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Influencers' effect on the perception of sustainability of cosmetics

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Dissertation

presented as partial requirement for obtaining the Master Degree Program in Data-Driven Marketing

NOVA Information Management School
Instituto Superior de Estatística e Gestão de Informação

Universidade Nova de Lisboa

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Master Thesis presented as partial requirement for obtaining the Master's degree in Data-Driven Marketing, with a specialization in Marketing Intelligence

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STATEMENT OF INTEGRITY

I hereby declare having conducted this academic work with integrity. I confirm that I have not used plagiarism or any form of undue use of information or falsification of results along the process leading to its elaboration. I further declare that I have fully acknowledge the Rules of Conduct and Code of Honor from the NOVA Information Management School.

[Ricardo Miguel Oliveira Ramada]

[Lisbon, November 2024]

DEDICATION

I will start my dedication by demonstrate my gratitude to the professor Teodora Szabo-Douat of NOVA Information Management School (my thesis supervisor). During this process, the professor Teodora stood by me, helping me and guiding me to the right direction and showing always availability. I also appreciate all the unconditional support given by the professors from the master's thesis office from NOVA Information Management School.

I also want to dedicate my appreciation to my parents, my young brother, without them, I wouldn't be here and be who I am today. I also want to show my dedication to my grandparents, godfathers, closest friends and cousins. They always made sure that I followed my dreams and saw my potential, even when I couldn't see it for myself. I'm sure that I'm surrounded by people who truly love me for who I am and never let me down. I promise that I will always focus on my dreams and make myself proud and let you all proud of me.

ABSTRACT

Influencer marketing has been a strong weapon to companies, for the past few years. By collaborating with influencers, they can expand their visibility on the market. The cosmetic industry is one of the fields that the use of influencers is crucial, since they share their product experiences and provide product reviews to their audience, respecting their niche. Since the sustainable cosmetics are becoming more popular and consumers are demanding more natural products, the use of influencers is needed, where the companies need to match the product and the influencer perfectly to be credible and authentic. This investigation aims to verify the effect of Influencers on the good perception of sustainability regarding cosmetics, by considering several topics such as the number of followers, authenticity, credibility and number of partnerships/ promoted products. To answer this question, a quantitative approach was created supported by an online survey developed on Qualtrics. Thus, 703 responses were obtained, but only 314 were valid. The software SPSS was used as a way of analyzing the data and test the hypothesis. Authenticity and credibility regarding influencers were statistically proved to be crucial factors when consumers are looking for sustainable cosmetic brands. This study aims to help future investigations regarding influencer marketing and the green cosmetics, since it will show how consumers feel about influencers promoting green cosmetics and will be essential to companies, for them to create successful strategies advertizing sustainable cosmetics.

KEYWORDS

Social Media Influencers; Cosmetics; Sustainability; Consumer perception; Sustainable Cosmetics;

Sustainable Development Goals (SGD):



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1. INTRODUCTION

Nowadays, as a society, people spend a vast amount of their time scrolling on social media platforms and those have been suffering improvements for the past few years, they invented a digital market for brands to spread information and sell their products, helping companies to reach the consumers more effectively (Malik & Kaur., 2022). Due to this emergent digital presence that we have been witnessing, companies are progressively investing in influencers, instead of using a traditional marketing approach, (Botelho, 2019) due to the share of information from both sides (customers and social media influencers), a factor that has been seen as a reliable source more worthy than contents advertised by a traditional marketing approach (De Almeida Neto, 2018). Companies and brands started to see it as perfect way to share information while spending less money, despite the several challenges that comes with it, such as selecting the right influencers for certain campaigns, their payments and the use of creativity as well (Botelho, 2019). Influencers usually target a certain audience related to their content, generating and gathering a community of people sharing the same interests, which is fundamental for brands, where their products are shared by influencers, since they are listened by the population. Marketeers should be attentive to the market, keeping up with the changes and challenges concerning the digital era, since it's in a constant modification. One of the examples is the sustainable cosmetic industry, an area that became a popular interest, meanwhile climate change and pollution are two topics of conversation and motive of concern for most of consumers (Taylan, Cristina and Ekin, 2021). Companies nowadays are depending on digital strategies and platforms to reach/attract their future customers and maintain the existing ones.

This investigation seeks to find answers and respond to the following research questions: "When buying cosmetics, are consumers more likely to consider getting a certain sustainable product advertised by influencers, considering their number of followers?", "When looking for sustainable cosmetic product recommendations, are consumers more likely to rely on influencers that are more authentic?"; "Are people more willing to change their old habits or usual products for an expensive sustainable product because of an influencer credibility?"; "Do consumers think the number of partnerships and products that the influencers advertise is important when searching for product reviews and real experiences with the products?".

Regarding the thesis structure, firstly it will have the abstract containing the study recap and the main results. The second chapter will introduce an overview of some crucial concepts related to this investigation such as Influencer Marketing, Social Media, Cosmetics and Sustainability, clarifying the research questions and objectives as well. The third chapter includes the review of the literature,

detailing definitions of several topics, understanding and analyzing the concepts of Social Media Marketing, Influencer Marketing, Cosmetic Industry, Sustainable Cosmetic Industry, along with the variables that helped scoping the hypothesis such as: Influencer Credibility, Number of Followers, Influencer Authenticity, Number of Advertised Products and Partnerships and Good Perception of Sustainability regarding cosmetic brands. The fourth chapter contains the Methodology, the conceptual model containing the created hypothesis and the research framework. This study is quantitative, and the hypothesis will be tested by doing an online survey on Qualtrics. The Hypothesis are: 1) Credibility of influencers affects positively the perception of sustainable cosmetic products; 2) The number of followers, which transmits more credibility, creates a good perception of sustainability regarding sustainable cosmetics; 3) The authenticity of influencers leads to a good perception of sustainability regarding sustainable cosmetics; and 4) The number of partnerships/products advertised leads to a good perception of sustainability regarding sustainable cosmetics. The fifth chapter will contain the data analysis (analyzed on the statistical software SPSS) and will be based on data collected from the online questionnaire.

The last presents the results, the conclusions and the respective discussion of this study. It also has the implications/limitations of this investigation and recommendations for future research.

It is expected with this study to verify the influencers affect on the perception of sustainability of cosmetics, investigate more about this recent job position more known as “influencer”, highlighting their importance for brands and companies, how they are seen as a role model and the impact that they have on the transformation of consumers habits/consumption behavior towards cosmetic products. To conclude, one recent study like this one, will provide more deeper insights and consequently help congregate data information and accuracy for future investigations in this area that is constantly evolving.

The lack of scientific literature about this topic makes this theme a noteworthy research gap, since the cosmetic industry has a significant use of influencers, which has been advantageous for the industry, and consequently the consumers look for them (Santos, Bernardes, Amorim, 2021) and most of the studies regarding influencers and sustainable cosmetics are mainly focused on buying behavior and not on consumer perception of sustainability .

