

St. Petersburg University
Graduate School of Management

Master in Management Program

INFLUENCE OF SOCIOCULTURAL FACTORS ON CRUELTY-FREE CONSUMPTION IN
THE RUSSIAN BEAUTY MARKET

Master's Thesis
by the 2nd year student
Concentration —Management
Valentina Krivosheeva

Research advisor:
Associate Professor
M. Deniz Dalman

St. Petersburg
2021

ЗАЯВЛЕНИЕ О САМОСТОЯТЕЛЬНОМ ХАРАКТЕРЕ ВЫПОЛНЕНИЯ ВЫПУСКНОЙ КВАЛИФИКАЦИОННОЙ РАБОТЫ

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30.05.2021 (Date)

АННОТАЦИЯ

| | |
|---|---|
| Автор | Кривошеева Валентина Андреевна |
| Название ВКР | Влияние социокультурных факторов на потребление этичных косметических средств в России |
| Образовательная программа | Менеджмент |
| Направление подготовки | Менеджмент |
| Год | 2021 |
| Научный руководитель | Далман Мустафа Дениз Старший преподаватель кафедры маркетинга |
| Описание цели, задач и основных результатов | <p>Цель данного исследования - определить и проанализировать социокультурные факторы, влияющие на поведение российских потребителей относительно косметических товаров не тестируемых на животных. В связи с этим, практическая направленность работы обусловлена разработкой практических рекомендаций для компаний, продающих косметические товары в России.</p> <p>В ходе работы были определены ключевые факторы, влияющие на поведение потребителей на этом рынке: «знания потребителей о тестировании на животных» и «доверие потребителей». Экспериментальный подход был применен для определения уровня влияния этих факторов на решение потребителя о покупке косметического продукта не тестируемого на животных вместо косметического продукта, который был протестирован на животных. Также, в ходе экспериментов оценивалось социальное влияние различных типов лиц (друг/эксперт) на вышеупомянутые факторы и на выбор потребителей.</p> <p>Основными результатами работы являются: определение основных социокультурных факторов влияющих на поведение российских потребителей на рынке косметических средств, не тестируемых на животных, оценка влияния этих факторов на поведение российских потребителей, рекомендации для компаний из индустрии косметических средств, а также рекомендации для будущих исследований.</p> |
| Ключевые слова | Потребление без жестокости, поведение потребителей, индустрия косметических товаров, доверие потребителей, знания потребителей, маркетинг, этичное потребление |

ABSTRACT

| | |
|---|---|
| Master Student's Name | Krivosheeva Valentina Andreevna |
| Master Thesis Title | Influence of sociocultural factors on cruelty-free consumption in the Russian Beauty Market |
| Educational Program | Master in Management |
| Main field of study | Management |
| Year | 2021 |
| Academic Advisor's Name | M. Deniz Dalman, Assistant Professor Marketing Department |
| Description of the goal, tasks and main results | <p>The aim of the given research is to determine and explore sociocultural factors that influence cruelty-free consumption on the beauty market among Russian consumers. In this regard, the practical focus of the work is due to the development of practical recommendations for companies selling cosmetic products in Russia.</p> <p>In the course of the work, key factors that influence consumer behavior in this market were identified: “consumer knowledge about animal testing” and “consumer trust”. An experimental approach was applied to identify the level of influence of these factors on consumer’s decision to purchase cruelty-free cosmetic product instead of cosmetic product that was tested on animals. Also, through the experiment, the social influence through the different types of reference (friend/expert) on the before mentioned factors and cruelty-free behavior of consumers was evaluated.</p> <p>The main results of the work are: determination of the main socio-cultural factors affecting the behavior of Russian consumers in the market of cosmetics that are not tested on animals, an assessment of the influence of these factors on the behavior of Russian consumers, recommendations for companies from the beauty products industry, as well as recommendations for future research.</p> |
| Keywords | Cruelty-free consumption, consumer behavior, beauty market, consumer trust, consumer knowledge, marketing, ethical consumption |

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Introduction

Research background and motivation

During the 20th century, a major shift to new economic and business models occurred, resulting in rapid economic growth that eventually fostered natural resource exploitation and over-consumption. The extensive consequences include global warming, environmental degradation (soil, air, and water), ozone layer depletion, and life-threatening health hazards (Biswas et al., 2015). Since these times the topic of sustainable responsibility became crucial for businesses and individuals, and the process of shifting towards new behavior has commenced.

This shift calls for a transformation of the markets, discarding such outdated notions as treating the environment as a limitless source of materials and sink for waste, seeing economic value as the only measure of nature's worth, encouraging unbridled consumption, and considering perpetual economic growth as even possible (Hoffman A., 2018). In the past years, we observe how all over the world existing companies are integrating sustainable practices transformation into their processes and new businesses are proactively disrupting the market to make it even more sustainable.

Thus, previously mentioned environmental and social changes resulted in the inception of a new consumer mentality – ethical consumption. Nowadays, the range of ethical consumer practices is wide: boycotting the products of companies with an irresponsible attitude to the environment, participation in waste management, energy saving, gardening, eco-tourism, “buy less”, “walk more often” strategies, use public transport, and not own car.

Purchasing cruelty-free cosmetics (that are not tested on animals) is one of the forms of ethical consumer behavior. Despite existing alternative methods of testing products some companies are still using animals to run their tests. Most of the brands that are owned by a few giant corporations like L’Oreal, Estee Lauder, Procter & Gamble, Clorox, Johnson & Johnson, S.C. Johnson, Colgate-Palmolive, Reckitt Benckiser, Church & Dwight, Unilever, and Henkel are using animal testing for its products (PETA, 2021). In the meantime, the recently revised forecasts for the development of the beauty market, even with the recent drop in expenditure on skincare and make-up across consumers from all countries due to COVID-19, experts estimate global beauty market size valued at \$463.5 billion by 2027 with a CAGR of 5.3% from 2021 to 2027 (Statista, 2021). While cruelty-free and vegan cosmetics are estimated to reach \$21,4 billion by 2027 with an annual CAGR of 6,0 % (Market Research, 2021).

In the past years, we observe a growing demand for cruelty-free cosmetics, especially, among eco-active consumers (Market Research Future, 2020). However, the awareness of consumers about topics of cruelty-free products and animal testing, in general, is different across

countries and social groups. The difference is especially visible between developed and emerging markets due to dissimilar law regulations on animal testing, as well as generally higher awareness about sustainable consumption among consumers from developed countries.

In addition to the gap between developed and emerging countries mentioned above, we still observe a consumers' attitude-behavior gap between their environmental concern and actual buying behavior that hinders the market share for cruelty-free products. According to recent data, 49% of consumers in Russia find it important that cosmetics are not being tested on animals, however, only 22% of these consumers know cruelty-free brands and participate in cruelty-free consumption (Deloitte, 2019). In agreement with behavioral science, a key influencer of consumer behavior is the set of beliefs that a consumer holds about the world. This set of beliefs is determined by the society and culture where the individual is growing and living. For example, consumers can have different attitudes towards consumer concern for animal welfare (Cornish et al., 2016), willingness to pay for animal welfare (Clark et al., 2017), the role of consumer trust in animal-friendly labels (Harvey et al., 2013) and the trade-offs that consumers are willing to make between animal welfare and other product benefits, such as healthiness or safety (Krystallis et al., 2012). Moreover, such differences do not only stem from varying preferences and perceptions but may also stem from norms and values within specific cultures and subcultures.

