook was utilized for the data analysis. In addition to Table 5, four domains and associated codes were identified and used as an a priori codebook, which can be found in Table 6. The data was examined using the program *Atlas.ti* (Version 23.2.1). Initially, data was collected and analysed simultaneously. Throughout this process, the researcher shifted to creating a list of suitable videos based on the pre-determined inclusion and exclusion criteria and then selecting videos from this list to analyse the data.

Table 6

A-Priori Codebook Based on the Theoretical Framework

Domain	Definition	Codes	Definition
Attitude	Beauty vloggers' favourable or unfavourable assessments related to sustainable skincare products.	Appearance, Attractiveness	(Un)favourable assessment of appearance- and attractiveness behaviours in relation to sustainable skincare products.
Subjective Norm	The feelings of social pressure from others that are important to a beauty vloggers' performance in some way in relation to sustainable skincare products.	Viewers' Needs, Viewers' Expectations, Viewers' Engagement	Beauty vloggers' incorporation of viewers' needs, expectations, and engagement that are important to a beauty vloggers' performance in some way in relation to sustainable skincare products.
Perceived Behaviour Control	The extent that beauty vloggers believe that they are capable of performing behaviour(s) related to sustainable skincare products.	Obstacles, Expertise, Prior Knowledge, Experiences	Beauty vloggers' incorporation of obstacles, expertise, prior knowledge, and experiences to assess sustainable skincare products.
Expectations	Beauty vloggers' a priori anticipations when assessing sustainable skincare products.	Product Attributes, Information, Utilitarian Value, Hedonic Value, Desires, Preferences	Beauty vloggers' incorporation of product attributes, information, utilitarian and hedonic value, desires, and preferences when assessing sustainable skincare products.

To analyse the data, a thematic analysis was carried out. According to Braun and Clarke (2006), a thematic analysis can be described as “a method for identifying, analysing, and reporting patterns (themes) within data” (p. 6). Based on Forman and Damschroder (2008), the data analysis followed three phases: immersion, reduction, and interpretation.

First, the researcher highlighted specific content regarding skincare products in the transcriptions of the video material. On that basis, the researcher used an open coding procedure to identify broad categories and themes related to beauty vloggers' assessments of skincare products. Afterwards, the established codes were compared to the a priori coding scheme.

During this coding process, several codes from the a priori codebook were adjusted. While certain a priori codes were not applicable and omitted during the process, others were adjusted, included, or merged with codes of the codebook that were established during the inductive coding process. For instance, the a priori codes *appearance* and *attractiveness* were omitted during the coding process, as they did not apply to the present sample. Then, axial, and selective coding was used, creating a more detailed coding scheme (see Boeije, 2010). This resulted in a final codebook consisting of 41 codes (see Table 7), 11 categories and 3 overarching domains, with 1015 code segments identified. A more detailed codebook can be found in Appendix B.

Using this coding scheme, a second researcher independently coded 10.8% of the transcribed documents. The second coder received segmented transcripts and the full codebook. This ensured that the coders had the same basis for analysing the transcripts and applied them to the same segments of the data, thereby ensuring replicability (Atlasti, n.d.). The second coder independently coded the data, and the coded documents of both researchers were combined to calculate the intercoder reliability. The intercoder reliability was calculated, using Cohen's Kappa ($\kappa = .86$). According to Landis and Koch (1977), a kappa coefficient between 0.81 and 1.00 can be interpreted as almost perfect agreement between coders. As a result of this agreement, there has been no further adjustment to the coding system. It was observed, however, that the second coder did not use the 'innovation' code, indicating that this code might be less relevant. Lastly, the gathered data were interpreted and formulated into results based on the underlying patterns and categories identified.

Table 7*Finalized Codebook Including Absolute Frequencies and Average Code Frequency per Video*

Domain	Category	Code	Absolute Frequencies	Number of Videos using the Code	Average Code Frequency per Video
Descriptive Methods	Product Attributes	Availability	17	9	1.9
		Cost/price	31	16	1.9
		Ingredient(s)	80	22	3.6
		Innovation	6	5	1.2
		Label	19	9	2.1
		Package Design	12	8	1.5
		Theme			
		Package material	78	24	3.3
		Product Durability	14	7	2.0
		Product Logo(s); Certificates	18	12	1.5
		Product Size	12	7	1.7
		Claim	18	11	1.6
		Multifunctionality	22	14	1.6
	Animal(s)	34	12	2.8	
	Sustainability Concept	Sustainability Concept	7	5	1.4
	Brand Activities	Brand Ethos	25	18	1.4
		Brand Marketing	14	7	2.0
Product Line/Range		26	15	1.7	
Programs		14	11	1.3	
Product Life Cycle	Manufacturing Process	13	5	2.6	
	Consumption Process	28	15	1.9	
	Disposal Process	47	18	2.6	
Evaluation	Comparison	Comparison	23	10	2.3
	Individual Needs	Desire	12	5	2.4
		Health Condition	6	2	3.0
		Skin Condition	42	18	2.3
	Product Result	Hedonic	26	13	2.0
		Utilitarian	61	19	3.2
Product Loyalty		24	12	2.0	
Medium-Specific Evaluation	Influencer Ethos	Influencer Ethos	23	13	1.8
	Viewer	Viewer	26	17	1.5
	Encouragement Senses	Encouragement			
		Audio	15	7	2.1
		Smell/fragrance	32	17	1.9
		Flavour	4	1	4.0
		Tactile	24	9	2.7
	Demonstration	Application Procedure	44	16	2.8
		Packaging	16	9	1.8
		Product Content	13	8	1.6
	Knowledge	Additional Sources	36	14	2.6
		Areas of Uncertainty	12	6	2.0
		Experiences	37	18	2.1
Expertise		6	6	1.0	

Results

The present study aimed to identify how beauty vloggers construct their assessment of sustainable cosmetic products. In the following, the results will be outlined. First, videos were categorized according to structural assessment patterns, followed by beauty vloggers' approaches to assess product sustainability. Lastly, beauty vloggers' product assessment strategies will be discussed, outlining descriptive, medium-specific, and evaluative approaches. Throughout the results section, various perspectives on sustainable skincare products will be outlined to each other to discuss BVs' differences in the way they assess sustainable products. Therefore, the results will not only discuss the strategies used most frequently by BVs, but also the strategies used less often to illustrate the different ways BVs construct their assessments.

Video Assessment Patterns

Beauty vloggers' videos aimed at reviewing sustainable products. The present study focused on BVs' assessments of sustainable skincare products. BVs examined several different types of skincare products ranging from skincare application tools, facial make-up, skin serums, creams, lotions, moisturizers to deodorants and shampoos. When reviewing these products, several structural assessment patterns were identified. These were grouped into categories based on BVs' explicit statements or the way in which BVs assessed sustainable skincare products. The former implied that BVs mentioned the video format explicitly, either verbally or textually. For instance, 17 videos explicitly stated the video format in the title of the video (e.g., 'sustainable beauty favourites'). The remaining videos were categorised based on observations made by the researcher, in which videos were classified based on their primary assessment strategy, as discussed in the subsequent chapter (see Product Assessment Strategies). As a result, eight video categories were identified to review sustainable skincare products, which are summarized in Table 8.

Table 8*Identified Video Categories and Their Respective Descriptions and Frequencies*

	Video Category	Description	Frequency
1	Brand Review	Reviews focused on assessing several products from the same brands that either marketed themselves as entirely sustainable or claimed to produce sustainable products.	12
2	Sustainable Swaps	Reviews focused on green products and/or habits that BVs considered sustainable alternatives to conventional ones.	6
3	Sustainable Favourites	Reviews focused on their favourite sustainable products based on BVs' personal product experiences.	6
4	Sustainable Routines	Reviews focused on demonstrating a series of steps and sustainable products that BVs incorporate into their regular skincare practices.	5
5	Educational Video	Reviews focused on discussing various beauty-related topics and provided information to help viewers make more sustainable choices.	4
6	Sustainable Product Haul	Reviews focused on showcasing a collection of products that BVs had recently purchased, highlighting their sustainable product choices.	2
7	Personal Content	A review focused on discussing personal circumstances in relation to sustainability.	1
8	Balanced Review	A review focused on presenting both positive and negative experiences with favourable and unfavourable products.	1

First, brand reviews focused on products selected by a particular brand. BVs discussed the characteristics of each product but also paid attention to the brand under consideration. In doing so, reviews not only emphasised product attributes but also provided information on brands' activities (see Brand Activities). Second, BVs often used comparative approaches in sustainable swaps, comparing conventional products with sustainable alternatives (see Comparison). The reviews presented a one-sided perspective on products with BVs arguing that the green product alternatives selected for the review were more sustainable than traditional products.

Third, sustainable favourite videos highlighted products that were viewed positively. Products shown during this review were already assessed positively before the video, listing product attributes and product effects that BVs perceived as beneficial (see Product Attributes

& Product Result). In doing so, BVs presented arguments and effects of products that led to their positive product recommendation. Fourth, educational videos focused on general sustainable product attributes, with branded products used only as examples to illustrate how product sustainability can be realised. BVs often used factual data and statistics to emphasize the importance of sustainable product attributes (see Knowledge).

Fifth, BVs showcased a series of steps and products they considered sustainable to address their sustainable skincare routines. Primarily using demonstration techniques in their review process, BVs showed a series of steps they undertook to achieve beneficial and sustainable skincare practices (see Demonstration). Sixth, hauls incorporated a way of showing newly purchased products that BVs considered sustainable. During their assessment procedure, they mostly described product attributes that initiated the purchase (see Product Attributes).

Seventh, one BV (Echo Vani) made a personal video, explaining her role as an influencer in relation to sustainability. Here, she discussed her (un)sustainable consumption patterns, thereby reflecting on her unsustainable habits as a beauty vlogger (see Influencer Ethos). Finally, a single video demonstrated favourable and unfavourable reviews of products. During Eco Insights' review, she provided viewers with insights and arguments about the positive and negative attributes and impacts of each product, regardless of whether the products were viewed positively or negatively, leading to a balanced product review (see Product Attributes & Product Result).

Videos demonstrated varying degrees of strategic emphasis. While some relied more intensively and frequently on one or more strategies, others did not emphasise them to the same extent or in the same way. These structural patterns show that BVs prioritise certain review styles when assessing sustainable skincare products, and thus employed key strategies in their review process.

Sustainability Approach

Two distinct approaches were identified that BVs adopted when assessing the sustainability of skincare products: (1) a holistic assessment approach and (2) a reductionist assessment approach. While the former approach considered a broad range of overarching and interrelated elements that constitute sustainability, a reductionist approach was concerned with reducing sustainability into smaller parts. In the reductionist assessments, BVs mentioned various components of sustainability in isolation, highlighting either social, ethical, or environmental factors that products possessed in relation to sustainability. Here, 31 videos primarily used a reductionist approach when describing sustainability. For example, when reviewing *Fenty Beauty* skincare products, Kira Wanderer highlighted the non-vegan nature of its products, thereby referring to animal welfare and mentioning the ethical component of the products: *“But one thing to note, they aren't completely vegan. So, if that's something you are looking for, not all products are 100% vegan”*. Hence, BVs primarily addressed sustainability by highlighting its distinct components in the form of addressing single sustainable product attributes.

However, this approach omits broader systemic, contextual, or interrelated factors by focusing exclusively on single properties of sustainable cosmetic products. This phenomenon is described by the content creator Formulation Academy, using the example of the ingredient roses:

“Now, I have seen people in the industry argue that roses are unsustainable and for it not to be used. However, they do not address the farmers and the people in the supply chain and how they would replace that crop with something of equivalent value to them.”

In this case, Formulation Academy described that avoiding roses is perceived as a sustainable practice. However, focusing on ingredients in isolation ignores potential

unsustainable outcomes, such as negative social consequences on the supply chain.

Consequently, prioritising single properties could result in the neglect of other interconnected sustainable criteria. Due to the complexity of sustainability, she argued that a reductionist approach is insufficient to fully capture its essence.

In this context, 6 videos incorporated a holistic approach when assessing sustainable skincare products. During these videos, BVs discussed a wide range of overarching and interrelated elements that constitute sustainability. For example, in their educational video, Formulation Academy discussed social media influencers' promotion of sustainable product elements and their impact on the entire beauty industry. Linked to this, Echo Vani highlighted the consumption habits of YouTubers, criticising the unsustainable impact of BVs: *"[Being a beauty vlogger is] not sustainable. [...] It is the high consumption rates and the materialism that was associated with my beauty channel. I did not like that."*

Although the holistic approach considered sustainability's interconnected and multifaceted nature, only a few BVs used this approach during their assessment process. Instead, most BVs assessed sustainability by mentioning sustainable attributes in isolation. Hence, they did not take into consideration broader entities such as the environment, society, and economy, thereby using a reductionistic approach to assess product sustainability.