2. LITERATURE REVIEW

2.1. SOCIAL MEDIA MARKETING

The emergence of Web 2.0 and the social media itself was considered a game-changer, where people were able to create and publish content, spread their ideas, recommending certain products/services to others. Therefore, costumers took the Social Web, sharing their individual experiences related to brands, products, making it more authentic and relying on other experiences (reviews), before buying the products themselves (Evans, Bratton & McKee, 2021). People are connected to technologies, scrolling on social media, using electronic devices, one of the factors that characterize the digital era that we live in (Malik & Kaur, 2022). About 3.6 billion users were using social media platforms in 2020 and was predicted that this value will consequentially increase to 4,41 billion until 2025 (Nekmahmud, Naz, Ramkissoon, & Farkas-Fekete, 2020). Social media took over and transformed the routines of society, making possible for people to be connected to each other in all meanings, for communicating, entertainment, look for some information or even for sharing content (Evans, Bratton & McKee, 2021) and these are several examples of well-known platforms such as Instagram, TikTok, Facebook, Pinterest, twitter, LinkedIn, etc.

Companies have been defining their goals and strategies considering the marketing mix (the well-known four P's: Product, Price, Promotion, and Place/Distribution), but now they should add another P: Participation, since social media are changing the consumers life and consequently the marketers themselves when it comes to their businesses (Tuten & Solomon, 2017). By using social media, the companies can have and build a closer relationship with their costumers and collect data about their audience when it comes to their interests or behavior. (Santos et al, 2021).

Social Media Marketing can be defined as "(...) utilization of social media technologies, channels, and software to create, communicate, deliver, and exchange offerings that have value for an organization's stakeholders." (Tuten & Solomon, 2017). The use of social media according to some studies is expanding over 20% every single year, and the platforms Instagram, Facebook and Tiktok have an important role (Manero-Berne & Navarro-Marzo , 2020).

According to the study of Asgarkhani and Fernando (2023) and relying on several studies, it was stated that social media marketing has a positive impact on consumers perceptions regarding the promotion of sustainable products and behavior/ towards their consumption. It also enables their willingness of

transforming their habits and lifestyle, adopting a green comportment. It is also defended by Shanti and Alversia (2022). Other study also highlights that costumers tend to trust brands more easily if they see good reviews and real experiences regarding a product or a brand on social media. (Pop, Saplacan and Alt, 2020).

2.2. INFLUENCER MARKETING

According to some studies, we can affirm that Influencer Marketing is increasing at a global scale, marking a growth from 3 billion to 9,7 billion U.S. dollars, just in 3 years (Nafees, Cook, Nikolov, & Stoddard, 2021).

Influencer marketing is “the art and science of engaging people who are influential online to share brand messaging with their audiences in the form of sponsored content (...)” (Sammis, Lincoln, & Pomponi, 2015, p.7). Several research proved that consumers mostly dislike advertisements, so influencer marketing was perceived as a better way of engaging than the traditional advertisements spread online, and influencers appeared as a trustworthy role model to consumers, following their recommendations and buying the products. (Chopra, Avhad, Jaju, 2020; Barros, Barros, 2020)

A Social Media Influencer (SMI) is considered someone that create content online where they share their opinions, routines, feelings, gathering a loyal group of people that identifies with their content, exerting their influence on their followers (Ki, C.W.C., Cuevas, Chong, Lim, 2020). They also form/construct the costumers’ opinions/behaviors regarding a certain brand, has more than 10000 followers, sharing actively their routines or information related to products and they collaborate with brands that are promoting them on social media (Nafees et al, 2021), where they exchange posts for products (Campbell, Farrel, 2020). SMI are seen as “opinion leaders, with a position somewhere between celebrities and friends (...) might be described as self-made “microcelebrities” (...)” (Belanche, Casaló, Flávian & Ibáñez-Sánchez, 2021, p.2).

Within the influencer concept, there are several types of influencers concerning their number of followers and networking that brands usually categorized such as Nano Influencers (With reduced number of followers), micro-influencers (register a total reach of hundred thousand followers) and Mega Influencers (their network can achieve millions of followers). (Yalcin, Nistor, Pehlivan, 2022).

Companies are using influencers in their strategies, but it’s important to highlight that in order to succeed, corporations need to pay attention to the source of credibility, trustworthiness,

attractiveness and specially care about creating a connection between the products and influencers, matching them perfectly considering the type of content they publish. (Cho, 2020). The lack of congruence between the brands and the influencers can result in wasted resources or bad performance for the company itself and less trustworthiness or unfollows for the influencer. According to Schouten, Janssen, Verspaget (2020) supported by several studies, “the effectiveness of an endorsed advertisement is inseparably tied to the degree in which the image, personality, or expertise of the endorser fits the advertised product”. That importance of matching the endorser and the product can be shown by analyzing the real example about a failed collaboration between a lifestyle/fashion/beauty influencer and a car brand called Volvo, presented in the study of (Belanche et al, 2021).

It is shown on the study of study of Asgarkhani and Fernando (2023), since influencers share their personal experience using certain products and they also engage with their audience, consumers tend to perceive them as a more reliable source than the actual brands. The results from a study conducted by Sun and Xing (2022) in China shows that social media is a crucial factor in terms of promoting green lifestyle. Other study also defends that the sustainable cosmetic industry is observing a rise of attention regarding consumers and the influencers/celebrities will play a good role by creating content, giving reviews and recommendations, it will also generate trust, will influence their good perception of the products and the brand itself (Varma and Ray, 2023) and this statement is also defended by khoirotunnisa (2023), that affirmed that female has more impact on promoting sustainability rather than male influencers.

2.3. COSMETICS INDUSTRY

The cosmetics industry registered a growth rate of 4,75% until the end of 2022, the total revenue by 2025 is estimated to exceed the value of 716 billion \$ and Asia Pacific has a market share of 46%. (Gani M., Roy, Rahman, Faroque, Gupta, Prova, 2022).

The cosmetic Industry can be described as the number of brands/companies that sells products for any gender, to improve the human physical appearance and prevent undelightful human odors (Malik, Dr. Kaur, 2021).

The concept cosmetic can be described as “(...) any substance or preparation intended to be placed in contact with the various external parts of the human body (epidermis, hair system, nails, lips and

external genital organs) or with the teeth and the mucous membranes of the oral cavity with a view exclusively or mainly to cleaning them, perfuming them, changing their appearance and/or correcting body odours and/or protecting them or keeping them in good condition (...)" (Aranaz , Acosta, Civera , Elorza, Mingo, Castro, Gandía, Caballero, 2018, p.1).

Women remain with high percentages in terms of using and buying cosmetics, but men changed their mind-set about using them across the years. Nowadays they are concerned about their appearance and interested in cosmetics, according to studies (Infante, Calixto, Campos, 2016) & (Gani et al 2022). The cosmetic industry is considered one of the distinguished industries in the global market (Jaini, Quoquab, Mohammad, Hussin, 2019). Nowadays, people tend to buy sustainable cosmetics because they tend to associate something that is considered "green" and "eco-friendly" to something more authentic or natural, but according to Spironelli (2019), due to advertisements.

2.4. SUSTAINABLE COSMETICS INDUSTRY

According to Statista (2023), the sustainable cosmetics market value in 2022 was around 37 billion U.S. dollars and the prediction for 2031 is to reach the 58,6 billion U.S. dollars.

Sustainable cosmetics/products are outlined as "multifaceted construct for the preservation of the environment, minimization of pollution, responsible use of non-renewable resources, and animal welfare and species preservation (...), products that will not pollute the earth or deplete natural resources and can be recycled or conserved (...) natural cosmetics containing botanicals and fruit-based formulae, without chemicals or non-natural ingredients" (Lin, Yang, Hanifah, Iqbal, 2018, p1)

Recently a lot of interest from costumers has been brought up to the sustainable cosmetics, which occurs the same consequently to the corporations and academics. This interest was motived due to the apprehensions related to the supply chain involving the creation of cosmetics from scratch until the commercialization, the environmental/social impacts (unfair trade), (Bom, Jorge, Ribeiro, Marto, 2019; Kolling, Ribeiro, Medeiros,2022).