In the meantime, the COVID-19 crisis has forced many consumers to change their behaviors. As it is stated in a recent global survey by Accenture, consumers "have dramatically evolved", and that 60% were reporting making more environmentally friendly, sustainable, or ethical purchases since the start of the pandemic and it is estimated that nine out of 10 of that percentage said were likely to continue doing so (Accenture, 2020). According to recent studies, there was a significant change in the lifestyles of consumers: adoption of recycling practices, purchase of products in environmentally friendly packaging (Deloitte, 2020; McKinsey, 2020).

Because consumers ultimately decide to accept or reject animal-friendly products, consumer buying behavior presents a powerful drive or a barrier for the development of a market for such products. Thus it is essential to understand the internal and external barriers motives that lay underneath the consumer incentive to buy cruelty-free. Understanding deep sociocultural barriers and motives for cruelty-free consumption is beneficial to tackle existing challenges and opportunities in the Russian beauty market.

Research gaps in existing consumer behavior studies

As for today, existing literature provides us with a substantial amount of information on sociocultural factors that influence consumer behavior and green consumerism. Rather extensive

research has been conducted on the general topic of ethical consumption by both academic researchers (Chan and Lau, 2001; Chowdhury and Samuel, 2014; Biswas and Roy, 2015; Leonidou et al. 2010; Varshneya et al. 2017) and businesses (Deloitte, 2017; Deloitte, 2020; KPMG, 2018; McKinsey, 2020; McKinsey, 2021).

However, despite extensive research on consumers' environmental actions, attitudes, and apprehension in the context of Europe and the USA, such studies are remarkably absent in the context of the developing economies of the East (Schlegelmilch et al., 1994; Minton and Rose, 1997; Arkesteijn and Oerlemans, 2005; Faiers et al., 2007; Saxena and Khandelwal, 2010; Boztepe, 2012). Besides, an extremely limited amount of information on cruelty-free consumption in Russia is presented over the available research. It is important to highlight the fact that, despite the certainty that there are general implications from studies on the emerging markets and some behavioral patterns are generally assumed to be common for developing economies, each society has its own cultural and historical background (Pizam et al., 1997; Hofstede, 2011) which does not allow us to see the consumers in different countries as people with same influence – while many common characteristics might be more or less universal, if we decide to dive into the peculiarities of consumer behavior we should perceive every single society as a unique one, especially if we are to discuss the societies which are different in their very core – for instance, Western Europe and Russia.

Furthermore, the literature shows the lack of studies that take into account the impact of COVID-19 both on consumer ethical behavior and cruelty-free consumption. Therefore, there is a necessity to review the past researches and update insights on the influence of sociocultural factors on consumer behavior.

It can be concluded that cruelty-free consumption of cosmetics is poorly investigated in the realities of Russia. Hence, the current study aims to fill this gap and provide both academia and businesses with data on the subject we are discussing.

Research problem, goal, and strategy of the study

Consequently, it is of high relevance and importance to study the influence of sociocultural factors on cruelty-free consumption in Russia, hence to understand the incentives and reasons for such behavior and the outcomes it presents for those who are concerned with marketing and especially consumer behavior studies.

The research goal, therefore, is to determine and explore sociocultural factors that influence cruelty-free consumption on the beauty market among Russian consumers. In this regard, the

practical focus of the work is due to the development of practical recommendations for companies selling cosmetic products in Russia.

The subject of the given research is: “Sociocultural factors influencing consumer behavior in cruelty-free beauty product market”.

The object of the given research is: “Russian consumers of the beauty products”.

This research paper might be of interest both for the companies that are trying to adjust their existing processes and products to the new mentality and for the companies that are looking for new insights on how to increase and support further evolvement of cruelty-free consumption. As Russian market currently is characterized both by low awareness among consumers and lack of government regulation on animal testing in the beauty industry, making it more challenging for companies to leverage cruelty-free as its competitive advantage and for multinational companies to maintain brand identity across the market organizations. However, with COVID-19 we are facing a unique moment in time during which companies can reinforce and shape behavioral shifts to position their products and brands better for the next normal. We, as the researchers are interested in exploring the phenomenon, assessing its importance, and developing recommendations both for future research in the area and for the specialists who are working with related subjects in a practical environment.

Proceeding with the methodology of the study, it is vital to mention that this research is explanatory since it aims to understand the causal relationships between variables and to identify the nature of these cause-and-effect relationships.

In the meantime, it is formal and aims to high structuration. Hence, the theoretical framework of the research is constructed upon the analysis of the theories explaining cruelty-free consumption.

Based on the specifics of the study area, two key methods were selected for this research:

1. Literature review
2. Experiments

These methods will help to obtain two types of information:

- Secondary data from the scientific articles and existing case studies,
- Primary data from the experiments

This study aims to gather empirical evidence of the phenomena so that the researchers could be able to fill the research gap and present practically approbated information derived from several sources. Causal studies focus on the analysis of a situation or a specific problem to explain the patterns of relationships between variables. Experiments are the most popular primary data collection methods in studies with causal research design. This method aims to test different

assumptions (hypotheses) by trial and error under conditions established and managed by the investigator. One or more conditions (independent variables) are permitted to change during the experiment in an organized manner and the effects of these changes on associated conditions (dependent variables) are measured, recorded, validated, and analyzed for arrival (Gneezy, A., 2016). This method is beneficial in terms of the strict granting of data collected to the research problem's objectives. Besides, the data-gathering technique is strictly regulated. This also has its drawbacks, though, as the method is very laborious and often costly, however, it covers a large number of users.

The current work is constructed in three parts. The first one reveals the theoretical background of the study and aims to analyze existing research on the subject as well as secondary data. The second chapter presents the structure of empirical research. The last chapter presents the findings obtained by an empirical study, provides recommendations, and observes the hypotheses. Practical recommendations, offerings for further investigation, and limitations of the research are also present within this work.

Chapter 1. Investigation of the cruelty-free consumption phenomenon

1.1 Definition and background of cruelty-free consumption

In the existing literature cruelty-free consumption is often investigated as part of ethical consumption. Thus, to understand the background and specifics of the phenomenon of cruelty-free consumption in the beauty market, we should first refer to ethical consumption in general.

Many authors comment on the difficulty in defining ethical behavior (Singhapakdi et al., 1999; KPMG and Synovate, 2007), and ethical consumption (Howard and Nelson, 2000; Cherrier, 2005; Clavin and Lewis, 2005). This can be explained by the subjective character of evaluating consumer actions as they are often complicated by various circumstances. According to Barnett et al., ethical consumption is defined as any practice of consumption in which explicitly registering commitment or obligation towards distant or absent others is an important dimension of the meaning of the activities to the actors involved (Barnett et al., 2005). In general, ethical consumption is interpreted as the purchase and use of goods not only based on the value they deliver (for personal pleasure, benefit) but also under the influence of the moral factor (“what is good and what is bad”), taking into account the conditions of production and the consequences use of these benefits. This is the reaction of society (consumers) to the threatening state of the environment, the development of unsightly business practices, opposition to those that cause significant harm to people (their health, life, material well-being, or other elements of a decent life). Ethical consumers consciously recognize that private consumption has public consequences and that purchasing power can bring social change. Consequently, they vote with their dollars, purchasing from socially responsible companies and avoiding and boycotting unethical companies (Giesler and Veresiu, 2014; Vitell et al., 2015).

Adding to the multiplicity of disciplinary lexicons, ethical consumption can be conceived as either directly impacting entities in the immediate supply chain, such as, rural farmers through consumption of fairly traded commodities; or, indirectly creating positive outcomes for entities outside of the immediate commodity chain, such as the beneficiaries of cause-related marketing (Hawkins 2011; Olson et al. 2016).