Product Assessment Strategies

During their product reviews, beauty vloggers utilised three primary strategies to assess sustainable skincare products: (1) descriptive strategies, (2) medium-specific strategies, and (3) evaluative strategies. First, descriptive elements were used to describe sustainable skincare products. Second, several medium-specific strategies were used to evaluate sustainable cosmetic products, tailored to the audio-visual modalities of product reviews. Third, BVs employed evaluative strategies to appraise sustainable cosmetic products, forming the basis for their product verdicts and/or recommendations. These strategies were not

mutually-exclusively used. Instead, they employed a combination of all three and alternated between them during their reviews. Notably, descriptive strategies were employed the most often during BVs' assessments, thereby favoured over the other two strategies. In the following, these strategies will be discussed more elaborately.

Descriptive Strategies

Descriptive review strategies involved providing detailed information about the products without necessarily engaging in in-depth assessment processes. Instead of elaborate reviews, BVs focused on presenting product details, features, and characteristics to give viewers a comprehensive understanding of what the products under consideration entailed. Sustainable products were described addressing the following four categories: (1) Sustainability Concept, (2) Product Attributes, (3) Product Life Cycle, and (4) Brand Activities. The following sections will discuss BVs' use of descriptive strategies in relation to these identified categories.

Sustainability Concept

Within the domain of descriptive methods, BVs defined the overall concept of sustainability. Only a few BVs described the concept of sustainability in relation to sustainable products. When describing this concept, these BVs adopted a holistic conceptualisation of sustainability, viewing it as a multi-dimensional construct rather than unidimensional. Naturalist Nina, for example, defined the concept of sustainability by listing several criteria that she expects brands and/or products to fulfil to achieve sustainability:

“Now, a few criteria of a sustainable skin brand are that it is non-toxic, vegan, cruelty-free, palm oil-free, recyclable, or compostable packaging, like glass or cardboard or paper, which you can recycle. These criteria make this product more sustainable because it's healthier for your body and helps you produce less waste.”

In support of this holistic definition, Formulation Academy even criticised influencers' one-sidedness as they address sustainability in a reductionist way, in which they focus on criteria in isolation, thereby overlooking other facets of sustainability.: *“Something else I've seen is influencers who speak about beauty, moving towards touting the benefits of synthetics over naturals in terms of sustainability, but then completely ignoring the human aspect of the supply chain.”*

BVs, such as Naturalist Nina and Formulation Academy, perceived sustainability as a multi-faceted concept, given the many dimensions that constitute sustainability. In doing so, these BVs took a holistic stance on the definition of sustainability and even criticised perspectives with a singular focus on sustainability. Notably, most BVs in the present sample assessed products in a reductionistic manner, prioritising the assessment of individual attributes rather than integrating various sustainable product facets into their assessment (see Sustainability Approach). Consequently, most BVs failed to adopt a holistic lens to assess product sustainability, although their definitions suggest that BVs understand that sustainability is a multidimensional construct. This leaves a discrepancy between BVs' understanding of sustainability and their assessment process, which reduces product sustainability to single attributes, thereby neglecting its complex nature.

Product Attributes

Resembling the reductionistic assessment approach, 31 content creators used individual product attributes at least once to describe product sustainability. Product attributes were descriptive elements of a product that BVs used to characterise sustainable skincare products. These product attributes ranged from products' packaging material, package design theme, animal involvement, ingredients, price, availability, durability, size, and multifunctionality, to innovation.

Some product attributes were related more often to product sustainability, such as animal welfare, ingredients, and packaging material. Animal welfare attributes indicated ethical aspects of products, highlighting their cruelty-free and vegan nature. While cruelty-free indicated animal testing throughout the production process, vegan referred to ingredients that did not involve animal by-products. When describing sustainable ingredients, BVs often highlighted organic and natural ingredients, as well as the absence of certain substances that were considered unsustainable, such as paraben-free, sulphate-free, palm oil-free, non-GMO (i.e., non-genetically modified organism), plastic-free, non-toxic, filler-free, endocrine-free, and chemical-free. The absence of such ingredients was perceived as having a positive impact on the environment, but also on individual health. This suggests that ingredients were not only an important factor in the assessment of product sustainability but were also being considered for health reasons.

Packaging material received the most attention regarding sustainability during BVs' assessment process. Out of 37 content creators, 20 BVs emphasized the packaging attribute by focussing on sustainable materials used for a product. Certain product materials were highlighted positively due to their sustainable nature. For instance, glass was positively emphasised when assessing sustainable skincare. Other materials were also favourably reviewed, namely cardboard, tin, aluminium, bamboo, wood, and soy. Besides that, BVs considered products sustainable when they employed zero packaging material or little packaging material:

“So next up in skincare is this little package-free beauty. This is the Serum Solid Serum Bar from Lush. I have been wanting a solid serum in my skincare routine because I have such dry skin and I picked that up at the lush that's a couple of towns over from me and I love it. It melts into my skin beautifully. It hydrates and I love that

there's no packaging involved" (Eco Insight reviewing her favourite and least favourite skincare products).

Certain product materials were seen as less sustainable options, such as plastic. Yet, various forms of plastic were perceived differently in terms of the product's degree of sustainability. Here, black plastic and virgin plastic were seen as the least sustainable packaging options, while recycled or recyclable plastic materials were viewed as more sustainable options. Having these alternative materials, Eco Insight criticised Eco Brows' use of unsustainable materials:

"I mean, they use black plastic, which is the worst kind of plastic. It's not recyclable at all. The bottom is in glass. Like that's nice, but this could be a metal cap, you know, like this could be any other kind of plastic; it could be post-consumer recycled material, anything else."

Unlike Eco Insight, who evaluated Eco Brows' product without considering brand claims, several BVs relied on information provided by brands, such as product labels, logos, or certificates, to assess its sustainability. Labels were included on the product or directly on its packaging and 8 BVs utilized them to obtain information about products. By reading out or visually displaying the product labels, BVs informed their viewership about the sustainability of a product. For instance, Dr Mum reviewed a soap bar by reading out the product's label, focusing on its sustainable ingredients: *"It's vegan, cruelty-free, no parabens, no phthalates, no artificial colours."*

BVs, such as Dr Mum, utilized product labels as a source of information to review the sustainability of a product. However, the creator we called Skin Guru noted that checking the product label for sustainability might only work to a certain degree. She explained that in terms of microbeads, using the label as a source of information is insufficient to determine

product sustainability, as certain brands are not obligated to list every unsustainable ingredient:

“Cosmetic manufacturers must list their products’ ingredients. However, if the product is registered with the Australian Register of Therapeutic Goods as a therapeutic good, manufacturers only need to list the active substances and their proportions, as well as any potential allergens or components that could affect certain individuals. In this case, you may contact the manufacturer directly to find out whether there are any microplastics in the product.”

In most cases, however, BVs did not consider that brands might not be obligated to report specific unsustainable elements on the product. In doing so, they uncritically relied on information provided by the brands. Only when further inquiries are carried out, these hidden, unsustainable elements might become accessible, according to Skin Guru (see quote above). However, as identified in the following sections (see Knowledge), BVs primarily consulted brands’ official websites to verify sustainability information, thereby using biased sources to get further information about products and brands.

In this context, brand websites and product labels often displayed logos and certifications. Out of 37 vloggers, 12 BVs used these logos and/or certifications to assess the sustainability of their products. Logos and certificates are symbols or documents that provide information about products’ sustainable attributes, often in the form of written or visual brand statements. Written brand statements explicitly emphasised the recyclability of the products and the absence of toxic, synthetic, or chemical ingredients, as well as the companies’ commitment to animal welfare. Visual brand statements implicitly conveyed brands’ sustainable initiatives. BVs perceived logos and/or certificates as a confirmation that single products or entire brands were indeed sustainable, as noted by Naturalist Nina who reviewed the brand *Super Bloom* by *Grove Collaborative*:

“And for my last final notes about sustainable skincare, you want to look for certain certifications to verify that the product you're using is not just greenwashing and is actually a sustainable brand that is using organic and natural materials.”

Naturalist Nina highlighted that specific certifications are necessary to confirm product sustainability and avoid greenwashing. She showed several logos (see Figure 1) that she considered to be credible certifications of sustainability. In Nellie Rivers' review of *Huda Beauty*, she differentiated between products that are third-party verified and unverified products: *“I do want to note that the products that are vegan are not certified. They're not certified by the vegan society or anything like that. They are just, you know, claim to be vegan”*.

Figure 1

Screenshot of Logos Shown by the Creator Naturalist Nina during her Brand Review



In this respect, 8 BVs highlighted third-party certification from various non-profit organisations, such as the Vegan Society, Forest Stewardship Council, Environmental Working Group, Fair Trade Certified and B-Corporation. Yet, two BVs emphasised sustainability using different logos. When reviewing a sunscreen, Lila Hudson presented a self-made logo from the brand *V.Sun* that indicated its reef-friendly qualities, while Ruby

Penny explained that the brand *Beauty Kitchen* uses its own logo (see Figure 2) to indicate its recycling program to consumers: “*Now if you see that little round green arrow on any of their products, it means that you can return it to Beauty Kitchen, and they will reuse it.*”

Figure 2

Screenshot of a Logo with a Round and Green Arrow Shown by the Creator Ruby Penny



BVs used logos and certifications to confirm the accuracy of brand statements regarding product sustainability. Although third-party verified logos were considered reliable sources to confirm sustainability statements, only 8 out of 37 BVs mentioned these certifications in their assessment process. Two BVs even confirmed product sustainability using brand-made logos. Other BVs did not attempt to confirm brand statements, thereby relying on the truthfulness of brands.

Relying on brands as a trustworthy source was seen as problematic by the BV, we called Formulation Academy. This content creator observed a trend towards sustainability, in which the beauty industry uses it as a trendy buzzword to market their products. When Formulation Academy carried out further research, she experienced that brand statements are frequently proven inaccurate, as companies fail to adhere to their sustainability claims: “*But sometimes when I scratch the surface, I do uncover greenwashing where brands are making eco claims that they can't substantiate or hiding behind a green smokescreen*”. Formulation Academy observed that brands often advertise sustainability yet fail to meet their promises. She continued by stating that consumers often rely on products marketed as green or sustainable, while many of the brands that proclaim to be eco-friendly still have a lot of work

to do in terms of sustainability. Hence, the content creator argued that some brands exploit sustainability statements as a marketing strategy, thereby deliberately deceiving consumers.

Although Formulation Academy criticised brands for their greenwashing tendencies, most BVs still considered brand claims when evaluating sustainable skincare products. Out of 37 content creators, 9 BVs addressed the purported nature of these statements but still omitted to assess the accuracy of these sustainability claims. These content creators only made consumers aware of the potentially deceiving nature of the claims by using a specific sentence structure such as “it says”, “it is supposed to”, or “this claims to”. Similar to other content creators, these BVs also included claims in their assessment process, thereby neglecting to evaluate the sustainability of the product, despite including a disclaimer for their viewers. Hence, most BVs insufficiently examined sustainability in their reviews by relying on brand statements to describe sustainable products.

Product Life Cycle

Closely related to product attributes was the products' life cycle, which involved three main processes: (1) manufacturing process, (2) disposal process, and (3) consumption process. Rather than perceiving the product life cycle as an interconnected concept, BVs highlighted each process individually, aligning with the reductionist approach as described before (see Sustainability Approach).

When describing the process of manufacturing, BVs emphasised several aspects of the production process. Some BVs discussed products' sustainable sourcing process, focusing on ethically- or responsibly sourced ingredients, materials, and packaging. For instance, Earth Magic highlighted *EcoLips*' statement that its lip products incorporate ethically sourced oils and butter. Others mentioned products' sustainable supply chains, production processes or manufacturing partners. For example, Beauty Brew Talks mentioned that *Tata Harper* does small order batches, thereby concluding that the brand produces no excess waste. She

perceived this production behaviour as sustainable, as the brand went against personal interests, such as financial gain, and focused on producing less: *“It shows their dedication to sustainability. All the small batches cost a little bit more for the business.”*

When discussing the sustainability of product manufacturing processes, BVs mostly utilised official brand statements as a source of information, such as brand websites or product claims. For example, when describing *EcoLips*' products, Earth Magic used its website to gather further information on the manufacturing process. In other cases, BVs used unspecified sources that were not transparently disclosed, thereby not explicitly stating the origin of the information. Nonetheless, these also appeared to be based on brand statements, as information was exclusively presented favourably. For instance, Gita Johnson confidently claimed that *REN* takes numerous actions to achieve zero waste in its supply chain. However, she did not specify the source of the information that led to her confidence, nor did she provide additional explanation for these initiatives: *“And I know for a fact that they are doing a lot of things to make their supply chains zero waste, which is also really cool.”*

Only in one instance did a BV provide comprehensive details regarding the sustainable manufacturing practices adopted by a brand. In this case, the BV we called Britannia Elegance set up an interview with the brand *Haeckles*. Throughout the video, she took part in various manufacturing activities, while interviewing brand employees. For example, Britannia Elegance conducted an interview with an employee while collecting seaweed on the beach. During this conversation, the interviewer asked about the sourcing process, specifically querying whether machines are utilised, and the average amount of seaweed collected. Doing so, Britannia Elegance acquired detailed information about the manufacturing process from the brand, while participating in related activities:

Britannia Elegance: And talk to me about how you guys go about sourcing it. Do you use machines? Is it done by hand? What's the process?