Since consumers are looking desperately for green products, companies will face a lot of constrains/challenges, they will have to adapt, invest and keep up with trends on the market and change their strategies in order to be well seen to consumers (Szabo, Webster, 2020) and motivate

them to buy “green”. (Amberg, Fogarassy, 2019). Companies must be aware about the packing of the products, their ingredients, green symbols on the packaging, replacing the synthetic ingredients and using natural components (Cinelli, Coltelli, Signori, Morganti, Lazzeri, 2019; Bom et al, 2019; Sung, 2021). Managers from various cosmetic companies aspire to develop policies towards sustainability intensively focusing on green initiatives and mainly the consumer. Matching sustainability and cosmetics it’s difficult to accomplish, it involves hard work and drastic modifications while doing business (Gradinaru et al, 2022).

Corporations are being pressured by several stakeholders to come clean/be genuine about their environmental performance which includes their production and values associated with the brand itself, which is also defined by green marketing (Netto, Sobral, Ribeiro, Soares, 2020; Christopher, Prya, Priyadharshini, 2023).

Statistically speaking, relying on a study, we can affirm that 66% of the worldwide consumers prefers getting expensive products that are sustainable instead of others (Netto, Sobral, Ribeiro, Soares, 2020).

Due to this demand for green products and the need of corporations to keep up with the trends, a new concept was created, entitled Greenwashing. According to diverse authors: Greenwashing can be defined as a way of distorting the consumers’ minds regarding the environmental process and products, when companies claim and ensure to be eco-friendly as well as their products, including their packaging, procedures and services (Maijláth, 2017).

2.5. NUMBER OF FOLLOWERS

The number of followers is one of the chosen metrics from brands when they are looking to collaborate with influencers. (Ramela Odireleng, Dr. De Villiers Marike Venter, 2022).

Corporations face one of the biggest challenges associated with the use of influencers. Sometimes those endorsers have either fake followers or engagements rates (Belanche et al, 2021), which can bring negative consequences to the company, such as monetary and social reputation of the brand.

Based on several studies, the investigation of Okuah, Scholtz, Snow (2019) stated that the number of followers that an influencer has does not compromise the quality and impact of their performance on social media, in fact, transmits more trust (Haln Sini, 2023). Another study also found that when it comes to green influencers, micro influencers can be more effective influencing costumers and

endorsing sustainable products (Buvár, Zsila, Orosz, 2023; Park, Lee, Xiong, Septianto, Seo, 2021). This same affirmation is also defended in the article written by Pittman and Abel (2022), in which an influencer by having a smaller audience, will increase trust and mindsets regarding the green lifestyle.

In opposition, the investigation made by Murwaningtyas, Harisudin, Irianto (2020) concluded that the celebrities have more impact on consumers' minds, regarding attitudes, beliefs and perceptions, making them a crucial weapon when promoting organic products, since they have a huge amount of followers that admires them. This statement is also defended and supported by data collection on the study developed by Pop, Saplacan, Alt (2020).

Based on these findings, the following hypothesis was developed:

H1 – The number of followers, which transmits more credibility, creates a good perception of sustainability regarding sustainable cosmetics.

2.6. CREDIBILITY

According to several studies regarding the usage of cosmetics or other sustainable products, there are several factors associated to their consumption such as benefit, credibility, trustworthiness and expertise. Moreover, when influencers film diary videos, the consumers will consider the way they film, they style, naturalness, appearance. Such factors will potentialize trust and credibility regarding the influencer (Schorn, Vinzenz, Wirth (2022); Filieri, Acikgoz, Li, Alguezaui (2020)). Influencers “should concentrate on the credibility, trust and familiarity with the product” (Sumathy and T.P., 2023).

According to Sharavya (2022), credibility does affect the perception, consumers attitudes and purchasing behavior and other factors such as expertise, trustworthiness and attractiveness (it is also stated by Abraham, Floreto, Pagkalinawan, Etrata, 2022; Teixeira, Oliveira, Texeira, Teixeira, 2023). Nowadays, micro-influencers are registering more percentage of engagement, since they have a niche, post relevant content, posting specifically about a topic (beauty, sports, fashion, food, lifestyle, etc.), transmits trust to the followers and that will make them register more engagement rates (Smith, “Marketing with Micro-Influencers: Engagement, Relevance and Authenticity” Blog Post – BrandWatch, 2016). Contrarily, supported by the study developed by Sun and Xing (2022), celebrities play a good role in terms of shaping consumer minds and behavior towards green products. Other

study highlights that the credibility of digital influencers and celebrities impacts positively the purchase intention and the good perception of organic cosmetics (Dos Santos, Silva, Da costa, Batista, 2023).

The second hypothesis was developed based on scientific research:

H2- Credibility of influencers affects positively the perception of sustainable products.

2.7. INFLUENCERS AUTHENTICITY

Influencer marketing has been a tool for companies to create awareness throughout the years. Recently, the concept of authenticity along with the concept of credibility, registered a huge importance and nowadays is a motive of concern on the part of consumers, particularly in the beauty industry (Yupelmi, Yulastri, Ganefri, Effendi, Mukhlidi, 2023). Authenticity can be described according to Beberland and Farrely, as something or an individual being real, which means when speaking about influencers, the way they appear on social media without create a new persona, copying others and make sure they always act like themselves (Zniva, Weitzl, Lindmoser 2023). Being an authentic influencer means creating a strong bond with their audience and they can boost interest in eco-friendly cosmetic products (Joshi, Korrapati, Reji, Hasan, Kurudamannil, 2022).

Currently, consumers do prefer authentic influencers, including authentic products and brands (Audrezet, Kerviler, Moulard, 2020; Yeung, Keke, Hien, 2023; Baker, Baker, 2023) and it is also defended by Jacobson and Harrison (2022) when it comes to sustainability influencers, since they must be fully committed to green lifestyle in order to get consumers trust and if they want to be seen as a reliable source.

The third hypothesis was created, since several investigations considers authenticity as a key factor:

H3 – The authenticity of influencers leads to a good perception of sustainability regarding sustainable cosmetics.

2.8. NUMBER OF PRODUCTS AND PARTNERSHIPS:

The impact of the number of partnerships and products regarding influencers, depends on several factors such as Authenticity of Partnerships (Kosumen Krista, 2020), the credibility of the influencers (as mentioned above), the engagement with their followers (Hahl Sini, 2023), transparency of brands and diversity of influencers regarding their backgrounds and find a match between the influencer and Product that is being advertised, aligning the product to the influencer contents and what their audience expects to see. This will also change positively the attitudes and perceptions towards any brand (Kosumen Krista, 2020; Jordas Anna, 2023).

No matter how much partnerships or advertised products an influencer has and according to the study of Esteves Daniela, Moráis Nidia Salomé, Raposo Rui (2023), consumers know how to differentiate paid content from genuine/organic content nowadays and having a partnership or several on cosmetics/sustainable cosmetics, doesn't make influencers trustworthy and they can only be value for brands if they are sincere.