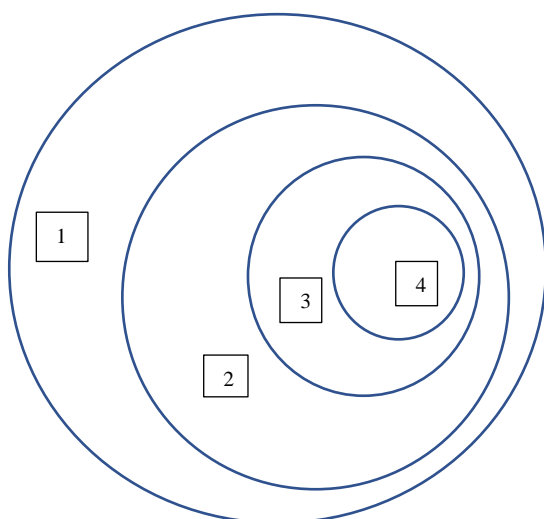
According to the consumer behavior theory, switching to ethical consumption requires consumer additional efforts, which are often considered as a perceived nonmonetary sacrifice. In contrary with ordinary consumption, ethical consumption requires the additional process of searching for information or extra efforts in terms of thinking about avoiding redundant actions or making some extra actions. Interestingly, in some cases, a large price discount may be required to compensate for the heavier loss of consumers.

The range of ethical consumption practices is wide. Forms of action in ethical consumption can be grouped into six groups: (1) non-consumption, (2) value-based regular shopping, (3) boycott, (4) positive boycott (buycott), (5) usage, and (6) placement after usage, disposal (Gulyas, 2008). Speaking of the motives for ethical consumption, some researchers identify the interconnection of the theoretical model of Maslow's pyramid and the need of ethical consumers for safety. They strive to increase the level of care and well-being of close people, families, relatives, and if we say globally, they care about the well-being of all people and all forms of life inhabiting planet Earth.

One of the ethical consumption practices is cruelty-free consumption. The term cruelty-free was first used in this way by Lady Dowding who persuaded manufacturers of fake furs to use the label Beauty Without Cruelty and went on to found the charity Beauty Without Cruelty in 1959 (Bekoff, 1998). The term was popularized in the US in the 1970s and later in 1998, the United Kingdom was the first country to ban all testing on animals.

After reviewing existing literature on this topic, it was identified that the term cruelty-free is quite versatile, as it is used for marketing purposes in several different contexts and can represent different ideas regarding how animals are treated. Thus, it can be used to connote a company's avoidance of testing products on animals - an animal rights perspective that suggests that animals should not be used or owned by people in any way. Also sometimes it is used to connote the welfare of an animal, such as allowing chickens to live free-range or cage-free, resulting in what is called "cruelty-free eggs". In the context of the beauty market, cruelty-free consumption is often referred to as avoidance of testing products or ingredients on animals. However, in some sources cruelty-free cosmetics are confused or combined with vegan cosmetics, making it complicated to estimate the current market volumes correctly. Vegan cosmetics refer to a more narrow term, meaning such product is not tested on animals and does not contain any animal ingredients or animal-derived ingredients. Or sometimes vegan cosmetics can refer only to a brand that does not contain any animal ingredients or animal-derived ingredients. Figure 1 (The essence of the term "cruelty-free" consumption) illustrates the interconnection between the aforementioned terms, which is especially important to understand their place in the hierarchy to diversify research papers by the specific type of consumption. To summarize, it is important to note that this study will focus on the concept of cruelty-free under the definition of animal testing of beauty products and its' ingredients.

Figure 1. The essence of the term “cruelty-free” consumption



- 1- Sustainable consumption
- 2- Ethical cosmetics consumption
- 3- Cruelty-free consumption (cosmetics)
- 4- Vegan cosmetics consumption

Animal testing has been used as a common practice since the early 20th century to establish whether or not a product or ingredient is safe for public health before allowing it on the market. In general, not only cosmetics are being tested on animals, but also new drugs, household cleaning products, food additives, pesticides. For cosmetics tests most often are used small animals like mice, rats, bunnies, and guinea pigs. According to the statistics, often these animals die from the experiments.

Nowadays some companies are moving from testing products on animals to cruelty-free alternatives, such as doing tests using human cells and tissues (also known as *in vitro* methods), advanced computer-modeling techniques, and studies with human volunteers. Interestingly that alternative types of testing, according to the latest scientific research, show more accurate test results than animal testing. In addition, some researchers believe that tests of drugs and cosmetics on animals do not guarantee that the product is safe for humans and will not cause side effects - at least because animals and humans react differently to the same substances. Moreover, every year millions of animal carcasses used in research laboratories are discarded and are mostly contaminated with toxic and hazardous chemicals. This waste of animal bodies and tissue has the most obvious impact on the environment (Groff et al., 2014). Still, many companies continue testing on animals.

The main challenge for companies to switch to cruelty-free production is local legislation. Nowadays an animal testing ban is in effect in a total of 40 countries, including the European

Union, United States (some states), India, Australia, Israel, and Norway. Thus, testing cosmetics on animals for products manufactured and sold on these territories is not allowed. However, some markets have a different position on legal testing. China being one of the largest and promising cosmetic markets had the most stringent legislation in the field of cosmetics and perfumery until May 2021, requiring any imported cosmetics sold in Chinese stores to be tested on animals. Since the 1st of May new laws will apply to cosmetics imported to China, meaning that products that do not have claims such as ‘anti-aging, skin whitening or anti-acne will not need to go through animal testing when imported into the country. Even though it is indicated to be a large step forward for the cruelty-free cosmetic market, for many product categories and brands the requirement for animal tests is still in place. And as the Chinese cosmetic market is one of the most promising in terms of annual consumption growth, many global brands are not ready to give up an opportunity to be present on the Chinese market and expand their operations and profits for maintaining their cruelty-free status. We observe examples of brands like Dior, Estée Lauder, and many others that do not test their products or ingredients that they sell in Europe or any other markets where it is not required, however all their products imported to China are tested on animals at the pre-sale stage.

Therefore, we can identify 4 types of brands, depending on their cruelty-free status (figure 2) and the attitude of the cruelty-free consumers towards these 4 types of brands is different. From a consumer behavior perspective, the decision to avoid buying cosmetics that test on animals means an obligation not to hurt animals for unnecessary purposes. For the majority of ethical activists, brands that position themselves in Europe as cruelty-free, but at the same time are represented in China, are considered unethical and cannot truly be considered cruelty-free. Thus, consumers with high awareness and involvement on the topic of animal testing will avoid buying such products. However, certain consumers might be less radical regarding their opinion on such brands, explaining it by the requirement to follow local regulations. In the meantime, we observe some cases, where the company changed its cruelty-free status to non-cruelty-free because of its decision of expanding to the Chinese market and it resulted in boycotting its’ products. For example, in June 2017 Nars cosmetics expanded its market share to the Chinese market and gave up its’ cruelty-free status. This move for Nars cosmetics resulted in previous consumers boycotting the cosmetic brand. The hashtag boycott Nars became a global hashtag once Nars cosmetics made the announcement.