Haeckles Employee: It's all done by hand. You get a couple of boxes of us, get a pair of scissors, and get to it.

While most BVs utilised standard brand statements as a source, Britannia Elegance acquired her information from an uncommon brand source by interviewing brand representatives. In both cases, however, BVs relied on narratives provided by brands about the manufacturing processes of products, thereby treating brands as a trustworthy source. As previously discussed, Formulation Academy has raised concerns regarding brand statements, as these claims are often used as a marketing tool and proven inaccurate when further research is carried out (see Product Attributes).

When describing the disposal process, BVs referred to the process of waste disposal after product consumption. BVs positively highlighted sustainable waste management practices, such as recycling, biodegradation, composting, and upcycling, as well as reusable and refillable products. Especially reusable or refillable products were described as an innovative waste management process, as such products were stated to be partially exchangeable and thereby customizable. The BV we called Katlyn Rosemont, described that even reusable product parts made of plastic are more sustainable:

"I love products that offer refills because although this is a plastic tube, it is not single-use plastic. And I think that we focus a little bit too much on reducing plastic waste when we just need to be focused on reducing waste. Because if I'm refilling this time and time again, it's not waste. And I think our focus should be on reusing rather than trying to wipe out a substance. Because I do think that plastic is useful in a lot of circumstances."

Comparable to BVs' description of the manufacturing process, most BVs relied on brand statements without critically assessing them. In most cases, it appeared as BVs simply repeated the information provided by the brands. For example, Ruby Penny explained *Beauty*

Kitchen's disposal initiative by reciting their slogan: “*It says ‘return, refill and repeat - we wash and reuse our bottles’*”. In doing so, BVs did not question the disposal claims of brands. This is also illustrated by Kristian Hansen, who highlighted *Caudalie's* anti-ageing moisturiser as having a refillable initiative in which the glass jar is kept while the plastic tube inside the glass container is replaced. By not reflecting on the sustainable claim, Kristian Hansen overlooked the fact that only the life cycle of the sustainable glass container is extended, while the unsustainable part of the packaging is thrown away.

Only two BVs assessed the products' disposal capabilities themselves. Dr Mum evaluated *Naturium's* packaging material by using her auditory senses, suggesting that the identified glass material is easily recyclable. The following section (see Senses) contains more information on BVs' use of senses to assess products. Eco Insight took a critical stance towards *EcoTools's* statement in her product haul, claiming that its make-up sponge is compostable at home: “*I'm going to cut this up and stick it in my plants and see how it decomposes. Hopefully, it breaks down because it claims that it will.*”

When describing the consumption process of products, brand claims played a less prominent role. BVs described the process by which they consumed or used products sustainably. Some of these strategies incorporated specific product attributes, such as product durability, size, and multifunctionality. For instance, BVs preferred multi-functional products over single-use products to reduce consumption or consumed larger products to enhance the durability of products, thereby minimising waste. This strategy aligned with the video format of sustainable swaps in which BVs highlighted sustainable products. During this format, BVs encouraged consumers to switch from conventional products to sustainable alternatives by outlining its distinctive attributes:

“The first thing that I do, and you want to do is to swap out makeup wipes. Makeup wipes are extremely convenient. But if you use them constantly, then you are throwing

away a lot of wipes which go straight into the landfill, and they are not easily compostable. I've swapped these with the reusable cotton rounds, and they function exactly like disposable cotton rounds.” (Lisa David)

Other strategies aimed at managing the consumption of skincare products sustainably. These strategies did not involve product attributes and placed responsibility for sustainability on consumers instead of brands. Beauty vloggers recommended their audience to avoid overconsumption of cosmetics as a sustainable practice. In this context, Jane Neumann stressed the importance of consuming already purchased products for sustainability:

“And if there's one tip that you should follow, it is to use what you have. Before you go out and buy all the fancy eco stuff, use what you already have in your home [...]. The most sustainable thing you can do is to use what you already have.”

In contrast to promoting products due to their sustainable attributes, BVs urged viewers to consume products in a sustainable way, regardless of their attributes. However, only one BV questioned their own consumption tendencies as an influencer. Echo Vani recognised the materialistic and excessive consumption that often accompanies being a beauty influencer. She criticised the high consumerism that is prevalent amongst influencers on YouTube including herself. In this sector, she stated that unsustainable consumption is widespread:

“My second point as to why my [personal] brand was not sustainable long term is that there is a lot of materialism and high consumption rates. At one point I was a product junkie [...] But staying on YouTube and having your [personal] brand centred around high consumption rates, just means that you're like spending, spending, spending. [...].”

Similar to describing product attributes, BVs relied on statements of brands about the manufacturing- and disposal process, thereby being uncritically accepting of information provided by the brands. Only when discussing the consumption process, BVs partially refrained from using company claims as a basis for their sustainability assessment. Opposed to product attributes and the manufacturing- and disposal process, they used fewer brand claims to describe product consumption and relied more on their own arguments. However, even then, BVs appeared uncritical of their own product consumption, merely encouraging viewers to adopt more sustainable consumption habits without reflecting on their own materialistic and promotional tendencies as influencers.

Brand Activities

The previous sections identified that BVs mostly relied on brand statements when describing sustainable product attributes. BVs also considered sustainable brand attributes by taking into account various elements of brands' activities, including their ethos, their sustainable initiatives, such as product ranges and programs, as well as their marketing activities.

When describing brands' ethos, BVs focused on brands' embodiment of traits, values, goals, and missions. Besides describing brands as luxurious, innovative, and prestigious, BVs especially highlighted when brands were perceived as sustainable, cruelty-free, vegan, environmentally friendly, and natural. When describing these characteristics, BVs embedded this information in narrating brands' history, journey, or missions in relation to sustainability. This was illustrated by Dr Mum, who was convinced by the ethos of the brand *Ilia Beauty*, highlighting its initiatives toward clean skincare: "*The whole ethos of the company is to have natural, healthy-looking, and healthy skin, and this is done by not including harmful chemicals [...].*"

In this context, BVs named several programmes that brands marketed as sustainable initiatives. For instance, brands were reported to provide financial support to environmental organisations; to have their own sustainable campaigns, where they claimed to take back products for recycling or refilling; or to have sustainable shipping arrangements, where brands claimed to support reforestation or carbon-neutral efforts. BVs, such as Katlyn Rosemont, expressed their enthusiasm towards these initiatives: *“I love Earth Harbor’s sustainability initiatives. They’ve launched a refill program now, where you can send your bottles back and get them refilled rather than having to recycle them.”*

Other sustainable efforts were based on brands’ product ranges. BVs described brands as having created a range of products that included certain sustainable attributes. These ranged from the exclusion of unsustainable elements (e.g., parabens, chemicals, and fragrances) to the inclusion of sustainable characteristics (e.g., vegan, clean, and sustainably packaged). Memory Lane with Mira, for example, highlighted *Khadi Essentials’* product collection, in which a set of products had certain sustainable properties in common: *“They have a wide range of paraben-free products”*.

Initiatives, such as sustainable programs and product ranges, were perceived as practical implementations of sustainability by brands, providing BVs with information on brand sustainability. This information appeared to be adequate to persuade BVs of the truthfulness of brand claims. As mentioned before (see Product Attributes), few BVs were sceptical about product claims and stressed their potential for greenwashing, but even fewer questioned brand claims. Only two channels took a critical stance towards brands’ ethos and initiatives. Beauty Brew Talks expressed scepticism towards *Biossance’s* promise to be committed to zero waste by 2025. Considering the time remaining to achieve this promise, one of the two content creators questioned the brands’ implications towards zero waste:

Speaker 1: What is the most amazing to me about Biossance is that they are committed to completely zero waste by 2025.

Speaker 2: That's in three years' time.

Speaker 1: Zero waste. How is Biossance going to replace the dropper of their products?

Speaker 2: I don't know.

Speaker 1: I want to see how they hold to their words.

Eco Insight complained about the brand name Eco Brow as she perceived it as misleading. She accused the brand of greenwashing due to a mismatch between its name and its practices:

“I just feel like the name is really misleading and it's a little bit of greenwashing for them to call themselves eco brow. [...] The only eco-friendly thing is the formula and not the packaging and the packaging is so important. I'm not going to repurchase from them, not until they change their practices”.

When evaluating *Eco Brow* and *Biossance* as brands, both Eco Insight and Beauty Brew Talks adopted a critical lens on brand sustainability by assessing their brand claims. Eco Insight analysed marketing components in relation to each other, uncovering a disparity between brand promises and genuine initiatives. Beauty Brew Talks challenged the implementation of zero waste in relation to the time remaining to achieve that promise. This differed from the approach of most BVs who described brands solely based on their marketed initiatives. By uncritically relying on these brand claims, these BVs treated them as unexamined descriptors.

That most beauty vloggers tended to review brand claims without much critical examination, might be related to the persuasive communication tactics employed by the brands. At a make-up event, Artistic Visionary stated to have met the founder of *MOB-Beauty* and was impressed by the brand's promotion of its sustainable goals: *“I just really loved what the company was doing, the mission statement and how they spoke about their product and*

the knowledge behind the formulas and why they created the brand". Based on this experience, he dedicated a whole video towards *MOB-Beauty*, in which he enthusiastically described his experiences with the brand, while assessing its products in an uncritical positive manner based on the brand's sustainability claims.

Despite brand events, BVs listed other marketing activities during their reviews, including giveaways and celebrity endorsers. During some marketing activities, BVs reported to have received free products from the brand. For example, Ruby Penny reported being excited about a gift she received when ordering from the brand *Beauty Kitchen*: *"I was really, really excited when I found out that this was a gift because I love a free gift."* Naturalist Nina and Eco Insight described to have participated in brand giveaways. In exchange for certain requirements set by the brands, these BVs obtained products after fulfilling several promotional activities on social media. Both BVs decided to review the products during their videos. Naturalist Nina even stated that winning the giveaway was a decisive factor for making a brand review about *Grove Collaborative*:

"I have a few products from the Superbloom line, which is a brand made by the Grove Collaborative. I got all these items from a giveaway online. They had a little thing where you tag a few people, put it on your story to get free skincare products and I happened to win. So, I thought why not make a fun video just trying out these different skincare products."

Celebrity endorsements were another motivating factor for purchasing products. Here, Kira Wanderer attributed the endorser's actions to those of the brands. She explained that Fenty Beauty's founder and celebrity endorser, *Rihanna*, has donated to a project against climate change. Given her donation, she believed the brand to have similar objectives, thereby attributing information about the endorser to the brand:

“Fenty Beauty by Rihanna. I have been using Fenty products for a while now and I love it. It's just perfect for me [...]. She just donated a lot of money to environmentally conscious companies that are doing things to help the climate change crisis. So, I know my homegirl Riri has to be doing things right with her products.”

Although Kira Wanderer believed in *Fenty Beauty*'s commitment to sustainability, Dr Mum mentioned its unsustainable packaging. Nevertheless, the founder and endorser *Rihanna* appeared to be a persuasive factor for still purchasing *Fenty Beauty*'s products, regardless of the brand's unsustainable practices:

“I love Fenty so much, but I've been trying to steer away from it because it's all in plastic packaging. But like, who doesn't love Rihanna? I mean, come on. Also, the whole line is endocrine disrupting- and chemical-free. So, if you really love Fenty, you're basically safe because Rihanna is amazing.”

Most BVs appeared to be impressed and convinced by brands' promotional activities and uncritically relied on their statements about sustainability. In one instance, a brand's initiative even convinced a BV to continue purchasing products from a brand, despite knowing that products were unsustainable. Hence, though BVs might not be directly sponsored by brands, brand activities still served as an encouraging factor when reviewing sustainable skincare products.

Medium-Specific Strategies

Medium-specific strategies describe review approaches in which BVs used medium-specific modalities to review products. YouTube is a video-sharing platform with unique features that distinguish it from conventional platforms, offering a variety of communication opportunities. By leveraging modalities such as auditory and visual elements, BVs had the opportunity to convey product information beyond traditional communication channels. In

doing so, BVs provided viewers with a more immersive and interactive experience of the product. Within this domain of medium-specific strategies, five categories were established: (1) Influencer Ethos, (2) Viewer Encouragement, (3) Senses, (4) Demonstration, and (5) Knowledge. In the following, these categories will be discussed more in detail.