The fourth_hypothesis was generated based on the findings:

H4 – The number of partnerships/products advertised leads to a good perception of sustainability regarding sustainable cosmetics

2.9. CONSUMER PERCEPTION OF SUSTAINABILITY REGARDING SUSTAINABLE COSMETICS

The concept of human Perception is complex, it englobes societies (singular individuals or groups of people) interactions with objects and the human senses as well as the human brain. The human perceptions are understood to be shaped by factors such as physical conditions, cognitive abilities and background. Besides, the perception of sustainability it's dissimilar, it varies depending on geographical levels, distinct strata of societies and their personal circumstances and there is also a lack of information concerning this subject (Yttredal and Homlong, 2020).

According to the study developed by Gradinaru et al (2022), supported by other authors, it is shown that there are significant factors affecting the perception of sustainability in terms of cosmetics, such as TBL (Triple Bottom Line). This TBL concept can be described as an agenda involving sustainability constituted by three important pillars: Economic, Social and Environmental, concentrating their focus on obtaining an equilibrium between Economy, Environment and Social Justice. Other study also highlights the importance of behavior belief, normative belief and control belief (Theory of Planned Behavior) as factors that can influence customer's perception when they show interest in some type of product (Rocca, Acerbi, Fumagalli, Taisch, 2022). Green thinking plus social media marketing affects and enhances the green consumption intentions on the social media user's and consequently their perception (Wu M. & Long R.). Cosmetic brands need to be more transparent, authentic and they must be cautious delivering their messages wisely to the consumers while making sure their policies deliver the right message, making sure they are committed to sustainability. (Singh, 2019; Dueñas, McColl, 2023) It will give a good perception of sustainability (Gradinaru et al (2022)).

3. METHODOLOGY

In this chapter, the methodology was discussed, along with the research design and the applied techniques as a support to answer the research questions. In order to get the results, one of the main focuses was the ethical considerations, the research design itself containing the methods, sample techniques, data collection, the constructed survey and consequently their measurements.

This is a causal study, where the purpose is to verify the effect of influencers on the perception of sustainability of cosmetic. The research is explanatory, and the objective is to test cause-effect relationships between the selected variables. Hypothesis were created based on the theoretical evidence considering existing investigations related to the topic. In this investigation, the approach was quantitative, since the survey (created on Qualtrics) is the only experiment to collect and get insights about the data. The data results were generated by using the statistical software SPSS.

The influencers credibility, the number of followers, authenticity, number of brands partnerships and products advertised were the selected variables to better understand if these criteria related to the social media has an impact and can change positively or negatively the perception of the consumers' minds, regarding sustainable cosmetics. These results provide a better understanding about social media, how consumers feel about consuming this type of information on several online platforms created by Influencers.

3.1. CONCEPTUAL MODEL

The conceptual model presented bellow was created based on the objectives of the study and supported by bibliography. The purpose of creating the conceptual model is to build the scope of the investigation and create hypothesis. It is represented below.

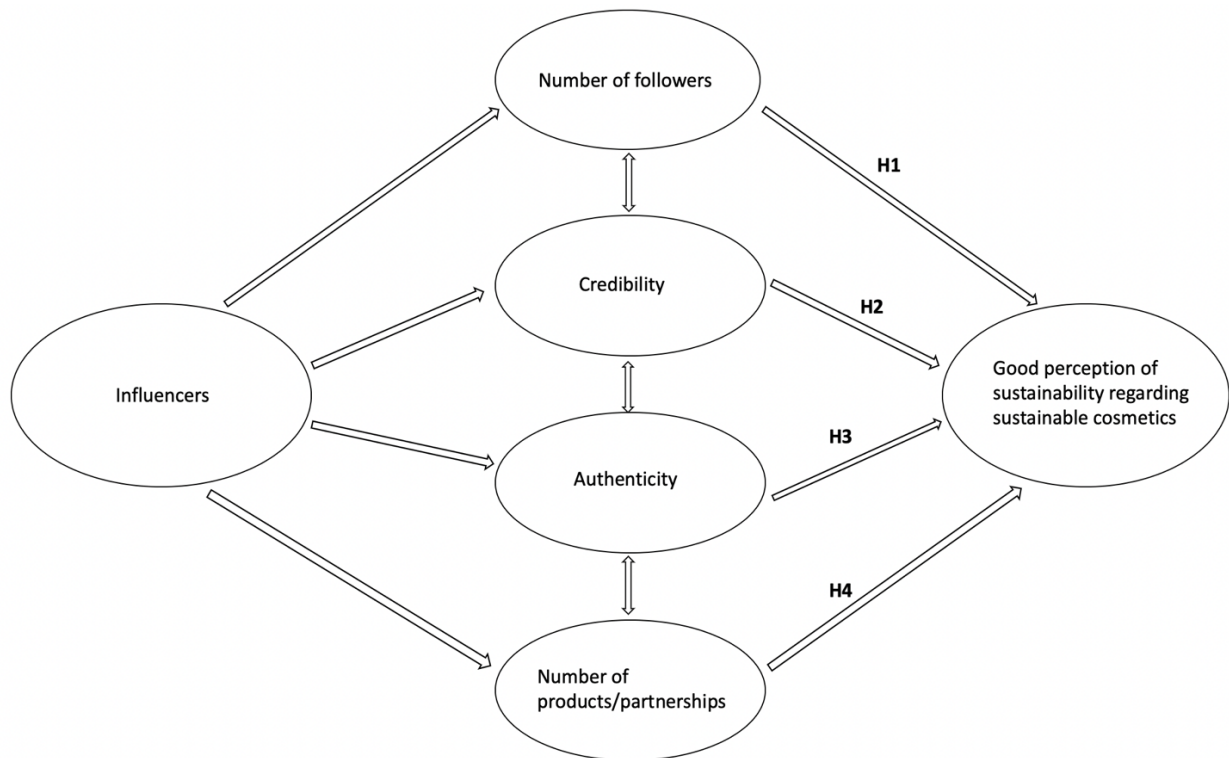


Figure 1- Conceptual Model - Scope of the investigation

3.2. SAMPLE AND DATA COLLECTION

The entire process started with acquiring data from the responses to the inquiries. An online survey was created and answered by 703 overaged participants. Since this investigation is entirely about influencers and sustainable cosmetics, the participants required three criteria (Use of Social Media Platforms, follow influencers and usage of sustainable cosmetics). After cleaning the data, the number of valid responses was 314, which corresponds to the sample that was used in this investigation. Therefore, from these 703 inquiries, 314 (45%) affirmed that they use social media platforms and 389 (55%) do not consume and these values are equal to the question about following influencers on social media and the usage of sustainable cosmetics. When it comes to following green lifestyle influencers, relying on the total of the population (703), only 249 (79%) follow this type of content creator and 65 (21%) don't.

3.3. SURVEY DESIGN

To determine and verify the effect of influencers on the perception of sustainability regarding cosmetics as shown in annex (2- Questionnaire Design) the questionnaire is divided into different sectors. It has an introduction part, where the study was introduced, highlighting that the participation in this study was voluntary, ensuring confidentiality/anonymity of the answers and explaining the only main academic purpose of collecting this data.