Figure 2. Typology of brands according to their cruelty-free status and attitude of eco-activists

| An attitude of the brand towards animal testing | Markets where brand do animal testing | Brand (examples) | Owned by a parent company that tests on animals (if applicable) | An attitude of cruelty-free consumers |
|--|--|--|--|--|
| <i>Positive</i> | <i>Where it is not banned by law</i> | <i>Primarily local brands or companies that break their commitments</i> | <i>Yes</i> | <i>Negative</i> |
| <i>Positive</i> | <i>Where it is required by law</i> | <i>Nars, L'oreal, Benefit, Bioderma, MAC, Estée Lauder, Dior, Clinique</i> | <i>Yes</i> | <i>Negative</i> |
| <i>Negative</i> | <i>No markets</i> | <i>Urban Decay, NYX, The ordinary,</i> | <i>Yes</i> | <i>Positive/Negative</i> |
| <i>Negative</i> | <i>No markets</i> | <i>Aesop, Aveda, Dermologica</i> | <i>No</i> | <i>Positive</i> |

Source: Information retrieved and processed by the author from - <https://www.crueltyfreekitty.com/>

Another important question is concerned with ethical brands that are owned by unethical companies. For example, NYX and Urban Decay are cruelty-free brands that do not test on animals, however, they are owned by a parent company L'Oréal that has brands that are sold in China. There is no consensus among activists and adherents of an ethical lifestyle on this matter. Some are calling for a boycott of brands that are subsidiaries of large unethical concerns (such as L'Oréal and Estée Lauder). Others believe that maintaining an ethical brand, while dependent on another company, shows big players that buyers need a product.

To avoid duality and misunderstanding, in this research we are primarily focusing on cruelty-free cosmetic brands rather than researching animal testing in the context of companies that do not have a unified position for animal testing for all the brands it owns.

1.2 Barriers and motives for cruelty-free consumption

1.2.1 Theoretical discourse on factors influencing cruelty-free consumption

There is a large number of researches, that examine factors, influencing consumer behavior in general. Empirical studies carried out in different countries indicate that the development of ethical consumption is influenced by factors of a different nature, lying on the side of both individuals and individual communities and society as a whole. However, concerning the role of specific sociocultural factors influencing consumer behavior in cruelty-free consumption, the accumulated knowledge is very ambiguous.

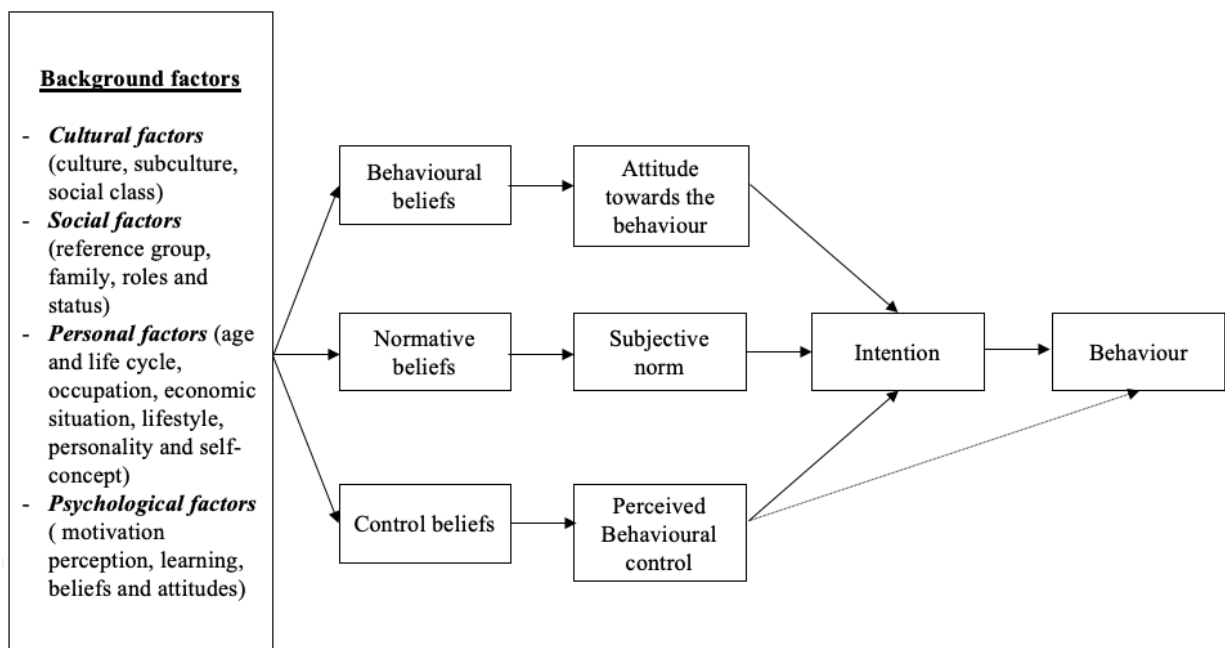
The specifics of ethical consumption, as well as cruelty-free consumption, is that consumer often faces intention/attitude-behavior gap. The attitude-behavior gap refers to the situation when consumers form positive attitudes about ethical consumption but fail to follow through with their actual purchase behavior (Ajzen,1991). The majority of the research papers on cruelty-free consumption are based on the Theory of Planned Behavior (TPB) model developed to understand ethical consumption and to address the attitude-behavior gap. According to the theory of planned behavior, human behavior is guided by three considerations that lead to the formation of a behavioral intention: beliefs about the likely outcomes of the behavior and a positive or negative assessment of a particular behavior (attitude toward the behavior), social pressures perceived by an individual to behave in a certain way (subjective norm), and an individual's perceived ease or difficulty in carrying out a particular behavior (perceived behavioral control).

Thus, behavior associated, for example, with the use of cruelty-free cosmetics, is determined by behavioral intention: the strength of the intention to perform certain actions and achieve the set goals (for example, "I am going to buy cruelty-free cosmetics"). This intention depends on attitudes towards behavior (beliefs of the individual), subjective norms, and perceived behavioral control. Beliefs are a person's attitude to behavior. It is the result of subjective assessment and can be positive or negative (for example, "Using cruelty-free cosmetics is good (or bad) for me"). Subjective norms are a person's ideas about what he should do, according to the people around him who are significant to him (for example, "Most of the people who are important to me think that I should use cruelty-free cosmetics"). Finally, perceived behavioral control reflects how easy or difficult it is for a person to achieve a goal (for example, "It would be easy (or difficult) for me to use cruelty-free cosmetics"). Attitudes towards behavior and subjective norms affect behavior only indirectly, that is, only through intention. Accordingly, if the intention is not formed, then there will be no effect of the influence of these elements on the likelihood that a person will behave in a certain way. The third element - perceived behavioral control is expressed in behavior both through intention and direct. Thus, regardless of whether a person wants to perform certain

actions, if the implementation of these actions seems to him relatively easy, then the likelihood that he will perform them is higher.

Behavior within the framework of this concept is an action to purchase a certain product, and behavioral intention is formed under the influence of a set of beliefs, which in its turn are formed by the background factors that according to Kotler and Armstrong, can be classified as cultural, social, personal, and psychological factors. Thus, ethical consumer behavior is a complex process that is illustrated with an expanded framework based on the observations above (Figure 3: Conceptual framework - Factors influencing ethical consumer behavior).