Influencer Ethos

When evaluating skincare products, BVs integrated their beliefs and personal motivations as influencers into the assessment process. More specifically, they expressed their values, goals and missions concerning sustainability. This was demonstrated by Lisa David, who stated the belief that everyone has an environmental responsibility, therefore sharing her sustainable beauty routine with her viewers: *“We all have a duty to take care of our planet and here are just some things that I do.”*

Most BVs noted to have educational motivations regarding their review of sustainable skincare products. Here, BVs perceived themselves in an educational role, aimed at informing consumers about the importance of sustainable practices and sustainable product choices. For instance, Dr Mum argued that by providing educational content on sustainable products, she could empower consumers to make more informed product choices: *“I want to mention just at the very beginning that the main point of this video is to empower you to feel like you can be a more educated consumer or customer.”*

Besides educational missions, three BVs also stated to believe in transparency and authenticity, guiding them in their product selection and reviews. Based on these values, Ruby Penny and Eco Insight expressed a responsibility towards reviewing products truthfully, providing viewers with their honest opinions on sustainable products. For instance, Eco Insight expressed her commitment towards testing out products to give viewers insights on whether sustainable products are recommendable: *“I’m almost always going to be that person that goes ahead and tries products because I want to be able to tell you guys if it’s worth it.”*

These responses suggest that BVs believed to have a certain responsibility in providing viewers with educational and honest reviews of sustainable skincare products. Formulation Academy stressed influencers' responsibility, stating that BVs have a significant influence on consumer's shopping behaviour. Due to their position as intermediaries between brands and consumers, she perceived BVs as a vital link between the two parties. When using this key position to promote sustainability, Formulation Academy stated to believe beauty influencers have sufficient influence to shift the industry towards a more sustainable market:

“I would encourage beauty influencers to start mentioning the sustainability credentials of each brand they review. [...] It won't be easy, but the more influencers challenge brands on their environmental and social credentials, together with the shoppers, that's you and me, the more change we can make.”

This belief contrasts with Echo Vani's perception of the beauty industry. Echo Vani argued that the activities of influencers are not in line with sustainable practices and even promote unsustainable trends through excessive product consumption: *“For me specifically, beauty was the opposite [of sustainability]. How am I going to continue to promote [...] that you need this product, you need this nail kit, you need this gel or whatever.”*

Contrary to most BVs' belief of having a certain responsibility towards consumers, she noted to have experienced an internal conflict, in which her sustainable values and influencer practices did not align. She elaborated that she had shifted away from materialism and excessive consumption towards wanting to create change, and perceived her profession of being an influencer as unfitting to fulfil this mission:

“Is this being the change that I want to see? [...] I outgrew the [beauty] space. I need something deeper than these high consumption rates. I think my values and priorities just shifted and it was hard for me to stay in the old space. [...] But like in a nutshell,

it's the high consumption rates and the materialism that was associated with my beauty channel. I did not like that."

Most influencers stated to believe they have a substantial responsibility to provide sustainable product reviews to viewers to educate and inform them about sustainable product choices. In this context, vloggers argued that they can create sustainable change due to their intermediary positioning. While these BVs took a positive stance towards the promotion of sustainable products, only one BV questioned influencers' position in relation to sustainability. Echo Vani perceived influencers to be a promotional factor of unsustainability. While influencers reported to believe in encouraging and promoting sustainability through their reviews, they may not be entirely sustainable themselves due to their excessive consumption of products.

Viewer Encouragement

BVs used another medium-specific strategy to encourage their viewership to engage in certain activities related to the product and/or the brand. At the end of their videos, influencers urged viewers to leave comments, to subscribe to their channels and/or to turn on the notification bell. In most cases, however, BVs invited viewers to leave comments with input on the products they were reviewing. Often, these questions encouraged viewers to share their attitudes, experiences and insights towards reviewed brands and products. This is illustrated by Gita Johnson:

"I hope you enjoyed this video. Let me know if you've tried this brand, what your favourite products are, and what your experience has been with these products. If you have tried them, I would love to hear what y'all think and just kind of see how y'all are feeling about this brand."

In addition, BVs encouraged their viewers to suggest new sustainable products to try. For example, Eco Insight requested to leave a comment if viewers had any sustainable product recommendations that they would like to see reviewed: *“Are there other refillable, sustainably packaged products that you've been enjoying and that you think I should try out? Leave me a comment down below”*. Such responses suggest that viewership comments seem to provide BVs with valuable feedback on their product reviews. Based on this feedback, BVs can gain insight into the audience's preferences, allowing them to incorporate their interests into future videos. However, only three BVs specifically mentioned having realised viewers' feedback. For instance, Caitlyn Shine directly addressed to have made this video based on a viewer's input from social media: *“It's me, Caitlyn. Somebody on TikTok asked me for a skincare routine video. So, today I'm going to walk you through my skincare journey.”*

Besides encouraging viewers to engage in activities related to BVs' performance, they also motivated viewers to engage with brands. Here, Ruby Penny urged viewers to sign up to *Beauty Kitchen's* newsletter to learn about their sustainable initiatives:

“I would strongly recommend signing up to their newsletter and getting a feel for them as a company and all that they're doing to be as sustainable as possible, because I think they're one of the leading companies in terms of sustainability.”

In this context, the BV we called CosmetiCaroline expressed the importance of encouraging brands' sustainable activities. She argued that this can function as positive feedback for the brand, and in turn, encourage them to be more sustainable:

“I think whenever you see mainstream brands dabbling in the sustainable area, it's important to encourage that. That is an Instagram-Like or if you're already shopping that brand, making sure you're buying that [sustainable] product; just giving the brand a hint that the consumer is excited to see something that has a level of sustainability to it.”

However, such encouraging activities might not always be related to the promotion of sustainability. Kira Wanderer differentiated between a referral link and an affiliate link. Although she claimed that her link was not affiliated with the brand, both referral and affiliate links involve the possibility of benefits or incentives for the influencer. Therefore, even though Kira Wanderer stated that she was not financially compensated, she may still receive benefits from the brand when viewers signed up to *Grove Collaborative*:

“And if you're interested in signing up for Grove, you can always click on the referral link down below and you will get a gift when you sign up. I don't work for them. It's not an affiliate link. It's literally a referral code.”

Although beauty vloggers encouraged viewers to engage with their video content by leaving comments to provide feedback on product reviews, they rarely incorporate viewers' input into their videos. In some instances, BVs not only invited viewers to engage with the video content but also to participate in brand activities. While some BVs mentioned that engaging in brand activities serves as a means to get to know brands' sustainability or encourage its sustainable initiatives, their motives are questionable as encouraging viewers to engage in brand activities might also lead to promotional benefits on the part of the influencer.

Senses

Another medium-specific evaluation method was the use of senses to evaluate sustainable skin care products. BVs used different senses in their evaluation: olfactory, gustatory, tactile, and auditory. BVs used their olfactory, tactile, and gustatory experiences primarily to evaluate cosmetic attributes instead of sustainable ones. Using these senses, they analysed the products in terms of fragrance, consistency, texture and, in the case of edible lip products, even taste. For example, Dr. Awens used her olfactory sense to evaluate *Amazon*

Aware's moisturising face cleanser in terms of scent: *"It doesn't impart any odour to this. I don't detect any odour or scent."*

Based on the assessment of cosmetic elements such as fragrance and texture, BVs often assessed their satisfaction with these elements. For instance, Eco Insight expressed her dissatisfaction after smelling the skin serum by the brand *Ilia*: *"Oh, it smells like somebody melted Play-Doh into this container [...] I just can't wear it because the smell gives me a headache."*

In some cases, the evaluation of products' cosmetic properties was influenced by individual needs, such as skin type and desires, which had an impact on product satisfaction (see Individual Needs). Dr Awens, Caitlyn Shine and Eco Insight judged their sensory experiences of products in relation to their own needs, with Dr Awens sometimes assessing satisfaction beyond her own requirements by including the potential needs of her viewers: *"If you just hate fragrance in your skincare products from an experience perspective and you don't like smelling fragrance, you're not going to really encounter that with this."*

Only a few videos assessed sustainability based on sensory perception. Here, vloggers used a tactile-auditory approach and focussed on the packaging of the products, particularly their material. By tapping on the packaging of a product, BVs released a distinct sound that was derived from the materials used in the product's packaging. As mentioned earlier (see Product Attributes), certain product materials were considered more sustainable than others, such as cardboard, glass and aluminium. In this way, BVs highlighted the sustainable materials used in a product in addition to their verbal description of the product. For example, Artistic Visionary decided to use an additional auditory experience to describe that *MOB-Beauty's* eyeshadow palette is packaged in cardboard, using its characteristic sound to underline his point: *"It is a cardboard material. This can be recycled, which is nice"*.

While the beauty influencers primarily relied on smell and touch to evaluate the cosmetic properties, they also used auditory experiences in addition to verbal descriptions to

showcase the sustainable packaging. These auditory experiences matched the audio-visual nature of the videos and allowed not only the BVs but also the viewers to experience the sustainability of the product packaging. In this way, viewers were able to experience the sustainability of the packaging as BVs triggered sounds associated with sustainable materials. Nevertheless, only packaging materials were assessed in that regard, neglecting the appraisal of other sustainable attributes in the process, such as sustainable ingredients or animal welfare.

Demonstration

Due to the audio-visual nature of videos, BVs were able to describe products not only verbally or auditorily but also through visual demonstration techniques that stressed certain product features. BVs adopted three strategies to review products visually, namely by demonstrating their application procedure, product content and packaging.

Demonstrating the application process and product content were techniques that BVs used to highlight cosmetic attributes. By using the application process strategy, BVs highlighted how they used cosmetic products on their skin. The application process was at the centre of the video format 'Skincare Routine', in which BVs demonstrated a series of steps they deemed beneficial for treating the skin, incorporating several sustainable skincare products. In doing so, BVs not only verbally explained the application process of the products but were also able to visually display cosmetic effects. This strategy enabled BVs to share their experiences with products in a visual manner, allowing their audience to vicariously experience the cosmetic effects. For example, Alec Chandler highlighted certain cosmetic features of *Gen See's* brow gel by visually demonstrating its effects after applying the product: "*Can you see all that product just sitting on the skin? This is a very intense brow gel. So, I'm going to take a little towel and rub some of that off*". This enabled viewers to experience the effects of the product more vividly than through mere verbal descriptions.

This was also the case for the demonstration of product content. Using a sample of the substance, BVs visually demonstrated the cosmetic properties of products by testing their content on specific areas of the skin, such as the back of the hand. This is illustrated by Eco Insight, who applied a sample of *La Bouche Rouge Paris*' highlighter on her skin to demonstrate its effects: *"It's so shimmery. Can you see that?"*

Similar to auditory experiences (see Senses), sustainable attributes were only demonstrated through the packaging. When describing the product packaging, BVs often used certain camera modes to visually underline their verbal representation. For instance, by creating a close-up of the product, BVs highlighted products' sustainable materials. In this respect, Gita Johnson expressed her love for *Elite*'s packaging of the tinted lip balm by showing a close-up of its sustainable packaging, revealing a glass container and wooden cap: *"This is a little tinted lip balm that I have absolutely been loving. It is so nice. First of all, the packaging is really good."*

By using visual demonstration techniques, BVs were able to showcase products beyond mere description. The visual demonstration often revealed experiential information about the products, allowing BVs to let viewers experience the products vicariously. Similar to auditory experiences, BVs focused primarily on demonstrating products' sustainable packaging. As mentioned before (see Descriptive Strategies), product sustainability encompasses facets beyond sustainable packaging, such as animal welfare, sustainable ingredients, or the product life cycle. Given this multifaceted nature, BVs only assessed the sustainability of products to a limited extent using auditory experiences and visual demonstration techniques. This might be because the audio-visual modalities of videos are constrained to conveying only certain experiences, and some attributes might be less compatible with them for assessment. The sustainable packaging material might be the only sustainable product attribute that can be assessed through these medium-specific strategies.

Other attributes, such as product lifecycle, might not be assessable through these modalities and require more evaluative strategies.

Knowledge

The last established category was named Knowledge. BVs adopted a range of strategies to express their knowledge when assessing sustainable skincare products, ranging from additional sources, areas of uncertainty, and experiences to expertise.

BVs included additional information and sources when assessing sustainable skincare products to gather information beyond product information. BVs searched for information when product information was unclear or unknown, thereby gathering missing information to close knowledge gaps or to have supplementary information about products. This information assisted BVs in reviewing products, giving them further information for their assessment. In some cases, BVs were not transparent about their sources, particularly when using statistics and factual data. Using this information, BVs argued in favour of the sustainable products featured in their review, rather than their conventional counterparts. For instance, Kira Wanderer incorporated factual data to numerically accentuate cosmetic products' unsustainability, thereby emphasising the importance of purchasing green cosmetic products that she selected for her review:

“So today we're going to talk about eco-friendly beauty products. Now, beauty consists of a lot of different things. Today we're going to focus on makeup. And I have three items that I'm going to share with you that you can do to replace some resources and whatever. But why do we need to care about this and why are our makeup products so wasteful and harmful to the environment? Let me get my notes. Did you know most of the packaging made for makeup can take hundreds to thousands of years to decompose back into the planet, and that means we're using way more resources,

way more resources daily than what the planet can replenish. Therefore, eventually, we're going to run out because the planet cannot keep up."