In the first sector, the participants were asked if they use social media platforms, follow influencers and use sustainable cosmetics (in case of negative response, the survey would be terminated, since they don't match the criteria). In the second sector, the questions are relative to influencers credibility and how it can change consumers' minds towards the cosmetic brands. The respondents were asked to choose from a list what kind of influencer they would most rely on while looking for sustainable product recommendations on a scale from 1 (most rely on) to 4 (less rely on). The third sector is regarding the number of followers that an influencer has being or not a decision factor when looking for sustainable cosmetics recommendations. The fourth sector is constituted with questions regarding the number of brands and the amount of product advertised by an influencer to verify how important this is to the costumers. The fifth sector has questions regarding the good perception of sustainability and the last sector has demographic questions such as age, location, level of education and gender. The last sector enquires were asked about demographic questions such as age, gender, level of education and geographic location.

4. DATA ANALYSIS AND RESULTS

4.1. DEMOGRAPHIC FINDINGS

This chapter will contain demographic findings from the collected data which includes the geographic distribution of the population, their age, gender and level of education.

4.1.1. Geographic distribution of the population

Table 1 - Geographic distribution of the population

Geographic location	Frequency	Percentage
Europe	299	95,2%
America	8	2,5%
Asia	2	0,6%
Africa	3	1%
Australia	2	0,6%

As it is presented in the table 1 and also in the annex 3 and 4, 299 (95,2%) are from Europe, 9 (2,50%) are from America, 2 (0,6%) are from Asia, 4 (1%) are from Africa and 2 (0,6%) are from Australia. Most of the population that participated in this study are from Europe.

4.1.2. Age

Table 2 - Age of the population

Age	Frequency	Percentage
18-29	204	65%
30-39	24	7,6%
40-49	41	13.1%
50-59	42	13.4%
60-69	3	1,3%

As it is presented in the table 2 and also in the annexes 3 and 4, 204 (64,56%) inquiries are concentrated in the age gap between 18-29 years old, 24 (7,59%) are positioned between 30-39 years old, 41

(12,97%) are situated between 40-49 years old, 42 (13,29%) are located between 50-59 years old and lastly, 4 (1,27%) belongs to the age gap from 60-69 years old. The average of the participants is approximately 32 years old.

4.1.3. Gender

Table 3 - Gender of the population

Gender	Frequency	Percentage
Male	68	21,7%
Female	237	75,5%
Other	3	1%
Prefer not to say	6	1,9%

Concerning the gender, by looking at the table 3 and in the annexes 3 and 4 68 (21,7%) are men, 238 (75,5%) are female, 3 (1%) stated to have other gender and 6 (1,90%) preferred not to reveal their gender information. Most of the respondents are female.

4.1.4. Level of Education

Table 4 - Level of education of the population

Level of education	Frequency	Percentage
High School graduate	88	28%
Bachelor's	103	32,8%
Master's	86	27,4%
Doctorate	11	3,5%
Other	26	8,3%

In the matter of the level of education, by observing the table 4 and the annexes 3 and 4: 88 (27,85%) are a holder of a high school degree, 103 (32,91%) are bachelor's graduates, 86 (27,22%) are master's graduates, 11 (3,48%) are doctorate graduates and 26 stated that they own other level of education.

4.2. RESULTS:

Regarding the results, diverse tests were conducted on the Statistics Software (SPSS), such as correlation, regression analysis and descriptive tests between depended and independent variables. The dependent variable chosen in this investigation is **“Good Perception of Sustainability regarding Sustainable cosmetics”** and the independent variables are **“Number of Followers”**, **“Credibility”**, **“Authenticity”** and **“Number of Products/Partnerships”**.

The analysis started with running a frequencies test on SPSS applied to all the variables, as it is shown below in the annex 4. The next step was correlating the chosen variables (“Do you think that the credibility of an influencer can change your perception of sustainability regarding a certain cosmetic brand?; Do you think that the number of followers of an influencer can change your perception of sustainability regarding a certain cosmetic brand?; Do you think that the authenticity of an influencer can change your perception of a sustainability regarding a certain cosmetic brand?; Do you think that the number of partnerships that an influencer has can change your perception of sustainability regarding a certain cosmetic brand?; Do you think that the number of products advertised by an influencer can change your perception of sustainability regarding a certain cosmetic brand?; Do you think that the good perception of sustainability regarding cosmetic brands is due to social media influencers?) and verify how much correlated they were.

4.2.1 Pearson Correlation test

As it is illustrated below on the table 5 and based on the annex 5, there are moderate and high correlations, the p value < .001 for all the variables and most of the variables are moderately correlated such as **Credibility vs Good Perception (0,623)**, **Credibility vs Authenticity (0,604)**, **Authenticity vs Good perception (0,635)**, **Number of followers vs Number of partnerships (0,563)** and **Number of followers vs Number of advertised products (0,596)**. Nevertheless, there is some variables that are highly correlated such as the **number of advertised products and the number of partnerships** with a score of 0,829 (within a scale from 0 to 1).

Table 5 - Correlations between the variables

	Credibility	Number of followers	Authenticity	Number of partnerships	Advertised Products	Good perception of sustainability
Credibility		0.368	0.604	0.406	0.501	0.623
Number of followers			0.436	0.563	0.596	0.417
Authenticity				0.437	0.487	0.635
Number of partnerships					0.829	0.473
Advertised products						0.528
Good perception of sustainability						

 Low Correlation
  Moderate Correlation
  Strong Correlation

4.2.2. Multiple Linear Regression test

A regression test presented in the annex 6 was done with all the variables mentioned above regarding the correlation test. The good perception of sustainability is the dependent variable, and the independent variables were the Authenticity, Credibility, Number of followers, Number of partnerships, Number of advertised products, by analyzing the impact of all the independent variables on the dependent variable. By analyzing the results: the R^2 represents the value that verifies how the independent variables explain the variations on the dependent variable, which is this case is **0,525** and the adjusted square is **0,518**. This means that the linear model explains **52,5%** of the variance of the dependent variable on the independent variables.

Lastly, the table presented on the annex 6 regarding the Coefficients (that shows how each independent variable affects the dependent variable). By observing the **Sig value** for each independent variable, shows that only the **Credibility** and **Authenticity of influencer** can affect the dependent variable “Good perception of sustainability regarding a certain cosmetic brand”, since for both variables the Sig value is “<.001”, which means is bellow than “0.005”. The number of followers, number of products and partnerships doesn’t have an impact on the perception of sustainability.

Thus, by observing these results means that from all the dependent variables, it is concluded that only the authenticity and credibility of the influencers can really improve the perception of sustainability regarding sustainable cosmetic brands, like it is illustrated bellow on the table 7.