Figure 3. Conceptual framework - Factors influencing ethical consumer behavior



Source: (Kotler & Armstrong 2010, p. 162), (Ajzen, 1991)

To determine the sociocultural factors that will be analyzed in this paper, it is essential to mention prior research on ethical and cruelty-free consumption. In general, the majority of studies for both emerging and developed markets are focusing on analyzing personal factors (age, gender, occupation). For example, some studies have found that women are more active than men in engaging in ethical consumption (Olli et al., 2001; Diamantopoulos et al., 2003; Lee, 2009; Starr, 2009). In particular, married women with children are willing to pay more for environmentally friendly products (Laroche et al., 2001). Other researchers, on the contrary, record the insignificance of the gender factor (De Pelsmacker et al., 2006; Haanpää L., 2007; Cailleba, Casteran, 2009). There is no unequivocal dependence on age. Some studies have concluded that it is impossible to single out a clear age category that is more committed to ethical consumption than

others (Starr, 2009), while others record a higher involvement of older age groups (Carrigan et al., 2004), or, on the contrary, young people (Diamantopoulos et al., 2003; Cailleba, Casteran, 2009). Thus we can conclude that belonging to a specific group determined by personal factors is not sufficient to determine the preference for cruelty-free consumption. Indeed, we observe differences in consumer behavior not only among countries but also between people living in the same country, city, district, age group, etc.

Existing literature evaluate the interconnection of different sociocultural factors and cruelty-free/ethical consumption: perception of social justice (Torres-Harding et al., 2012); civic engagement of individuals (participation in rallies, protests, flash mobs) (Witkowski, Reddy, 2010); left-wing political views and altruism (Straughan, Roberts, 1999); affiliation of the nation to individualism or collectivism.

In the meantime, in the context of developed markets and some developing markets the importance of consumer knowledge and consumer trust on the attitude-behavior gap in cruelty-free consumption. For example, Toma et al. (2011) study the determinants of desire to switch to animal-friendly products and change the usual place of purchase for this in nine European countries (Great Britain, Finland, Ireland, Lithuania, Malta, the Netherlands, Poland, Portugal, and Spain). The data from the Eurobarometer database included such information about the respondents as knowledge and desire to learn more about the conditions of keeping animals on farms, attitudes towards animal welfare in general, opinions on the effectiveness of labeling animal-friendly products, intentions to contribute to improving animal welfare and social-demographic factors. The authors found that the greatest influence on the desire to switch to animal-friendly products has the factors of access to information about such products and practices overall, as well as the credibility of the labeling. These factors increased the likelihood of switching to animal-friendly products from 24% to 54% and from 8% to 37% for the factors, respectively (depending on the model and country).

A factor that is related to credibility labeling and is mentioned in other papers as an important determinant for cruelty-free consumption is consumer trust. Trust means respect for cruelty-free cosmetics, confidence in the conformity of reality, and consumer expectations concerning cruelty-free cosmetics. It is one of the main aspects that shape the long-term relationship between the consumer and the product, and sometimes acts as a factor influencing the buying intent (Chen and Chung, 2012).

To conclude this part, even though consumers can be concerned about the negative environmental implications of purchasing goods, yet, there are indications that consumers do not always act on these concerns, causing an attitude-behavior gap. The literature review revealed such factor as consumer trust and consumer knowledge about animal testing significant for cruelty-free

consumption. However, for consumers to make ecologically responsible purchases, they need to be nudged to switch to cruelty-free consumption. Thus, it is also essential to understand the mechanism of social influence on the consumer behavior in more detail.

1.2.2 The phenomenon of consumer knowledge

The term «knowledge» is quite versatile in the literature, as we observe many definitions in different contexts. Knowledge is considered an integral component of attitude (Fabrigaret et al., 2006), where attitude-specific knowledge is defined as ‘the number of attitude-relevant beliefs and experiences that comes to mind when encountering an attitude object’ (Wood et al., 1995). Consumer knowledge can be also defined as ”a subset of all stored information that is relevant to the purchase and consumption of products” (Di Virgilio et al, 2014).

The impact of consumer knowledge is fundamental for decision-making. In terms of consumer behavior, consumer investment in knowledge should, according to Bonner (1992), Shim and Dubey (1995) contribute to:

- better management of resources and more rational selections that have a direct impact on their state well;
- more efficient interactions to achieve the best shopping;
- better informed decision-making processes;
- contentment and a higher standard of living.

It is commonly assumed that greater knowledge is linked to a greater influence of attitudes on behavior (Fabrigar et al., 2006; Nielsen and Thøgersen, 2015). The same assumption applies to environmental behavior – that is, deeper environmental knowledge enhances environmental attitudes and behaviors (Polonsky et al., 2012). In the existing literature environmental knowledge has been defined in many ways: ‘knowledge and awareness about environmental problems and possible solutions to those problems’ (Zsóka et al., 2013); and ‘general knowledge of facts, concepts, and relationships concerning the natural environment and its major ecosystems’ (Fryxell & Io, 2003). According to the existing literature, environmental knowledge can be both general in nature (Rettie et al., 2012) and specific about environmental issues (Polonsky et al., 2012; Schahn and Holzer, 1990).

Nonetheless, it appears to be difficult for consumers to identify eco-friendly products (e.g. Borin et al., 2011; Osburg et al., 2017). Consumers are often not fully informed about a product’s environmental criteria, which need to be understood as a complex phenomenon resulting from a range of sub-criteria (such as environmental impact, origin, material, and supply chain characteristics) (Osburg et al., 2016).

Knowledge acts as a key factor in the formation of attitude (Stutzman and Green 1982). Within ethical consumption, knowledge performs two distinct functions: to increase awareness of relevant environmental issues, and to empower the consumer in the identification and selection of the best green consumption action. Information that raises consumers' level of knowledge and awareness, which in turn instigates social responsibility, is crucial in the formation of green consumption behavior (Lee et al., 2006).

However, several studies reveal that knowledge does not clearly and sufficiently explain pro-environmental behavior (Bamberg and Moser, 2007; Kollmuss and Agyeman, 2002; Rokicka and Slomczynska, 2002). This inconsistent result can be explained by different forms of knowledge not being recognized in conjunction with the traditional measure of the amount of knowledge possessed (Kaiser and Fuhrer, 2003). According to Kaiser and Fuhrer (2003), knowledge can be divided into the following categories:

- System knowledge. For a person to take a pro-environmental action, one must first have some understanding of the current state of the environment and its problems. In the context of cruelty-free consumption, system knowledge can be attributed to knowing how cosmetics are being tested (animal testing and alternative methods of testing).
- Action-related knowledge. It is a knowledge of available actions in addressing the given problem. Within the context of cruelty-free consumption, it would explain people know how to access and participate in cruelty-free consumption.
- Effective knowledge. Effective knowledge defines as people know the effectiveness of a given behavior in itself, as well as relative to others in terms of cost and benefit. For cruelty-free consumers, this knowledge means the impact their actions have on the number of animals that were hurt during animal testing.

Thus, we can conclude that a low level of consumer knowledge about certain product categories might serve as a serious sociocultural barrier for the consumption of this product. However, if the level of consumer knowledge is increased, it might have a positive effect on the adoption or transition to a certain consumption. That leads us to the following hypotheses:

H1: Consumers with low knowledge about cruelty-free testing are less likely to choose cruelty-free product compared to consumers with high knowledge about cruelty-free testing

H3c: Increase in the "consumer knowledge" positively affects buying likelihood of cruelty-free products among consumers

1.2.3 The phenomenon of consumer trust

When considering the role of trust in product information, it must be acknowledged that trust is itself can be defined as a psychological condition that allows the individual to accept a state

of defenselessness based on positive expectations of others' intentions or behaviors (Chang et al., 2013).