When BVs cited sources, they referenced reviews by ordinary consumers or fellow YouTubers, or referred to official brand websites or websites where product information, such as the presence of chemical ingredients, could be monitored. However, the latter sources had the primary purpose to determine whether products were suitable for people with special health and skin needs, rather than to assess the level of sustainability of products. Only brands' official websites were explicitly consulted for information on sustainability, such as their environmental initiatives. Similar to product claims, they treated this information as unexamined descriptors, often repeating it verbally or depicting screenshots of the information: *"As for this Superbloom line that I'm talking about today, it's plant-based, vegan, cruelty-free and EWG-verified as being free of chemicals of concern, and this can all be found on their website"* (Naturalist Nina, talking about Grove Collaborative's skincare products). Only one beauty vlogger, called Eco Insight, criticised Eco Brows' brand name in relation to the information found on their website: *"Eco Brow, right? It sounds like it's going to be good and sustainable. I've looked at their website. I can't find what the sustainability claims are. I don't know what's eco about it"*.

Besides using additional sources, BVs drew upon personal experiences to assess sustainable skincare products. BVs' personal experiences with products were mostly unrelated to sustainability. Rather, they focused on the number of times they had used a product or the length of time they had used it: *"Okay, so the next brand, right is Tata Harper. And I've used this cleanser for a few days and I really actually quite like this"* (Beauty Brew Talks about her experiences with Tata Harper's Regenerating Cleanser). Similar to personal experiences, BVs mostly expressed to have expertise unrelated to sustainability. Some BVs highlighted their expertise through their educational background, referring to their certificates or degrees. While some worked in the healthcare sector as a dermatologist, corneal therapist or a nurse,

others were employed in the beauty industry as make-up artists or beauty journalists: *“I’m a skin therapist and corneal therapist specializing in treating and caring for the skin”* (Skin Guru in her video on sustainable skincare options, introducing herself to her audience).

Hence, although beauty vloggers mentioned having personal experiences and expertise when assessing sustainable skincare products, this knowledge was mostly unrelated to sustainability.

Their lack of experience and expertise in regard to sustainability was reflected in BVs’ areas of uncertainty. BVs expressed to be having difficulties with the lack of clarity around the concept of sustainability including its complex and challenging nature, as well as the misleading nature of brands’ green marketing. This is illustrated by Dr Awens explaining why she had previously refrained from reviewing sustainable skincare products:

“Now I get a lot of requests to please review more products that are sustainable. And the reason why I don't do that or talk a whole lot about it is not because I detest the planet. I simply don't know that much about sustainability - it is actually a very complicated topic and I think it's an area where brands can market heavily to us. And because we don't necessarily know all the ins- and outs of it, it's easy to be misled. And in some cases, I think it's highly possible that a brand or a product can claim to be good for the environment or carbon neutral, climate-friendly, even third-party verified, but what does that mean? Is it cutting down on waste? There are a lot of nuances that go into it, and I'm simply not that well informed [about sustainability]. It's not my area of expertise.”

Due to the limited experience and expertise of BVs and their expression of various uncertainties about sustainability, BVs expressed a lack of necessary in-depth knowledge about sustainability. Assessing the sustainability of a product might require a deeper knowledge of environmental impacts, ingredient sourcing and ethical practices, which they

might not be equipped to discuss in depth. This might have led them to rely on brand statements and product information (see Descriptive Strategies). Besides, as described above, other attributes might require an evaluative approach, as not all attributes are compatible with the audio-visual modalities and need additional strategies for proper evaluation. However, the lack of knowledge of BVs might have prevented them from evaluating sustainability attributes beyond descriptive and medium-specific strategies. This is might have led them to prioritise the evaluation of cosmetic attributes rather than sustainable ones, which will be discussed in the next chapter.

Evaluative Strategies

In addition to medium-specific strategies, BVs employed evaluative approaches. These strategies involved reviewing products and expressing subjective opinions, impressions, evaluations, and recommendations about them. Unlike descriptive strategies, evaluative strategies took into account BVs' perspective on the effects and performance of products. Here, three evaluative strategies were employed, namely (1) individual needs, (2) comparison, and (3) product results. During the assessment, BVs conducted cosmetic evaluations in which they prioritised the assessment of cosmetic attributes. As a result, they neglected to consider sustainable attributes in their evaluations. The following sections will discuss BVs' evaluative assessment in more detail.

Individual Needs

When incorporating individual needs into their assessment of sustainable skincare products, BVs focused on needs in relation to personal desires, skin conditions and health conditions. When assessing individual needs in relation to sustainable skincare products, BVs addressed whether products satisfied their cosmetic needs, rather than needs for sustainability. For instance, BVs addressed whether products were suitable for chronic illnesses, such as allergies. This is illustrated by Kaitlyn Rosemont emphasising the importance of clean

skincare products that are especially suitable for specific health concerns, thereby expressing a personal need for products prioritising well-being. While clean beauty suggests the absence of toxic and harmful ingredients and can be considered sustainable, Katlyn Rosemont's emphasised its effects on health and cosmetic outcomes, rather than sustainability: "*Clean beauty was my first love before I got into sustainability because I live with various chronic illnesses, and it's made a huge difference in my health.*"

Results suggest that there is a focus on health concerns, specific skin conditions such as skin tone, skin type and skin problems, as well as desires towards cosmetic attributes. Sustainability received less attention in BVs' assessment, as BVs prioritized cosmetic needs over environmental- and ethical requirements. Therefore, when evaluating cosmetic products, BVs focused more on cosmetic needs, overshadowing discussions about sustainable predilections.

Comparison

When using comparative approaches, BVs made evaluations based on the similarities or differences between two or more products. Subsequently, they assessed these findings and highlighted the products' advantages and disadvantages. For example, Dr Awens evaluated a hydrating cleanser and a balancing cleanser, both by the brand *Amazon Aware*. In a comparative process between these two products, she presented their cosmetic similarities and differences: "*It is a bit like the other one, and when you put it in your hands, it is very thin and runny. But this one in contrast to the other one, it does lather a bit more.*"

When BVs made a comparison between two products that they considered sustainable, they focussed on the cosmetic differences and similarities. Only Eco Insight evaluated sustainable similarities and differences of sustainable products. For instance, she assessed differences between the sustainable make-up sponges by *Everest Beauty* and *Honest Beauty*, highlighting the unsustainable packaging of one product:

“Everest Beauty’s sponge came completely package-free, no plastic whatsoever. The one from Honest Beauty did come in a cardboard box with plastic wrap around it, which I’m not a huge fan of.”

When comparing conventional products with products that were perceived as sustainable, BVs were more critical in terms of sustainability. During the videos that we categorised as ‘sustainable swaps’, vloggers aimed to promote sustainable products (see Classification of Videos). These videos encompassed an in-depth exploration of the differences between traditional and alternative products whilst extensively elaborating on the negative impact of the latter on the environment. Using this comparative approach, BVs promoted the use of alternative products over conventional ones due to their sustainable advantages. In Kira Wanderer’s video on sustainable swaps, she advocated the switch to towelettes instead of disposable makeup wipes, highlighting it as a sustainable alternative: *“Towelettes are definitely a nice replacement and a nice product to have to be eco-friendly in regard to makeup.”*

These results suggest that BV used different comparative approaches when evaluating sustainable skincare products. BVs tended to prioritise cosmetic attributes while neglecting sustainable attributes when comparing products that were perceived as sustainable. Nevertheless, when comparing conventional- to sustainable products, BVs paid more attention to their sustainable differences. Here, BVs framed unsustainable products in terms of their disadvantages, while focussing on sustainable advantages of the promoted alternative products, for example by highlighting their environmental benefits.

Product Result

While BVs employed comparative processes and analysed individual needs regarding sustainable skincare, they also provided an overall assessment towards products’

performance. In this context, vloggers provided an evaluative verdict on products, referring to products' hedonic- and utilitarian value, and expressed their loyalty towards products.

When BVs talked about the hedonic value of products, they evaluated products based on their subjective experiences. Here, products' performance elicited several positive feelings related to tactile sensation, gratification, and product-induced elevation based on the cosmetic effects of products. The tactile sensation was a hedonic experience that BVs expressed the most. This sensual experience was related to feelings of refreshment, smoothness, hydration, or moisture. For instance, Naturalist Nina expressed a pleasant experience after using *Grove Collaborative's* moisturizer: *"I've been feeling moisturised this whole time, so that's great"*.

Tactile experiences were followed by the expression of gratifying experiences with products. Here, BVs expressed positive feelings such as pleasure and enjoyment after using skincare products. This is illustrated by Gita Johnson, who expressed to enjoy the effects of *OC's* cleansing milk: *"It's so good. It leaves my skin feeling amazing. And yeah, just overall a great one"*. Besides that, Cailyn Shine described her advanced experience with the brand *Upcircle*, stating that these products elicited a feeling of self-indulgence, thereby inducing an elevated experience: *"It just feels so luxurious to be like rubbing oil all over your face."*

When assessing the utilitarian value of products, BVs focused on their practical or functional abilities. Products were deemed useful when they met basic functions, while those that failed to do so were classified as unsatisfactory. The expected value was based on the product's ability to fulfil a particular purpose, such as its suitability to improve skin conditions, and health conditions or generate positive cosmetic outcomes. Utilitarian criteria were typically determined by the nature of the product and its advertised primary functions. For instance, products marketed as moisturisers were tested for their ability to moisturise. Dr Awens serves as an example, expressing her distinctive expectations for the performance of *Amazon Aware's* moisturiser.

“I did not find that this was particularly moisturizing in the sense that it didn't really behave like a moisturizer. I just find that this is hydrating, but it doesn't really seal in the moisture. I found it in terms of consistency and performance more like a hydrating serum.”

Dr Awens also distinguished between utilitarian and hedonic value, stating that the products were effective for their functional purpose but lacked hedonic appeal: *“The body cream and the body lotion are both really nice. They get the job done for moisturising dry skin. Not particularly fancy. They're not bad products, though”*. This differed from other BVs who tended to value product functionality more highly and described pleasurable experiences when functional abilities were well met: *“I'm a makeup artist and for sanitary reasons, I like to scrape out my products. You can see that I already scraped it out and I really, really love it - really beautiful”* (Artistic Visionary about a product from *MOB Beauty*)

In some cases, when products received positive evaluations, BVs conveyed their loyalty to these products by adding them to their skincare routines, using them beyond the scope of the product review, or expressing their intention to repurchase the products.

In most cases, sustainability did not play a significant role when BVs made a final verdict of products under consideration. Only Eco Insight considered sustainable attributes in her final verdict on a product. She expressed her disloyalty towards *Eco Brow's* products due to being unsatisfied with their product sustainability:

“I feel like the name is really misleading and it's a little bit of greenwashing for them to call themselves Eco Brow. The only thing that's eco-friendly is the formula and not the packaging and the packaging is important. I'm going to keep these, I'm going to use them up and then I'm not going to repurchase from them, not until they change their practices. That's it for my fails”.

BVs often evaluated sustainable skincare products based on their cosmetic outcomes in which hedonic- and utilitarian experiences played a significant role when deciding whether products were satisfactory. When products were considered satisfactory, BVs sometimes expressed loyalty towards these products. In this evaluative process, BVs predominantly focused on cosmetic (dis)satisfaction rather than (dis)satisfaction with sustainable attributes. Hence, BVs' final verdict was primarily based on cosmetic attributes, neglecting the consideration of sustainable components in their assessment process.

Noticeably, it was found that BVs paid little attention to sustainable attributes in both medium-specific and evaluative strategies. Certain sustainable attributes cannot be assessed through audio-visual modalities and require evaluative assessments, which BVs did not engage in. Hence, other sustainable attributes beyond the packaging material were completely disregarded. This might be due to the lack of knowledge on the part of BVs, stemming from their insufficient experience and expertise in sustainability, to properly assess sustainable product components.

Discussion

In the following, the main findings will be discussed in relation to the research questions, followed by a discussion of the theoretical- and practical implications. Afterwards, limitations and recommendations for future research will be considered and lastly, an overall conclusion will be drawn.

Main Findings

The purpose of this study was to investigate how beauty vloggers construct their assessment of sustainable skincare products. Using the Theory of Planned Behaviour and Expectancy Disconfirmation Theory, this study examined beauty vloggers' perspectives and strategies for assessing sustainable skincare products. A qualitative content analysis was conducted, analysing 37 videos from 32 content creators on YouTube. To the researcher's

knowledge, no prior study investigated beauty vloggers' assessment of sustainable cosmetic products. Previous research has focused on social media influencers' characteristics and/or their influence on purchase intent or subsequent behaviour (see Lima & Brandão, 2022). This study offers new insights into the construction of beauty vloggers' reviews, particularly focussing on their assessment of product sustainability. As social media influencers play a crucial role in consumers' decision-making processes (see Khoirotunnisa, 2023), this study expands the understanding of consumers' journey towards sustainable product consumption.