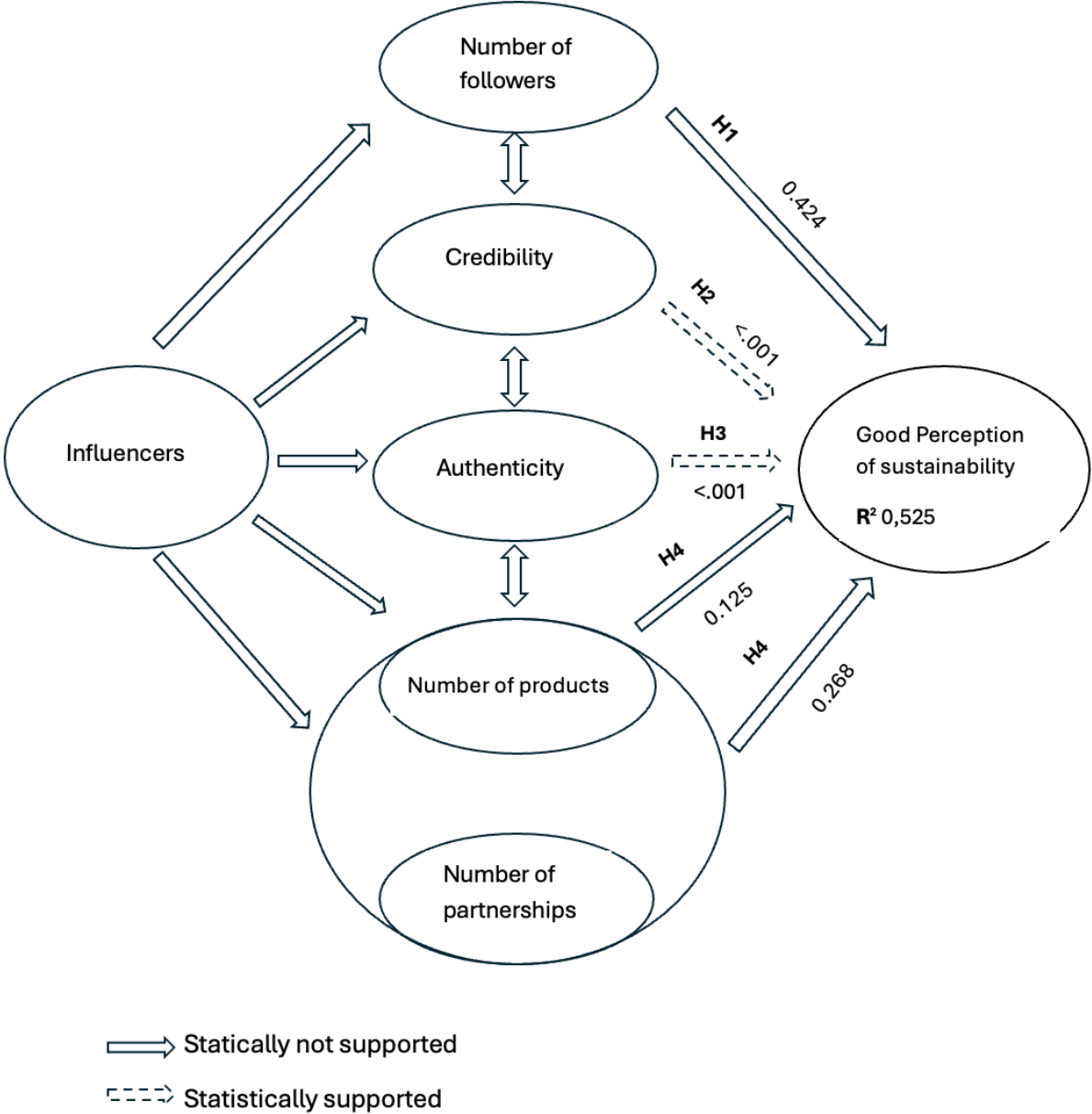


Figure 2 - Linear Regression Test and Hypothesis results

5. DISCUSSION

This research tested the importance of influencers on the good perception of sustainability regarding sustainable cosmetic brands, testing several factors regarding Social Media influencers (Credibility, Authenticity, Number of Followers, Number of Partnerships and Number of advertised products). Comparing with existing theories and based on the results/analysis, it is shown that the credibility and the authenticity are the most important and relevant for consumers.

The results are aligned with statements about the credibility being one important factor on building the consumer perception written by Schorn, Vinzenz, Wirth (2022), Filieri, Acikgoz, Li, Alguezaui (2020), Sumathy and T.P. (2023), Shravya, D. S. (2022), Dos Santos, Silva, Da costa, Batista, 2023. The number of followers has no significant impact, which means that the ideas discussed by the authors Murwaningtyas, Harisudin, Irianto (2020), Pop, Saplacan, Alt (2020) about celebrities having more impact on consumer perception are not aligned with the results. When it comes to authenticity, Joshi, Korrapati, Reji, Hasan, Kurudamannil 2022, Audrezet, Kerviler, Moulard 2020, Yeung, Keke, Hien 2023, Baker, Baker 2023 all stated and proved that authenticity is one important factor when it comes to the good perception of sustainability and it is verified relying on the data results in this study. Lastly, by analyzing the last two variables “Number of advertised products and Number of Partnerships” while comparing to existing theories and data results, It can be affirmed that both of this two variables are not relevant for consumers as it is for brands while choosing the perfect influencer for advertising, like it's mentioned by Esteves Daniela, Moráis Nidia Salomé, Raposo Rui 2023, Kosumen Krista, 2020; Jordas Anna 2023.

Future studies should be more focused on the Consumer Perception, that is also part of the buying behavior process, instead of focusing only on the Purchase Intention. This study could be seen and utilized as a pillar for further investigations, since It's a theme that is part of civilian's daily life and has been a challenge for companies and brands, keeping up with consumers' trends and preferences for green cosmetic products.

6. LIMITATIONS AND FUTURE RESEARCH

The emergence of the concept “sustainable cosmetics” is getting more attention throughout the years, consumers are demanding natural products and companies are being pressured to be genuine and eco-friendly. There is a lot of studies regarding cosmetics in general and consumer buying behavior towards cosmetics and sustainable products, but when it comes to the impact of influencers and their green performance affecting the consumers perception of sustainability regarding cosmetics brands, there are not that many investigations on this topic until nowadays, since it’s a recent concept and companies/brands are trying to adapt and implementing strategies (trial and error).

One of the limitations of this study is the lack of information in the literature, which makes it difficult to compare theories already defined by other authors interested in this field of green beauty. Other limitation was the difficulty of gathering the data and the amount of time waiting for the exact perfect number of valid answers since the preferred target was specific. There were a lot of responses, but most of them were blank space or incomplete. Most of the inquiries didn’t match the criteria for this study and all these factors, consequently, affected the results and the analysis.

It is interesting for future investigations to include topics such as trust or cultural factors, because each continent has more demand for green cosmetic products than others and it could be curious to compare different realities.

7. CONCLUSIONS

In today's rapidly changing business environment, new ideas emerge constantly, trends can quickly overturn established norms, and innovative theories are regularly discovered. Furthermore, understanding target consumers—their motivations, desires, and needs—should be the top priority for any business manager and brands. In fact, the more focus that is placed on these factors, the greater the likelihood of a company's success.

While influencer endorsements are at the forefront of modern marketing strategies, it's crucial for companies to carefully select the social media influencers they partner with. The behavior and actions of these individuals can significantly influence public perception of the brand, especially when it comes to green cosmetics.

An experimental study was conducted to explore how the influencers can be a good contribution for a brand in sustainable cosmetic industry, impacting consumers' perceptions of sustainability regarding sustainable cosmetic brands. Like it was mentioned above in the discussion chapter relying on the data collected from the questionnaire, It was proved that the number of followers it's not a crucial factor when leading to a good perception of sustainability on consumers' minds (H1), that the Credibility leads to a good perception regarding sustainable cosmetic brands (H2), the authenticity of the influencer was proved to be an important factor that leads to a good perception of sustainability (H3) and the number of products/partnerships were not considered essential for leading to a good perception of sustainability regarding sustainable cosmetic brands (H4).

The Authenticity and Credibility of an Influencer were statistically proved to have a positive impact and were the chosen factors that most leads to a good perception of sustainability regarding sustainable cosmetic brands. Since only two from four factors regarding influencers were statistically proved to be relevant to consumers when looking for sustainable cosmetic brands, it can be said that the influencers improve the perception of sustainability regarding sustainable cosmetic brands, but only concerning their authenticity and credibility.