In social interaction, there is always uncertainty, due to incomplete knowledge because other actors are independent and have the freedom to not comply with our expectations of their conduct (Luhmann, 1979; Giddens, 1990). Trust becomes a fundamental and critical component in the consumer's decision-making process. In addition, trusting beliefs positively correlate with a trusting attitude, which also significantly influences trusting intention (Li et al., 2008). Building trust and credibility is thus an ongoing reflexive process that requires continuous communication and openness where trust is generated and extended step by step (Möllering, 2006). Trust is composed of three dimensions (Mayer et al., 1995; Schoorman et al., 2007):

- Integrity refers to favorable values that the trustor adheres to during the exchange with the trustee, and when the trustee promises benefits to the trustor, the former is evaluated through the sincerity and honesty of his or her words;
- Benevolence involves the positive intentions of the trustee. The trustor evaluates if the trustee genuinely wants to do good to him or her, shows concern about his or her welfare, and avoids an egocentric motivation for making a profit off of the trustor
- Ability is related to the capacity or competence of the trustee to respond to the needs of the trustor, its ability to accomplish promises, and the ability to perform stated functions or services.

Consumer trust is related to different forms of consumer behavior (Lee et al., 2011). Trust becomes particularly important in the purchase decision process when individuals are faced with counterarguments as they occasionally appear in eco-friendly consumption such as reports of greenwashing incidents (McGuire, 1961). As trust represents one manifestation of attitudes, the trust may help to generate resilience towards negative information because trust in product information can make consumers resistant towards general negative claims about eco-friendly consumption (Jones, 1996).

Additionally, product and service trust, which can be achieved through detailed information provision, has been shown to increase consumers' purchase intention (Gefen and Straub, 2004; Sichtmann, 2007) and willingness-to-pay (Ortega et al., 2011; Ubilava and Foster, 2009). A detailed information provision enables consumers to better understand the reasons why a product is positioned as being eco-friendly. It is thereby essential to provide information consumers perceive as relevant, credible, and meaningful (Osburg et al., 2017). Detailed product information increases consumer trust in the truth of an environmental claim through transparency and partial verification opportunities, which enhances the credibility of the information disclosure (Atkinson and Rosenthal, 2014).

Thus, any lack of trust in environmental claims means the consumer is less likely to engage in environmentally responsible behaviors, we might conclude that consumer trust might be an essential barrier that determines the current state of cruelty-free consumption in general and in Russia in particular. That leads us to the following hypotheses:

H2: Consumers with low “consumer trust” are less likely to choose cruelty-free product compared to consumers with high “consumer trust”

H4c: Increase in the “consumer trust” positively affects buying likelihood of cruelty-free products among consumers

1.2.4 The phenomenon of social influence

Consumer behavior is also affected by social factors, such as the influence of reference groups, family or social roles, and status. Understanding consumers' susceptibility to group influence is important, as it provides consumers with social cues, which ultimately leads to social power (Burnkrant and Cousineau, 1975). We can see the influence of social factors on different levels of the decision-making process. First of all, people around us determine or contribute to our way of thinking. Thus, they might have an impact on the need or desirability for a certain product. Secondly, we often refer to external sources during the information search stage. For example, we ask our friends or family for their opinion or comments or search for advice or recommendations on the Internet or social media. Thus, other people's brands can influence knowledge that we possess about a certain product and build consumer trust in this product.

It has been found that people are more likely to engage in ethical consumption when their environment behaves similarly. If ethical practices are accepted in a particular community, then the inclusion of an individual in them forms the image of a “good citizen” and increases the chances of support from neighbors in difficult situations. On the contrary, ignoring the norms of ethical consumption adopted in the local community deprives the individual of the chance for this support (Starr, 2009).

The influence of reference groups innately varies across different consumer segments and different cultures (Childers and Rao, 1992). As well as the influence of reference groups varies between different age and gender groups: younger women are more susceptible to reference group influences (their friends' opinions) than older women (Kokoi, 2011); young consumers (14 to 25 years) tend to be more influenced by both parents and friends, however, parents play a less significant role as a reference group than friends; females are more socially connected with society and are psychologically more involved in shopping than males (Fisher and Arnold, 1994). Moreover, in a study of male and female cosmetics users, the results showed that men purchased cosmetics individually, whereas women depended on friends' influence (Nair and Pillai, 2007).

Freestone and McGoldrick (2007) suggest that social motivators are stronger motivators for ethical behavior than personal ones; many people recognized that their purchases represent their ethical beliefs to others. Indeed, the majority of individuals are dominated by the desire to belong to a certain reference group, with their special views and interests. Which, in turn, leads to respect in society and the start of self-realization. Green products are also purchased for individual actualization as the principles of conscious and sustainable consumption are gaining momentum among the masses, and are already being practiced as part of a moral duty to protect the safety of their society. Additionally, product attributes and social factors can influence consumer intention to purchase green products, for example, the accuracy of ‘eco labeling’ can help consumers make informed choices (D’Souza, 2004).

Moreover, a list of research indicates the importance of experts’ reference on consumer behavior and purchase decision. In the example of the consumer goods category, confirmation was found for the effect of the received information from the expert on consumers’ product evaluations, as this information was considered to be trustworthy because of the source of the information. Expert ratings have a stronger influence on individuals with low knowledge of the consumer goods category than on those with high knowledge (Cortinas et al, 2013).

As the consumer knowledge regarding cosmetic testing is rather different among one population (especially in the context of Russia) which is explained by different sociocultural environment. Therefore, investigating the impact of social influence on cruelty-free behavior formation is an emerging topic. Thus, we would like to verify in our research how the reference to a friend (peer) and expert might impact consumers’ decision to purchase a cruelty-free cosmetic product. That leads us to the following hypotheses:

- Consumer knowledge:

H3a: When exposed to an influence of a reference group “consumers’ knowledge” increases

H3b: The influence of a reference group on the consumers’ knowledge is stronger when the influencer is an expert compared to when the influencer is a friend

- Consumer trust:

H4a: When exposed to the influence of a reference group, “consumer trust” increases

H4b: The influence of a reference group on the consumers’ trust is stronger when the influencer is a friend compared to when the influencer is an expert

1.3 Challenges and opportunities of cruelty-free consumption in Russia

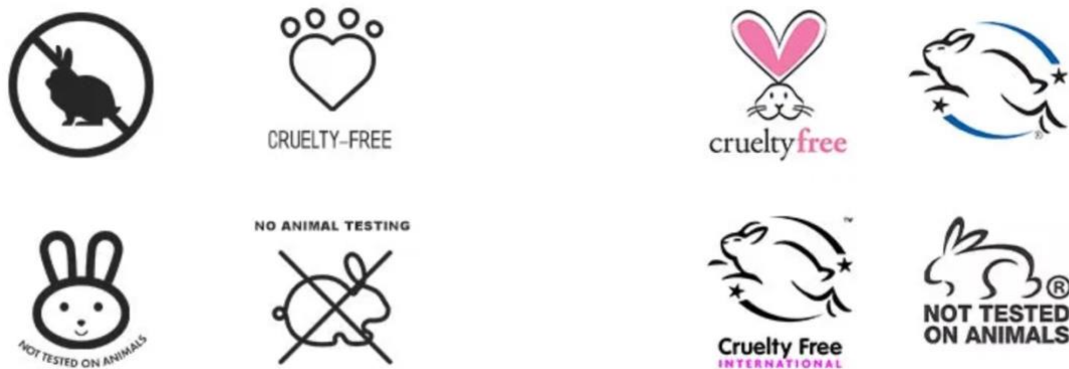
The number of cruelty-free cosmetic brands in Russia is growing in the past years, however, the majority of brands presented on the Russian market continue testing on animals. As it was mentioned earlier, animal testing is currently banned in a list of developed countries, however, in Russia situation is different. In Russia, animal tests for certification of cosmetics were mandatory until 2012. Now Russian manufacturers and distributors of cosmetics are offered to choose how to test their products: by alternative methods or on animals. One of the main opponents of alternative research in Russia is Rospotrebnadzor. In 2017, the department gave a negative assessment to the bill on the complete ban on testing cosmetics and perfumes on animals. Rospotrebnadzor believes that alternative tests do not cope with checking "new and little-studied types of raw materials", and laboratories require "serious financial investments" - unlike tests on animals.