The study identified four main findings. First, beauty vloggers used a reductionistic approach to assessing sustainability. While most brands take a holistic approach to sustainability addressing social, ethical, and environmental components (Ramli, 2015), beauty vloggers discussed sustainability by highlighting sustainable attributes in isolation. In doing so, they perceived individual green attributes as sustainable, rather than treating sustainability as a multi-faceted concept involving several green attributes. Marketers use a variety of tools to communicate environmental information to consumers, using textual or associative messages to emphasise sustainability to consumers (Grebmer & Diefenbach, 2020; Lim et al., 2020). When reviewing sustainable skincare products, beauty vloggers discussed green information separately rather than considering all green product information. This suggests that single green attributes carry more weight than the overall accumulation of green attributes in beauty vloggers' assessment. It appears that these individual attributes were sustainable enough for them, rather than assessing the level of sustainability on the basis of these attributes.

Second, beauty vloggers relied uncritically on brand claims when assessing sustainability, treating them as unexamined descriptors. Unexpectedly, beauty vloggers did not assess their satisfaction with green product information provided by the brand (see Spreng

et al., 1996). Rather, beauty vloggers relied on green information in the form of brand statements to assess sustainability. Green products are designed in such a way that implicit and explicit design cues trigger associations with sustainability, thereby providing meaning to consumers (Granato, 2022). These green associations seemed to be sufficient for beauty vloggers to consider a product sustainable, although some brands might engage in greenwashing, in which their actual behaviour deviates from green claims (de Jong et al., 2020). Some beauty vloggers stated to be aware of greenwashing tendencies yet failed to assess brands' green statements in relation to their actual behaviour. Consequently, beauty vloggers' assessment of sustainability seemed to be impacted by marketers in which vloggers adopted brands' narratives about product sustainability. Rather than being mediators of marketing messages, beauty vloggers seemed to be promoters of brands, echoing green product claims without adding their own critical perspective.

Third, beauty vloggers primarily focused on reviewing cosmetic attributes rather than sustainable attributes. Beauty vloggers have certain cosmetic expertise, aiding them in demonstrating, reviewing, and recommending beauty products to consumers (Chen & Dermawan, 2020). During their assessment of sustainable skincare products, beauty vloggers focused on critically assessing cosmetic attributes, neglecting the discussion of sustainable properties. Their expertise seems to be limited to cosmetic evaluation, as sustainability did not receive significant consideration during their reviews. This suggests that beauty vloggers are domain-specific experts, whose knowledge is deficient to evaluate product sustainability. Consequently, beauty vloggers' understanding of beauty products seems to be restricted to cosmetic elements, thereby not providing them with sufficient knowledge to assess product sustainability.

Lastly, beauty vloggers employed audio-visual strategies to assess and demonstrate packaging sustainability. Butkevičienė et al. (2008) have demonstrated that packaging design cues, such as verbal (e.g., product information) and non-verbal (e.g., material) package components are important communication tools influencing consumers' decision-making. Various sustainable packaging elements differ from their conventional counterparts (Granato et al., 2022). For instance, compostable biomaterial packaging produces a noisier "glass-like crinkling sound", distinguishing it from products that use conventional packaging (Evans et al., 2020). Beauty vloggers seem to leverage these distinct sustainable packaging experiences, using audio-visual strategies to analyse and demonstrate packaging sustainability to viewers. Through these audio-visual techniques, beauty vloggers are given the opportunity to convey product sustainability on a sensory level, allowing viewers to experience it vicariously.

***Subquestion₁:** How do beauty vloggers use arguments regarding appearance and attractiveness when evaluating sustainable cosmetic products?*

Appearance and attractiveness are inevitable parts of beauty vloggers' activities, crucial to building trust with their audience (Ding et al., 2019) or to facilitating acceptance of persuasive messages (Ramadanty et al., 2020). Cosmetic products are found to satisfy beauty- and care needs (Todd, 2004), and especially sustainable products are deemed important to consumers aiming at enhancing their appearance or maintaining their youth (Tirone, 2007, as cited in Kim & Chung, 2011). Although this suggests that green cosmetics are useful products for improving and modifying beauty vloggers' appearance, beauty vloggers did not use attractiveness and appearance arguments when evaluating sustainable skincare products. Instead, they expressed health- and skin needs suggesting that these requirements are more important in beauty vloggers' assessment of sustainable skincare products than appearance and attractiveness.

Subquestion₂: How do beauty vloggers incorporate attitudes towards green products when assessing sustainable cosmetic products?

When assessing sustainable skincare products, beauty vloggers expressed positive attitudes towards reviewing sustainable skincare products. In the form of their influencer ethos, including values, goals and missions concerning sustainability, beauty vloggers argued to have an educational responsibility to provide consumers with informational and honest reviews about sustainable skincare products. Cheung and To (2019) stressed the role of consumers' environmental concerns, impacting purchase intentions for green products due to associated environmental and social benefits. Applying this to the present context, beauty vloggers seemed to perceive sustainable skincare product reviews as a social contribution, as they emphasised their responsibility to educate and inform end-consumers about sustainable products. Therefore, they perceived sustainable skincare reviews as a pro-social good that contributes to the social benefit of educating consumers about sustainable consumption choices.

While beauty vloggers stressed the importance of reviewing sustainable products, they rarely engaged in in-depth analyses of sustainable attributes. Rather beauty vloggers focused on assessing cosmetic attributes while relying on brand statements to discuss product sustainability. Hence, there seems to be a disconnect between their positive attitude towards assessing sustainable products and their uncritical assessment process, which might present an attitude-behaviour gap. In the context of sustainability, this attitude behaviour gap is also called the green gap and reflects a discrepancy between attitudes towards sustainability and respective behaviour (ElHaffar et al., 2020).

In the present study, this green gap could be explained by drawing on the study by Simpson and Radford (2014). In their study, they found that consumers take different

approaches when making decisions about sustainable products. While reality-driven consumers take a pragmatic and holistic approach and engage in more elaborate decision-making processes, trend-driven consumers take a reductionist approach to sustainability and are uncritically accepting of sustainability claims. While Simpson and Ranford (2014) studied regular consumers, their study findings are also reflected in the current context of beauty vloggers. Beauty vloggers' evaluation behaviour is similar to that of trend-driven consumers who do not have a deep commitment to sustainability, resulting in a superficial and reductionist approach to sustainability. In line with trend-driven consumers, beauty vloggers were inclined to talk about sustainability but did not critically engage with product sustainability. As a result, beauty vloggers might be trend-driven influencers who are more interested in discussing the general importance of sustainability than in critically engaging with sustainability claims of brands and products.

Another explanation might be that beauty vloggers are affected by bounded rationality. The Theory of Bounded Rationality (Simon, 1990) assumes that rational behaviour is limited and determined by information that is available during the decision-making process. Rather than making optimal choices, individuals will use the information available to them to achieve satisfactory outcomes (Simon, 1990). Some of the beauty vloggers included in the sample claimed to be very unknowledgeable on the topic of sustainability. The Theory of Bounded Rationality might help to explain why beauty vloggers tended to use any information that was easily available to them, such as brand claims. Beauty vloggers' limited knowledge might have resulted in choosing to assess products based on available information in the form of brand claims, considering this assessment strategy as sufficient, rather than critically analysing product sustainability.

Bounded rationality and trend-oriented motivations might present two explanations for beauty vloggers' green gap regarding assessing sustainable skincare products. Further research is needed to investigate whether this disconnect is indeed caused by afore-mentioned phenomena or whether other mechanisms might be responsible.

***Subquestion₃:** How do beauty vloggers incorporate their perceived behaviour control, obstacles, and expertise, related to their prior knowledge and/or experiences, when assessing sustainable cosmetic products?*

Although beauty vloggers are considered experts on beauty-related topics (Chen & Dermawan, 2020), they reported to have limited knowledge in terms of sustainability. Beauty vloggers professed to have little understanding of sustainability due to uncertainties, as well as a lack of experience and expertise in that regard. Restricted expertise might be affecting vloggers' perceived behavioural control due to presenting an obstacle for them in assessing product sustainability. Kumar et al. (2021) introduced the concept of consumer knowledge, referring to consumers' prior knowledge of green products and labels. When assessing sustainable products, this knowledge is necessary to process green product information, as these are often displayed in a particular format (e.g., fair trade labels) (Kumar et al., 2021). Linked to that, Wang et al. (2019) found that consumers with green product knowledge engage in a cognitive assessment process whereby they incorporate existing product information, ultimately resulting in an evaluation of the product. Although these studies examined consumer knowledge, this might also apply to the present study context. Beauty vloggers' expertise might have been insufficient to assess sustainable properties elaborately, as this would have required domain-specific knowledge about sustainability that beauty vloggers did not possess. As a result, they might have relied on brand statements instead.

Subquestion4: How do beauty vloggers incorporate their own subjective norms, as well as viewers' needs, viewers' expectations, and viewers' engagement into their assessment of sustainable cosmetic products?

During beauty vloggers' assessment of sustainable skincare products, most beauty vloggers did not observably incorporate subjective norms, viewers' needs and expectations into their assessment. This finding is unexpected given that previous studies have found that satisfying viewers' needs facilitates an emotional bond between the content creator and the audience (Ki et al., 2020), as well as increases feelings of trust and familiarity, leading to a greater impact on audience product and endorsement acceptance (Reinikainen et al., 2020).

Instead of engaging in dynamic interactions that allow for audience interaction and co-creation (Izogo & Mpiganjira, 2022), beauty vloggers only encouraged dialogical interactions between influencers and viewers. Most of the beauty vloggers in the current sample were nano-influencers with a small number of views. It might be that these beauty vloggers did not have sufficient input from viewers to noticeably respond to social pressure, viewers' needs and expectations, and thus only encouraged this form of interaction. A case study by Zhang and Lee (2023) identified a similar pattern examining the beauty vlogger *Zoe Sugg*. They concluded that viewer encouragement can facilitate audience engagement by forming a connection between viewers and content creators. Engagement factors such as likes, subscribers, and comments are crucial for video popularity (Hoiles et al., 2017). Due to mostly being nano-influencers, beauty vloggers in the current study might have used these strategies as a ritual to elicit responses from their audience to encourage audience engagement, build a channel community or promote their videos, rather than instrumentalising subjective norms, needs and expectations of viewers for their assessment of sustainable skincare products.

Subquestion₅: How do beauty vloggers incorporate product attributes, expectations, utilitarian- and hedonic value and individual differences regarding sustainable cosmetic products into their assessment?

Rather than assessing sustainable product attributes, beauty vloggers focused on assessing cosmetic elements. This preference towards assessing cosmetic properties over sustainable ones might be due to individuals preferring immediate gratification over of delayed gratification, also known as temporal discounting. The longer the delay until the reward is received, the less the individual values this future reward (Ballard & Knutson, 2009). During their evaluation of cosmetic elements, beauty vloggers assessed their satisfaction based on cosmetic expectations regarding individual needs, as well as evaluated their utilitarian- and hedonic value. In doing so, cosmetic effects produced timely satisfaction when meeting functional expectations, but also provided sensory- and hedonic experiences such as tactile sensation, cosmetic gratification, and product-induced elevation.

These cosmetic effects were often observable and tangible results for beauty vloggers and viewers upon application, giving them a clear understanding of products' cosmetic impact. Beauty vloggers were able to use a combination of descriptive, sensory, and demonstrative strategies to communicate cosmetic effects to viewers. Due to these manifold modalities, beauty vloggers had the possibility to communicate cosmetic effects beyond mere description, thereby letting viewers vicariously experience cosmetic outcomes. For instance, beauty vloggers demonstrated the texture of moisturizing creams using visual demonstration techniques. Because of cosmetic attributes' immediate and visible results, cosmetic discussions were straight-forward for beauty vloggers, allowing them to instantly share their experiences through various modalities.

In contrast, sustainable attributes were not assessed to the same degree as cosmetic attributes. Sustainable attributes are credence attributes, and Darby and Karni (1973) describe that consumers are unable to evaluate them because they do not possess the expertise or

would have to undertake high costs to obtain the information necessary to do so. Similar to regular consumers, assessing sustainable elements of a product can be challenging for beauty vloggers with limited knowledge in the field of sustainability, as it requires time, effort, and specific skills to obtain and explain information verbally. Beauty vloggers might find this assessment process less rewarding, as evaluating these credence characteristics is not immediate but rather delayed.

Beauty vloggers only assessed packaging sustainability, using visual and auditory strategies to communicate these effects to their viewers. This presentation style required less explanation as the visual and auditory modalities spoke for themselves, making assessing it immediately accessible to beauty vloggers with no expertise and at low cost. It is possible that vloggers did not discuss other sustainable attributes, such as sourcing or manufacturing, due to limitations in their sustainability expertise, making them unable to evaluate them according to timely satisfaction. Furthermore, the beauty vloggers might have been reluctant to compensate for this lack of expertise with high costs in order to obtain enough information for an adequate assessment of the sustainable properties. For example, gathering sufficient and accurate information on sustainable attributes might be a time-consuming process that beauty vloggers were not willing to engage in. This might have resulted in these attributes being neglected in their product reviews. Further research is needed to determine whether beauty vloggers are indeed affected by temporal discounting and whether this causes them to overlook sustainable attributes in their assessment process.