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ANNEXES

1. Ethics Committee of NOVA IMS report



This is to certify that

Project No.: **DDMKT2024-12-69390**

Project Title: **Influencers' affect on the perception of sustainability of cosmetics**

Principal Researcher: **Ricardo Miguel Oliveira Ramada**

according to the regulations of the Ethics Committee of NOVA IMS and MagIC Research Center this project was considered to meet the requirements of the NOVA IMS Internal Review Board, being considered **APPROVED** on 12/6/2024.

It is the Principal Researcher's responsibility to ensure that all researchers and stakeholders associated with this project are aware of the conditions of approval and which documents have been approved.

The Principal Researcher is required to notify the Ethics Committee, via amendment or progress report, of

- Any significant change to the project and the reason for that change;
- Any unforeseen events or unexpected developments that merit notification;
- The inability of the Principal Researcher to continue in that role or any other change in research personnel involved in the project.

Lisbon, 12/6/2024

NOVA IMS Ethics Committee
ethicscommittee@novaims.unl.pt

2. Questionnaire design:

Hi, my name is Ricardo Ramada. Im writing my dissertation for my Masters Degree in Data Driven Marketing with specialization in Marketing Intelligence at the New University of Lisbon - NOVA Information Management School.

This survey aims to verify how much impact the **social media** and **social media influencers** has on the perception of **sustainability** of the consumers regarding cosmetic brands. Please answer the following questions, providing honest responses. It is important to highlight that there is no right or wrong questions.

The duration of this survey has approximately 5 minutes and the answers will be anonymous and confidential as well. Your participation will be important and appreciated.

In case of any doubt or additional questions, please contact me via my institutional email: m20210909@novaims.unl.pt.

Thank you! 😊

Consent:

Dear participant, there is no risk associated to answering all this questions. Your **participation is voluntary**, which means you can decide either if you want or not to participate and give up at any time during the survey. Your **answers** are really important, **anonymous, confidential** and the data will only be collected for academic purposes.

Before starting the survey, you declare, that you are at least 18 years old and you agree to participate in this survey.

I agree to participate

I do not agree to participate



Powered by Our

Do you follow Influencers?

Yes

No



Do you use sustainable cosmetics? (Sustainable cosmetics are defined as cosmetic products using natural ingredients produced from renewable raw materials)

Yes

No



Do you follow Green Lifestyle Influencers?

Yes

No



In this section, the next few questions will be about the influencers and their credibility regarding sustainable cosmetic products advertisements

How much importance do you give to the influencer credibility when looking for sustainable/organic cosmetics recommendations?

None at all

A little

A moderate amount

A lot

A great deal

Please rank from 1 (the type of influencer you would rely the most) to 4 (the type of influencer you would rely the less) when looking for sustainable cosmetics suggestions:

Celebrity

Green Lifestyle Influencer

Fashion Influencer

Lifestyle Influencer

Do you think that the credibility of an influencer can change your perception of sustainability regarding a certain cosmetic brand?

Definitely not

Probably not

Might or might not

Probably yes

Definitely yes



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In this section you will be asked about the number of followers being or not a decision factor when you decide to follow recommendation from an influencer to get sustainable cosmetic products.

Do you think the number of followers matter?

Not at all important

Slightly important

Moderately important

Very important

Extremely important

Do you believe that the number of followers can affect their influencer performance promoting a product?

Strongly disagree

Somewhat disagree

Neither agree nor disagree

Somewhat agree

Strongly agree

Are you most likely to buy a product advertised by a macro influencer (has more than 100.000 followers) rather than a micro influencer (follower count within the range of 10.000 to 100.000)?

Definitely not

Probably not

Might or might not

Probably yes

Definitely yes

Do you think that the number of followers of an influencer can change your perception of sustainability regarding a certain cosmetic brand?

Definitely not

Probably not

Might or might not

Probably yes

Definitely yes



Powered by Qu

In this section, the next questions will be about the influencers authenticity and number of products/brands they promote as a decisive factor when you are looking for advices regarding sustainable cosmetics.

How much importance do you give to an influencer authenticity when looking for a sustainable cosmetics recommendations

Not at all important

Slightly important

Moderately important

Very important

Extremely important

Do you think that the authenticity of an influencer can change your perception of sustainability regarding a certain cosmetic brand?

Definitely not

Probably not

Might or might not

Probably yes

Definitely yes

What about the number of brands they are working with, how much significance do you give on a scale from 1 (not important at all) to 5 (extremely important), when looking for product reviews?

Not at all important 1 Slightly important 2 Moderately important 3 Very important 4 Extremely important 5

Number of partnerships

Do you think that the number of partnerships that an influencer has can change your perception of sustainability regarding a certain cosmetic brand?

Definitely not

Probably not

Might or might not

Probably yes

Definitely yes

What about the number of products they advertise, how much significance do you give on a scale from 1 (not important at all) to 5 (Extremely important), when looking for product reviews ?

Not at all important 1 Slightly important 2 Moderately important 3 Very important 4 Extremely important 5

Number of advertised products

1



Do you think that the number of products advertised by an influencer can change your perception of sustainability regarding a certain cosmetic brand?

Definitely not

Probably not

Might or might not

Probably yes

Definitely yes



Powered by Q

In this section, the next questions will be about the good perception of sustainability towards cosmetics.

Do you think that you have a good perception of sustainability regarding cosmetic brands due to social media?

Yes

No

Do you think that the good perception of sustainability regarding cosmetic brands is due to social media influencers?

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

Do you think that the good perception of sustainability regarding cosmetic brands is due to social media influencers?

- Strongly disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

Please select one or more factors below that you think that gives you a good perception of sustainability while looking for sustainable cosmetics, while relying on Social Media Influencers:

- Number of Followers
- Credibility
- Authenticity
- Number of partnerships/Advertised products



Powered by Qu

Where are you from?

Europe

America

Asia

Africa

Australia

What is your gender?

Male

Female

Other

Prefer not to say

How old are you?

What is your highest level of education?

High School graduate

Bachelor's

Master's

Doctorate

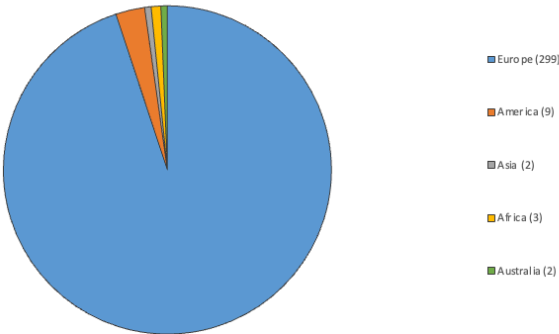
Other



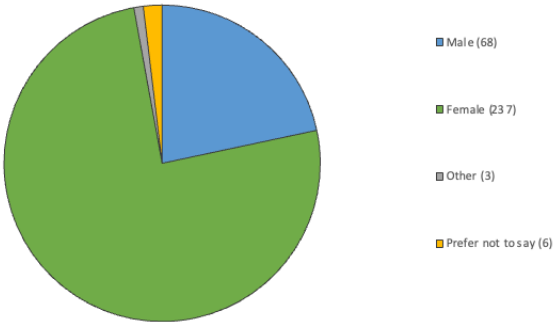
Powered by Qualtrics

3. Demographic Information

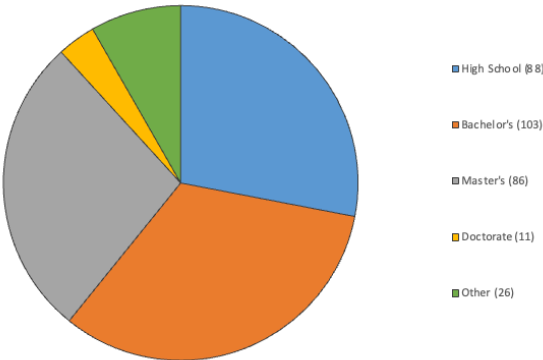
Geographic Distribution of the Population