Adding to the aforementioned point of different country regulations, it is important to note that in general in countries where legislations are unclear or support animal testing, the awareness among consumers on animal testing is rather low and results in low incentives of consumers to participate in cruelty-free consumption. It can be explained by two factors: *1st* – Countries that do not ban animal testing are in general emerging economies, where environmental requirements are less strict than in developed countries and consumers seem to express little environmental commitment; *2nd* – In countries that restrict animal testing on its' territories, governmental organizations support different cruelty-free campaigns, NGOs and other marketing and social media initiatives that promote cruelty-free consumption and raise awareness among consumers. (Source, incl). In the meantime, in emerging economies often NGOs or cruelty-free brands take a major role in educating consumers.

In addition, a Russian consumer faces a list of difficulties to determine which brands are truly ethical and which are just pretending to attract a buyer. Despite that some third-party certifications of cruelty-free products exist (PETA, Leaping Bunny, CCF, etc), some companies still hide and manipulate the facts of testing on animals, thus undermining consumer perception and trust in the concept of "cruelty-free" among the entire product category. First of all, in Russia, labels on the packaging are not regulated, thus consumers can not trust the cruelty-free nomination or icon. Unscrupulous manufacturers and distributors may place bunny badges on tubes and cans, similar to the International Association of Manufacturers Against Animal Testing, or vegan labels (Figure 4). Thus mimicking the real cruelty-free brand and manipulating consumers by using familiar slogans and images. Moreover, a recent wave of discussions on social media in Russia (Youtube, Tiktok, Instagram) concerning the film "Save Ralph" released by the Animal Welfare Society International (HSI) and dedicated to the problems of animal testing, led to confusion

among consumers, as some users thought that if a rabbit sign exists on the product packaging, then the manufacturer tested it on animals. Afterward, these Tiktok users were posting comments in which they asked to boycott such brands and throw out cosmetics without the label "Not tested on animals." Thus, creating false incentives.

Figure 4. Illustrations of fake and real cruelty-free signs used on the cosmetics market in Russia



Unofficial “cruelty-free” bunny logos

Certified “cruelty-free” bunny logos

Secondly, even though the PETA white list and other international lists are constantly updated, and there are several hundred brands and companies in it. However, small local Russian brands can be often not found on this list. Thus, if it is a Russian brand that positions itself as cruelty-free, then the only way to check its’ cruelty-free status is to request documents/certificates from the manufacturer. Moreover, it is important to constantly check brands on their cruelty-free status, as the company/brand may change its’ status from non-cruelty-free to cruelty-free and vice versa. This path is rather challenging, as it requires consumers to spend significant time searching and checking information to be able to identify alternatives for future evaluation and finally purchase decision. Currently, in various Internet resources and social networks, we observe the emergence of specific blogs dedicated to the topic of cruelty-free consumption (ex.: on Instagram – makeyourself, crueltyfreecode; personal blogs – Marpeta) and different apps (the Bunny Free app, Happy Bunny app) that simplify for the consumer the information search phase. However, referring to these sources to form a final decision about the product, requires awareness about the cruelty-free issue, prior search for these sources, and a stimulus to change the behavior.

At the same time, the variety of cruelty-free brands in Russia is broad, especially, in offline stores in large cities and online a consumer can find several dozen products of different price categories and different countries of origin. Speaking of some examples and key players on the cruelty-free market in Russia, we can identify the following segments:

1. Local Russian cruelty-free brands: Botavikos, Laboratorium, Samosvet (Самосвет), mi&ko, Chistaya liniya (Чистая линия), etc
2. Foreign cruelty-free brands: Lush, Essence, H&M beauty line, Dr. Konopka's, Dr. Hauschka, Inglot, Anastasia Beverly Hills, Natura Siberica, etc
3. Foreign cruelty-free brands (brand belongs to the non-cruelty free parent company): Aveda (owned by Estee Lauder); NYX (owned by L'Oreal); Smashbox (owned by Estee Lauder), etc

Many cruelty-free brands are currently not represented on the Russian market. Thus, some eco-active consumers purchase cosmetics from foreign websites (Cultbeauty, iHerb, lookfantastic), especially for more non-trivial or expensive products. For example, the selection of cruelty-free brands that specialize in fragrances in Russian stores (online and offline) is very limited.

At the same time, according to recent reports on ethical consumption in cosmetics, there is a growing interest of Russian consumers in the composition and origin of cosmetics. However, currently, consumers are more focused on the natural ingredients, eco packaging and only 49% of consumers in Russia find it important that cosmetics are not being tested on animals and only 22% of them are aware of whether the brand is cruelty-free or not (Deloitte, 2019). In the meantime, more consumers are trying to search for information about certain products on the Internet, consult with friends and family, read relevant blogs and websites, and finally, read the information on the packaging. Furthermore, Russians aged 18-35 are more often concerned about the problem of ethical treatment of animals (56%) (Deloitte, 2019). Representatives of this age group are also better informed about which brands adhere to this policy in their production. Other researchers also mention the growing interest in ethical and cruelty-free consumption among gen Z consumers, especially those that are 16-24 years old (McKinsey, 2020).

Thus, cruelty-free consumption in the Russian beauty market has a variety of challenges and opportunities that influence both consumers and brands. Definitely, no clarity in government legislation and negative attitude of Rospotrebnadzor creates barriers for cruelty-free brands to sell and promote its' products to consumers that have a low level of awareness about the topic and are rather skeptical about alternative methods of testing. Moreover, for consumers to be part of cruelty-free consumption it is essential to put a high effort into research every time before the actual purchase of the cosmetic product. In the meantime, we observe the growing interest in ethical and cruelty-free cosmetics among consumers, especially the younger generation is growing. However, the intent to buy currently is much higher than the actual purchase level. It might be explained by existing sociocultural factors that hold consumers' behavior from the adopting new form of consumption.

1.4 Conclusion and hypotheses

This literature review starts with an observation of existing definitions and classifications of ethical and cruelty-free consumption. Additionally, consumer behavior was investigated as a phenomenon and the factors affecting consumer behavior in cruelty-free consumption were observed.

Cruelty-free consumption is a developing trend in the beauty industry that is actively evolving in the past 20 years. However, in countries without strict government regulations that support cruelty-free consumption, it faces significant challenges to spread across consumers. At the moment there is a large number of scientific papers that explore consumer behavior in ethical consumption in general as well as cruelty-free consumption in the context of developed markets. Emerging markets were also investigated, however with a focus on personal factors rather than the sociocultural environment. Especially, a few studies focus on the peculiarities of the Russian consumers and no studies involve post-Covid evaluation of consumer behavior.

Thus, the research gap lies in the fact that cruelty-free consumption is under-researched in the Russian beauty market. The research goal, therefore, is to determine and explore sociocultural factors that influence cruelty-free consumption on the beauty market among Russian consumers. In the course of the literature review, the main factors that prevent a consumer from choosing cruelty-free consumption were identified and discussed.

Accordingly, the following research questions were stated:

1. How consumers' level of knowledge about animal testing impacts consumer behavior towards cruelty-free beauty products?
2. How consumers' level of trust influences consumers' preferences towards cruelty-free beauty products?
3. How exposure to a social influence affects consumers' behavior?

Therefore, in our first step of the analysis, we want to check whether low consumer knowledge about animal/cruelty-free testing prevents consumers from choosing a cruelty-free brand.