Subquestion 6: *How do beauty vloggers incorporate product information into their assessment of sustainable cosmetic products?*

Rather than assessing sustainable product information, beauty vloggers uncritically relied on information provided by the brands. Product claims served to identify product sustainability and were used as unexamined descriptors during beauty vloggers' assessment

process. In some cases, beauty vloggers searched for additional sources to gather further information about products. Among other things, beauty vloggers consulted brand official websites as a source, thereby not only relying on product claims but also brand claims.

As no prior study has investigated beauty vloggers' product information processing, this research will explain the present results using research on regular consumers. To what extent consumers process product information is dependent on their ability and motivation. The *Elaboration Likelihood Model* describes that an individual's involvement level determines the selected information processing route (Kumar et al., 2021). While individuals in low-involvement conditions (i.e., low ability or low motivation) use peripheral cues, consumers in high-involvement conditions (i.e., high ability or high motivation) process information in a deliberate manner using central cues. Consequently, when low-involvement consumers are confronted with green product information, they use cognitive heuristics to evaluate the product, whereas high-involvement consumers carefully evaluate the presented information by examining core arguments (Kumar et al., 2021).

Prior knowledge can influence how individuals process information. When knowledge is accessible, it can be effectively incorporated into information processing. However, when knowledge is limited or inaccessible, individuals rely on peripheral cues (Brucks et al., 1988). Knowledgeable individuals process information more thoroughly (Sujan, 1985; Chebat et al., 2001). Kumar et al. (2021) found that informed consumers rely on personal experiences to process information and evaluate the congruence of green advertising information with their own knowledge. They concluded that consumers with an understanding of green products use a central processing route, while less informed consumers face challenges in processing green advertising information in depth (Kumar et al., 2021). Following this line of reasoning, beauty vloggers might have intended to engage in critical reviews of sustainable skin care products. However, their ability to assess sustainability in depth might have been hindered by their insufficient knowledge to process green product information. As a result, they might have

been struggling to evaluate brands' sustainability claims, thereby relying upon them without verifying their truthfulness.

Moreover, this might have made them more vulnerable to the persuasive marketing tactics of brands. As identified, beauty vloggers expressed to be positively impacted by brands' activities. A study by Parguel et al. (2015) investigated consumers' level of knowledge in relation to their perception of greenwashing. In contrast to knowledgeable consumers, non-expert consumers were more susceptible to being misled by nature-evoking elements, leading to false perceptions of brand greenness (Parguel et al., 2015). Applying these findings to the present context, beauty vloggers' inability to process green product information might have facilitated persuasion, resulting in them being uncritically accepting of sustainable claims without understanding the nuances or verifying the accuracy of the information.

Theoretical Implications

This study offers new insights into the customer journey by examining how beauty vloggers assess sustainable cosmetics products. Prior research primarily examined social media influencers' characteristics (see Lima & Brandão, 2022) and their impact on consumers' decision-making processes towards sustainable product consumption (see Khoirotunnisa, 2023). This study extends this research, acknowledging beauty vloggers' product reviews as an important step in the consumer journey towards sustainable product consumption. In doing so, beauty vloggers are recognised as a crucial bridge between brands and consumers, providing key insights into their subjective interpretation and understanding of marketing messages and products, which are then passed on to consumers.

In the present research, the Theory of Planned Behaviour (TPB) and Expectancy Disconfirmation Theory (EDT) provided a comprehensive theoretical framework for understanding beauty vloggers' assessment of sustainable skincare products. Previous

research by Kim and Chung (2019) supported that TPB significantly predicts purchase intention for organic cosmetics. This study extends these findings, showing that the TPB can also be applied in the context of social media influencers, investigating their assessment construction of sustainable products. Perceived behavioural control appears to be particularly important in beauty vloggers' assessment construction of sustainable skincare products, as they reported limited knowledge of sustainability, which could have affected their ability to assess such products.

While the TPB focused on beauty vloggers' determinants towards their assessment, the EDT effectively discussed product factors impacting their satisfaction and dissatisfaction. In doing so, the EDT does not only predict factors impacting regular consumer satisfaction but also provides a good theoretical foundation in the context of influencer satisfaction. Here, product attributes, hedonic- and utilitarian value and individual predilections seem to be important factors, impacting beauty vloggers' satisfaction regarding cosmetic assessments. Hence, the combined framework allowed for the identification of individual- and product-related factors crucial in beauty vloggers' assessment of sustainable skincare products. While the TPB focused on determinants, such as influencers' ethical considerations when assessing products, the EDT captured relevant product factors contributing to vloggers' (dis)satisfaction.

However, the EDT and TPB are theoretical frameworks commonly used to examine the internal mechanisms and processes of individuals, such as consumers. Beauty vloggers often engage in self-impression management by organising their videos into a logical and compelling narrative (Olsson, 2019), resulting in staged content (del Rio Carral et al., 2022). Therefore, beauty vloggers' review content might not reflect their true assessment processes and instead represent a staged assessment construction. For example, beauty vloggers might adjust their responses to appear likeable, meaning that their video responses do not necessarily represent their authentic experiences, expectations, and opinions. The chosen

methodology, namely the content analysis, was not equipped to distinguish such staged evaluation processes from genuine ones. Thus, it is plausible that the methodology used in this study, in conjunction with the selected theories, did not adequately capture the genuine assessments of beauty vloggers.

When using the EDT and TPB as a theoretical foundation, a multi-methodological approach might be more appropriate when studying beauty vloggers' review videos. Combining an interview study with a content analysis might be one possible solution. Interviews can more accurately reveal beauty vloggers' cognitive and internal mechanisms, such as attitudes and subjective norms. By posing questions that directly address these cognitive constructs, researchers can obtain more in-depth and targeted responses from beauty vloggers. A content analysis allows these findings to be contextualised with tangible review behaviours as displayed during their reviews. Additionally, interview responses can be compared to the review assessment behaviours to identify any convergence or discrepancies between the observed content and beauty vloggers' self-reported insights. Therefore, a combination of interviews and content analysis might offer a more comprehensive and nuanced perspective on beauty vloggers' review constructions, as the results of these different approaches can be complemented and compared.

Practical Implications

The results indicate that beauty vloggers are uncritical assessors, as they tend to act as brand advocates, focusing on brand statements when assessing sustainability. To leverage beauty vloggers' susceptibility to green claims, brands should prioritise green attributes by making them more salient and appealing. In the present study, it was common for beauty vloggers to adopt and verbally communicate brands' green claims to their audience. Therefore, written claims are of utmost importance and should be phrased in a way that they convey the key sustainable elements of products. Beyond verbal descriptions, beauty vloggers

used audio-visual communication strategies to convey virtual product experiences to viewers. Brands should incorporate these modalities into their product design to maximize auditory and visual experiences. Using a combination of highly visible green claims and more distinct sounds of sustainable materials might create a rich experience of sustainability for beauty vloggers, as well as viewers. For example, brands could incorporate compostable biomaterial packaging that produces a noisier sound than traditional packaging (see Evans et al., 2020) and visible slogans on the front of the packaging that include the products' key sustainable initiatives. Incorporating such easily recognizable audio-visual green cues into products might allow beauty vloggers to showcase product sustainability better.

In the present study, beauty vloggers reported aiming at educational and honest reviews about sustainable skincare products. To adhere to their own goals, beauty vloggers should focus on educating themselves to be able to critically engage with product sustainability. Rather than functioning as brands' instruments promoting their messages, beauty vloggers should rely on their own pre-determined criteria that are needed to consider a product sustainable. Having such criteria might give beauty vloggers a roadmap guiding them in their assessment of product sustainability. Another option would be to invite experts on product sustainability. While beauty vloggers can focus on their area of expertise in assessing cosmetic attributes, experts can consult them on product sustainability. Experts might have better knowledge of ways to assess sustainable elements independent of brand claims, as well as might be more susceptible to identifying greenwashing. Hence, educational measures and expert collaborations might result in a more critical and extensive assessment of product sustainability, thereby supporting beauty vloggers in achieving their goals of providing educational and honest reviews.

Given the uncritical reflection of beauty vloggers on the sustainability of products, end consumers should be cautious when seeking advice on sustainability issues. Although providing detailed and critical advice on cosmetic properties, they paid insufficient attention

to sustainability in their assessment process. De Veirman and Hudders (2019) conducted a study which found that consumers were more sceptical of influencer content when sponsorships were disclosed, compared to videos without disclosed sponsorships. In the former case, consumers recognised the content as advertisements and were able to identify influencers' persuasive motives, resulting in perceiving them as less credible (De Veirman & Hudders, 2019).

The present sample did not include product reviews with disclosed sponsorships, suggesting that the content was not controlled by brands. Yet, vloggers still failed to critically assess sustainable brand claims, thereby acting as brand advocates. Only a small number of creators were introspective and reflective when assessing sustainable products, such as the vloggers we called Echo Vani and Eco Insight. Therefore, it is important for consumers to remain highly sceptical of any sustainable product recommendation, regardless of the sponsorship status of the videos. When seeking reviews on sustainable cosmetics, consumers should limit themselves to consulting beauty vloggers who demonstrate a high level of introspection and reflection.

Another implication beyond the scope of this study would be to create a comprehensive system of categorising cosmetic products to facilitate the identification of sustainability. It is recommended that institutions such as the European Union and the US Food and Drug Administration adopt an exhaustive categorisation of product sustainability that incorporates ethical, social, and environmental sustainability. Turunen and Halme (2021) have developed a holistic model in which different shades of green indicate the degree of sustainability of fashion products, considering their environmental and social components. Adapting this model for cosmetic products could attenuate brands' control and power over sustainability claims, lead to a decentralised indication of sustainability, and ease beauty vloggers' - and consumers' identification of product sustainability.

Limitations and Future Research

This study is not without limitations. First, YouTube Data Tools was used as a tool to create a list of videos based on provided search terms. Only a relatively small proportion of this list seemed to be relevant to the present research aim. It might be that the search terms did not accurately reflect keywords used by beauty vloggers for reviewing sustainable skincare products. Other terms might be more successful in gathering relevant product reviews on sustainable skincare products. In this sample, the use of the search term 'green' was considered as it is often used as a synonym for the term sustainable. However, using this keyword in the search query resulted in obtaining too many videos that were irrelevant to the aim of the study, such as green coloured products or products containing the ingredient green tea. Even after excluding these unsuitable keywords, many videos were still not related to the purpose of the study, resulting in only 37 videos being relevant for the data analysis. Hence, it is suggested that future research investigates relevant keywords that beauty vloggers use when reviewing sustainable skincare products to identify more suitable videos.

Second, the present data exhibits substantial variability, as demonstrated by the significant standard deviation of video views. The wide range of views might limit the generalisability of the findings, which might only apply to the unique characteristics of the sample and thus, not be applicable across the population. Therefore, future research should investigate different groups of beauty vloggers with varying sets of characteristics. While the present sample mostly incorporated nano-influencers with a limited number of views, it would be interesting to investigate whether assessment processes differ from macro-influencers with a huge following. For instance, influencers with more followers and views might engage differently with their audience due to higher perceived social pressure and engagement which might affect the way they interact with their audience. The study discovered limited arguments related to subjective norms; however, a different sample including more successful beauty vloggers might yield different outcomes.

It should be noted, however, that the search-term-based approach employed in this sample allows for more diverse content on sustainability and better replicability compared to an approach based on the number of views. A keyword-based approach enables the collection of a wider range of videos that might address broader aspects of sustainability, resulting in a more exhaustive perspective on the topic of sustainability, rather than prioritising the success rate of videos. Furthermore, using a sampling method based on search terms increases the chance of collecting more nuanced content related to sustainability, which does not necessarily require a high number of views, but rather a high level of relevance to sustainability. Moreover, view counts are highly dynamic and can change over time. Videos with initially low view counts might gain more views over time. Search terms provide a more stable and consistent sampling strategy for gathering videos by focusing on the review content, which is less variable. Hence, a search-term-based sampling method is less prone to variation, while allowing for gathering content that is highly relevant to the topic of sustainability.

Besides that, this study involved beauty vloggers who expressed to have limited knowledge of sustainability. It would be interesting to see whether content creators with higher reported knowledge use different assessment approaches compared to unknowledgeable vloggers. *Sinnfluencers*¹ are green influencers who encourage their audience to adopt a more ethical lifestyle by sharing green food recipes, sustainable fashion, and travel options, as well as green cosmetics, thereby promoting sustainable consumption patterns (Stiefvatter, 2022; Yildirim, 2021). Unlike influencers in this study, sinnfluencers perceive themselves as experts on ethical topics, as found in a visual content analysis of influencers' Instagram posts by Stiefvatter (2022). Sinnfluencers differ from mainstream influencers in that they provide ethical product recommendations, in line with their motives against overconsumption and materialism, rather than unethical product recommendations (Stiefvatter, 2022; Yildirim, 2021). Due to their reported expertise in ethical topics and their

¹ The term *sinnfluencer* is composed of the German word *Sinn*, meaning purpose or sense, and the word *influencer* and can be translated to purpose or sense influencer.

ethical motivation, influencers might assess sustainable products differently from the non-knowledgeable influencers in this study.