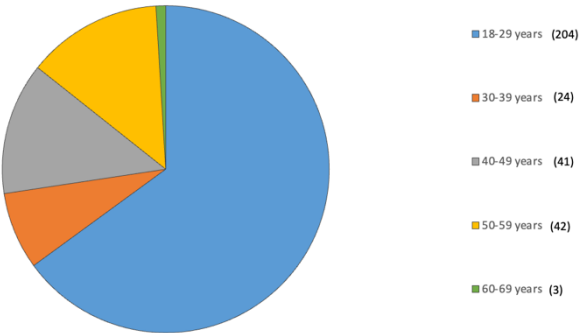
Gender



Level of Education



Age



4- Frequency test – SPSS

Frequências

Estatísticas

How old are you?

N	Válido	314
	Omisso	0
Média		31.72
Mediana		25.00
Erro Desvio		12.112
Intervalo		56
Mínimo		17
Máximo		73

Frequências

Estatísticas

What is your highest level of education?

N	Válido	314
	Omisso	0
Média		2.31
Mediana		2.00
Modo		2
Intervalo		4
Mínimo		1
Máximo		5

What is your highest level of education?

		Frequência	Porcentagem	Porcentagem válida	Porcentagem acumulativa
Válido	High School graduate	88	28.0	28.0	28.0
	Bachelor's	103	32.8	32.8	60.8
	Master's	86	27.4	27.4	88.2
	Doctorate	11	3.5	3.5	91.7
	Other	26	8.3	8.3	100.0

Where are you from?

		Frequência	Porcentagem	Porcentagem válida	Porcentagem acumulativa
Válido	Europe	299	95.2	95.2	95.2
	America	8	2.5	2.5	97.8
	Asia	2	.6	.6	98.4
	África	3	1.0	1.0	99.4
	Austrália	2	.6	.6	100.0
	Total	314	100.0	100.0	

What is your gender?

		Frequência	Porcentagem	Porcentagem válida	Porcentagem acumulativa
Válido	Male	68	21.7	21.7	21.7
	Female	237	75.5	75.5	97.1
	Other	3	1.0	1.0	98.1
	Prefer not to say	6	1.9	1.9	100.0
	Total	314	100.0	100.0	

5- Pearson Correlation Test - SPSS

Correlações							
		Do you think that the credibility of an influencer can change your perception of sustainability regarding a certain cosmetic brand?	Do you think that the number of followers of an influencer can change your perception of sustainability regarding a certain cosmetic brand?	Do you think that the authenticity of an influencer can change your perception of sustainability regarding a certain cosmetic brand?	Do you think that the number of partnerships that an influencer has can change your perception of sustainability regarding a certain cosmetic brand?	Do you think that the good perception of sustainability regarding cosmetic brands is due to social media influencers?	Do you think that the number of products advertised by an influencer can change your perception of sustainability regarding a certain cosmetic brand?
Do you think that the credibility of an influencer can change your perception of sustainability regarding a certain cosmetic brand?	Correlação de Pearson	1	.368**	.604**	.406**	.623**	.501**
	Sig. (2 extremidades)		<.001	<.001	<.001	<.001	<.001
	N	314	314	314	314	314	314
Do you think that the number of followers of an influencer can change your perception of sustainability regarding a certain cosmetic brand?	Correlação de Pearson	.368**	1	.436**	.563**	.417**	.596**
	Sig. (2 extremidades)	<.001		<.001	<.001	<.001	<.001
	N	314	314	314	314	314	314
Do you think that the authenticity of an influencer can change your perception of sustainability regarding a certain cosmetic brand?	Correlação de Pearson	.604**	.436**	1	.437**	.635**	.487**
	Sig. (2 extremidades)	<.001	<.001		<.001	<.001	<.001
	N	314	314	314	314	314	314
Do you think that the number of partnerships that an influencer has can change your perception of sustainability regarding a certain cosmetic brand?	Correlação de Pearson	.406**	.563**	.437**	1	.473**	.829**
	Sig. (2 extremidades)	<.001	<.001	<.001		<.001	<.001
	N	314	314	314	314	314	314
Do you think that the good perception of sustainability regarding cosmetic brands is due to social media influencers?	Correlação de Pearson	.623**	.417**	.635**	.473**	1	.528**
	Sig. (2 extremidades)	<.001	<.001	<.001	<.001		<.001
	N	314	314	314	314	314	314
Do you think that the number of products advertised by an influencer can change your perception of sustainability regarding a certain cosmetic brand?	Correlação de Pearson	.501**	.596**	.487**	.829**	.528**	1
	Sig. (2 extremidades)	<.001	<.001	<.001	<.001	<.001	
	N	314	314	314	314	314	314

** . A correlação é significativa no nível 0,01 (2 extremidades).

6 – Multiple Regression Analysis test - SPSS

Resumo do modelo

Modelo	R	R quadrado	R quadrado ajustado	Erro padrão da estimativa
1	.725 ^a	.525	.518	.716

- a. Preditores: (Constante), Do you think that the number of products advertised by an influencer can change your perception of sustainability regarding a certain cosmetic brand?, Do you think that the authenticity of an influencer can change your perception of sustainability regarding a certain cosmetic brand?, Do you think that the number of followers of an influencer can change your perception of sustainability regarding a certain cosmetic brand?, Do you think that the credibility of an influencer can change your perception of sustainability regarding a certain cosmetic brand?, Do you think that the number of partnerships that an influencer has can change your perception of sustainability regarding a certain cosmetic brand?

ANOVA^a

Modelo	Soma dos Quadrados	df	Quadrado Médio	Z	Sig.
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Coefficientes^a

Modelo		Coefficients não padronizados		Coefficientes padronizados	t	Sig.
		B	Erro Erro	Beta		
1	(Constante)	.867	.189		4.596	<.001
	Do you think that the credibility of an influencer can change your perception of sustainability regarding a certain cosmetic brand?	.287	.047	.315	6.101	<.001
	Do you think that the number of followers of an influencer can change your perception of sustainability regarding a certain cosmetic brand?	.030	.038	.040	.801	.424
	Do you think that the authenticity of an influencer can change your perception of sustainability regarding a certain cosmetic brand?	.339	.053	.335	6.430	<.001
	Do you think that the number of partnerships that an influencer has can change your perception of sustainability regarding a certain cosmetic brand?	.063	.056	.079	1.110	.268
	Do you think that the number of products advertised by an influencer can change your perception of sustainability regarding a certain cosmetic brand?	.095	.062	.118	1.539	.125

- a. Variável Dependente: Do you think that the good perception of sustainability regarding cosmetic brands is due to social media influencers?