Lastly, another limitation relates to the categorization of video sponsorship and affiliations for risk assessment purposes. This was implemented as an additional measure to transparently disclose the potential for videos to be sponsored or affiliated with a brand. However, whilst this categorization indicates the risk of sponsorships or affiliations, it cannot guarantee their occurrence. The sample consisted mostly of nano-influencers with a small number of views, making it possible to assume that most videos were not sponsored by brands, but this might not be the case for beauty vloggers with more views. Thus, there is a risk that some beauty vloggers were affected by undisclosed sponsorship and affiliation. Consequently, it might be that some videos did not reflect beauty vloggers' own assessment of sustainable products, but rather a brand-driven review process. This might have led to a less critical approach to reviewing products, as demonstrated by some beauty vloggers in this sample.

Conclusion

The present study aimed to identify beauty vloggers' assessment of sustainable skincare products. The following research question was formulated: *How do beauty vloggers construct their assessment of sustainable skincare products?* A qualitative content analysis was conducted, including 37 product reviews of 32 content creators, which were transcribed and analysed based on beauty vloggers' strategies to assess sustainable skincare products. It can be concluded that beauty vloggers' assessments are rather subjective and superficial due to their uncritical and restricted perspective on sustainability. While they conducted in-depth analyses of cosmetic attributes, sustainable properties were neglected in the process. The results indicate that beauty vloggers are no experts on sustainable skincare products due to their incomplete assessment process.

While the significant standard deviation of views limits the generalizability of the results, no prior study has investigated beauty vloggers' assessment of product sustainability, although product reviews are an important step in consumers' decision-making process regarding green products. Hence, this study extends previous studies by providing a new perspective on impacts on the customer journey towards sustainable skincare consumption. This study clearly demonstrates beauty vloggers' lack of expertise in product sustainability, but also raises questions about whether more successful or knowledgeable vloggers behave differently in their assessment process of sustainability. Further research is needed, involving different groups of beauty vloggers, to determine whether all beauty vloggers similarly assess sustainable skincare products, or whether there are differences in their assessments.

Declaration of AI Usage

During the writing process of this thesis, artificial intelligence (AI) was used solely for the purpose of providing suggestions on grammar, synonyms, sentence structure and spelling errors. No generative AI was utilized in the creation of substantive or conceptual aspects of this paper.

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Appendix A

Beauty Vloggers and Description of the Video Content

Table A1

Type of Videos and Description of Each Video Content Sorted by Beauty Vloggers'

Pseudonyms

	Beauty Vlogger	Video Type	Video Content
1	Eco Insight	Brand Review	Brand Review of the Brand <i>Pacifica Beauty</i>
		Brand Review	Brand Review of the Brand <i>Bliss Mighty Biome</i>
		Balanced Review	Skincare and Make-Up Favourites and Fails of the Year 2021
		Haul	Sustainable Skincare and Make-up Haul
2	Alec Chandler	Brand Review	Brand Review of the Brand <i>Gen See Beauty</i>
3	Dr. Awens	Brand Review	Brand Review of the Brand <i>Amazon Aware</i>
4	Nellie Rivers	Brand Review	Brand Review of the Brand <i>Huda Beauty</i>
5	Naturalist Nina	Brand Review	Brand Review of the Brand <i>Super Bloom</i>
6	Ruby Penny	Brand Review	Brand Review of the Brand <i>Beauty Kitchen</i>
7	CosmetiCaroline	Brand Review	Brand Review of the Brand <i>Glossier</i>
8	Leona Zephyr	Brand Review	Brand Review of the Brand <i>Ecoshark</i>
9	Artistic Visionary	Brand Review	Brand Review of the Brand <i>MOB Beauty</i>
10	Earth Magic	Brand Review	Brand Review of the Brand <i>Eco Lips</i>
11	Britannia Elegance	Brand Review	Brand Review of the Brand <i>Haeckels</i>
12	Skin Guru	Educational Video	Educational Video Guide Towards Sustainable Products
13	Abby Owens	Educational Video	Educational Video on Skin Types and Product Types in Relation to Sustainability
14	Formulation Academy	Educational Video	Educational Video on the Role of Social Media Influencers in Relation to Sustainable Beauty Products
		Educational Video	Educational Video on the Cosmetic Industry
		Educational Video	Educational Video on Difference Between Natural and Sustainable Products
15	Gita Johnson	Favourites	Beauty, Care and Make-Up Favourites of the Year 2021
16	Katlyn Rosemont	Favourites	Sustainable Beauty Favourites
17	Linda Mayfield	Favourites	Sustainable Product Favourites
18	Dr Mum	Favourites	Clean and Sustainable Beauty Favourites
19	Green Living	Favourites	Sustainable Skincare Favourites of Fall 2022
20	Beauty Brew Talks	Favourites	Conscious Beauty Products
21	Hadley Lark	Sustainable Haul	Sustainable Beauty Product Haul

22	Echo Vani	Personal Video	Personal Video About the Occupation as a Beauty Vlogger in Relation to Sustainability
23	Lila Hudson	Sustainable Routine	Sustainable Care Routine
24	Kristian Hansen	Sustainable Routine	Sustainable Skincare Routine
25	Memory Lane with Mira	Sustainable Routine	Morning Skincare Routine
26	Caitlyn Shine	Sustainable Routine	Sustainable Skincare Routine for Clear Skin
27	Plant Bianca	Sustainable Swaps	Sustainable Beauty Swaps
28	Kira Wanderer	Sustainable Swaps	Eco-Friendly and Sustainable Beauty Products to Reduce Waste
29	Insightful	Sustainable Swaps	Sustainable Make-Up Swaps
30	Hollis Barker	Sustainable Swaps	Sustainable Beauty Swaps
31	Lisa David	Sustainable Swaps	Sustainable Beauty Swaps
32	Jane Neumann	Sustainable Swaps	Sustainable Beauty Habits

Appendix B

Detailed Code Book

Table B1

Detailed Code Book Including Domains, Categories, Descriptions and Exemplified of Codes

Domain	Category	Code	Description	Example
Descriptive Methods	Product Attributes	Availability	Statement about the possibility of buying or receiving a product	“These shipped from the US and they recently, I believe, restricted their shipping policies a whole lot. So, they don't ship to as many countries as they used to [...]”
		Cost/price	The amount of money for which a product can be purchased	“The price point on these is not horrific. Of course, you can always find less expensive somewhere out there and you can always find more expensive out there. I would say they're relatively affordable.”
		Ingredient(s)	A substance that is part of the content of a product	“This has liquorice root which is anti-inflammatory, helpful for calming down redness.”
		Innovation	The creation and use of new ideas or methods regarding a product	“Nothing too spectacular in terms of novel ingredients.”
		Label	A piece of paper attached to the product that is used as a source information about the product	Content creator reads out product label: “It is vegan and EWG certified.”
		Package design theme	The external appearance of the product packaging	“And this is what the packaging looks like [...] But yeah, they just come in these cute little colourful boxes.”
		Package material	Physical substance(s) used to package a product	“Now, let's talk about the moisturizers for the face. These come in glass packaging jars”
		Product durability	The time period a product lasts for	“I feel like this would probably last you, [...] two months because you probably want to do retinol only in the evening.”
		Product Logo(s); Certificates	A symbol and/or document representing an information regarding a product.	“[...] Is Huda Beauty cruelty free? Yeah, Huda Beauty is cruelty free. Unfortunately, though, it is not certified.”

	Product size	Unit indicating how small or large a product is	“You get a lot of product, you get 4.7fl oz. “
	Claim	A product- or brand statement that is presented as true or as a fact when there is no evidence to support it.	“[The brand] claim[s] that all these products are third party verified as climate friendly and carbon neutral.”
	Multifunctionality	The product’s ability to have several different uses.	“My husband also uses all the same products. We don't use different products for each of us, which again cuts down on both the number of things we have to buy, but also the amount of packaging that we're using.”
	Animal(s)	The involvement of animals regarding a product.	“The skincare products are all vegan, so no animal derived ingredients.”
Sustainability Concept	Sustainability Concept	Description of the concept of sustainability.	“Now, a few criteria of a skin brand being sustainable are that it is non-toxic, vegan, cruelty free, palm oil free and makes their products with recyclable or compostable packaging, which is things like glass or cardboard or paper, which you can recycle.”
Brand Activities	Brand Ethos	A brand’s embodiment of traits, values, culture, goals, mission, and vision.	“I just really loved what the company was doing, the mission statement and how they spoke about their product and the knowledge behind the formulas and why they created the brand.”
	Brand Marketing	A brand’s activities aiming at encouraging people to obtain a product.	“So, if you really love Fenty, you're basically safe because Rihanna is amazing. So, yes, I use this beautiful setting powder and I love it so much.”
	Product Line/Range	Variety of similar products that are sold by the same brand	“[The brand has] a wide range of sustainable SLS and paraben-free products.”
	Programs	An organised system of services and/or activities, that is designed to achieve a goal.	“I love Earth Harbor sustainability initiatives. They're plastic free and they've actually launched a refill program now as well, where you can send your bottles back and get them refilled rather than having to recycle them.”

	Product Life Cycle	Manufacturing Process	The process of producing a product	"I know for a fact [that they] are doing a lot of things to make their supply chains zero waste, which is also really cool."
		Consumption Process	The process by which a product is consumed or used	"I'm going to just keep using it as long as I can, until it goes completely bad on me."
		Disposal process	The process of waste management after a product has been used	"It's completely recyclable or compostable after you're done with it."
Evaluation	Comparison	Comparison	A comparative statement about similarities or dissimilarities between two or more products.	"I think you're going to prefer this cleanser. It is a bit like the other one [...]. It's very thin and runny. But this one in contrast to the other one, it does lather a bit more."
	Individual Needs	Desire	Personal standards and aspirations regarding a product	"However, if you're somebody who likes a very rich face cream on first impression, you may think this is it."
		Health condition	Presence or absence of a medical condition	"This also has rosewater oil in it. Again, that's going to cross-react with fragrance if you're allergic to that."
		Skin condition	State of skin	"I think if you have dry to normal skin, you'll find that this does the job. It has a relatively good lather."
	Product Result	Hedonic	Judgment of a product's performance based on the sensory experience.	"It's so good. It leaves my skin feeling amazing. And yeah, just overall a great one."
		Utilitarian	Judgment of a product's performance based on the factual experience.	"It doesn't burn or sting. [...] Effective but not fancy."
		Product Loyalty	Indication of committing to the product	"They have good ingredients and they worked for me. I will gladly continue to use these."
Medium-Specific Evaluation	Influencer Ethos	Influencer Ethos	An influencer's embodiment of traits, values, culture, goals, mission, and vision.	"I want to mention just at the very beginning that the main point of this video is to empower you to feel like you can be a more educated consumer or customer."
	Viewer Encouragement	Viewer encouragement	The process of encouraging viewers to engage in a certain activity regarding a product/brand.	"I would strongly recommend signing up to their newsletter and just getting a feel for them as a company and all that they're doing to be as sustainable as possible, because I honestly think they're

			one of the leading companies in terms of sustainability.”
Senses	Audio	Auditory experience of a product	“Yes. I think you can hear the sound. Yes, it is glass.”
	Smell/fragrance	Olfactory experience of a product	“And it's so nice. I love this scent.”
	Flavour	Gustatory experience of a product	“The flavour here is lemon.”
	Tactile	Tactile experience of a product	“It's a very milky consistency.”
Demonstration	Application Procedure	Showing and/or describing how to use/apply a product	“Just open one vegan capsule for each use. The serum is kept fresh and potent inside of this unique packaging. When you're done, you can melt this little empty capsule with boiling water at home.”
	Packaging	Visual demonstration of the product packaging	“This is what the packaging looks like. And then it just got the little doe foot. So that's what it looks like.”
	Product Content	Visual demonstration of the product content	“[...] that's the body oil.” *starts demonstrating how it looks on the back of her hand*
Knowledge	Additional Sources	Inclusion of additional sources/information	“But it has been confirmed from some pretty reputable blogs and sources. So, I feel pretty good saying that they are cruelty free now. “
	Areas of Uncertainty	Mention of aspects which the protagonist is uncertain about	“And speaking of sustainability, when it comes to sustainable skincare products, it's hard for me to find one that is sustainable and not greenwashing at all.”
	Experiences	Mention that the information is based on the personal experience	“And like I was saying before, guys. I have used these products for a number of months now - I'd say probably a year.”
	Expertise	Mention of relevant training or qualifications	“I'm a nurse that's passionate about beauty and lifestyle and doing things that are good for my body and good for the planet.”