H1: Consumers with low knowledge about cruelty-free testing are less likely to choose cruelty-free product compared to consumers with high knowledge about cruelty-free testing

The second hypothesis relates to another factor - consumer trust. Low consumer trust, in this case, is understood as consumers' trust in the cruelty-free status of the brand.

H2: Consumers with low "consumer trust" are less likely to choose cruelty-free product compared to consumers with high "consumer trust"

It was also discussed in the theoretical part of this study that social influence has a significant impact on the beliefs a consumer holds about a certain type of consumption. First of all, we get new information and develop our knowledge from interaction with other people. Secondly, through people that we trust, brands can more efficiently communicate with us. Thus, the following hypotheses are formulated to test how introducing a reference group will change consumer's knowledge and how this change impacts the buying likelihood of the cruelty-free brand. Moreover, based on the literature review we identified two references: expert and friend that will be compared in the empirical part of this research.

H3a: When exposed to an influence of a reference group "consumers' knowledge" increases

H3b: The influence of a reference group on the consumers' knowledge is stronger when the influencer is an expert compared to when the influencer is a friend.

H3c: Increase in the "consumer knowledge" positively affects buying likelihood of cruelty-free products among consumers

Accordingly, the same hypotheses are questioned for the "consumer trust" factor.

H4a: When exposed to the influence of a reference group, "consumer trust" increases

H4b: The influence of a reference group on the consumers' trust is stronger when the influencer is a friend compared to when the influencer is an expert

H4c: Increase in the "consumer trust" positively affects buying likelihood of cruelty-free products among consumers

Chapter 2. Research Methodology

2.1 Research Methodology Overview

Proceeding with the methodology of the study, it is vital to emphasize that this research is explanatory since it aims to understand the causal relationships between variables and to identify the nature of these cause-and-effect relationships. Causal studies focus on the analysis of a situation or a specific problem to explain the patterns of relationships between variables. Experiments are the most popular primary data collection methods in studies with causal research design. This method aims to test different assumptions (hypotheses) by trial and error under conditions established and managed by the investigator. One or more conditions (independent variables) are permitted to change during the experiment in an organized manner and the effects of these changes on associated conditions (dependent variables) are measured, recorded, validated, and analyzed for arrival (Gneezy, A., 2016). Experiments are useful for testing the actual behavior of people under different conditions. This way consumers are being faced with choices to make under different influencing factors, and it is being possible to observe in practice how consumers actually react under influence of test factors. This method is beneficial in terms of the strict granting of data collected to the research problem's objectives. Besides, the data-gathering technique is strictly regulated.

For this particular research paper, 4 versions of experiments were created and were accordingly distributed among respondents (in total 4 groups of respondents). The experiments were based on the theoretical research provided in the first chapter. It was decided that for the purpose of the experiment we divide versions of the experiment first based on two factors:

- *Consumer knowledge.* As stated in the number of research papers, for a person to take a pro-environmental action, one must first have some understanding of the current state of the environment and its problems. Russian consumers are often unaware of methods of testing and how animals are being treated during these tests. Moreover, they are not informed in terms of how their purchase of cosmetic products can support this cruelty and what they can do if they do not want to support it. Thus, we can conclude that a low level of consumer knowledge about certain product categories might serve as a serious sociocultural barrier for the consumption of this product. However, if the level of consumer knowledge is increased, it might have a positive effect on the adoption or transition to a certain consumption. Inside this 2 versions of the experiment we also analyze how the influence of a reference (friend/expert) can impact consumer knowledge and buying likelihood of the cruelty-free brand. Thus, one version is exposed to a scenario with a friend, and another one with an expert. Moreover, as we argue that there is a difference in

the level of knowledge between consumers, we identify 2 subgroups in these 2 versions of the experiment: low level of knowledge about cruelty-free cosmetics and high level of knowledge about cruelty-free cosmetics and provide a comparison among these 2 subgroups.

- *Consumer trust.* According to the literature, trust means respect for cruelty-free cosmetics, confidence in the conformity of reality, and consumer expectations concerning cruelty-free cosmetics. It is one of the main aspects that shape the long-term relationship between the consumer and the product, and sometimes acts as a factor influencing the buying intent (Chen and Chung, 2012). A low level of consumer trust in certain product categories or brands might serve as a serious sociocultural barrier for the consumption of this product. However, if the level of consumer trust is increased, it might have a positive effect on the adoption or transition to a certain type of consumption. Inside this 2 versions of the experiment we also analyze how the influence of a reference (friend/expert) can impact consumer knowledge and buying likelihood of the cruelty-free brand. Thus, one version is exposed to a scenario with a friend, and another one with an expert. Accordingly, respondents in these 2 versions of the experiment are divided into 2 subgroups: consumers with a low level of trust and consumers with a high level of trust.

Thus, in total, we have 8 subgroups of respondents and 8 versions of the experiment. Each version of the field experiment consists of 3 parts. The first part is based on an assessment of the influence of the selected factor (consumer knowledge/consumer trust) on the consumer. The second part is aimed at assessing how social influence impacts (consumer knowledge/consumer trust), as well as buying likelihood of cruelty-free products. The third part includes general questions that are used to gain a more in-depth understanding of the respondents' profiles. We aim to have at least 70 respondents per version to have sufficient data to analyze and provide findings that might apply to a larger sample.

The experiment was accurately designed and integrated with the questionnaire spread among the respondents in order to achieve the closest to the real-life results and confirm in the end the stated hypotheses.

In conclusion, empirical work will be carried out in this paper, where methods such as literature review, survey, and field experimentation are used. The data gathered from the survey with experiments will be further analyzed using SPSS and the practical implications will be reported based on the results. Statistical methods such as repeated measures ANOVA, paired t-test and regression analysis will be used for the data analysis.

2.2 Experimental design

As was highlighted above, the research is focusing on the cosmetic industry, however, it was decided to narrow down the product category for the purpose of the experiment. In general, the decision-making process in consumer behavior is strongly dependent on the level of involvement with the specific product category (high or low level of involvement). Level of involvement is defined as the general level of interest in the object, or the centrality of the object to the person's ego structure (Day, 1970).

In this particular paper, we focus on the low involvement consumer product. The low involvement product category is related to products where the consumer doesn't have to think much before purchasing the product. The key features of the low involvement product category are low price, low-risk factor, low level of differentiation, heavy brand switching, high availability and distribution, repeated purchase. It was of particular interest to study how consumers will behave and make their purchase decisions related to low involvement products in the context of cruelty-free consumption. As with low involvement products consumers tend to spend less time on decision making, however for choosing a cruelty-free brand they need to be more involved in the decision-making process. Thus, it is interesting to understand what can do companies that produce low involvement cruelty-free products to stimulate consumers to search for, choose and purchase cruelty-free products. Thus it was decided to choose a deodorant for experiments, as it can be described as a good example of a low involvement product: people purchase deodorants relatively regularly, they are less expensive than some other cosmetic products, there is not much risk associated with purchasing a deodorant, resulting in a much faster decision-making process.

The choice of the respondents was made in favor of Russian citizens of both genders (men and women). The main focus was on the large cities, especially Moscow and Saint-Petersburg where consumers are exposed to a variety of options for cosmetic products in terms of the different price range, as well as cruelty-free and non-cruelty-free options. We decided not to limit respondents only to women, but also included men in our respondent pool. As the product chosen for the experiment (deodorant) refers to a gender-neutral cosmetic product and is widely used by both men and women.

Regarding another demographic factor, specific age group, it was decided to focus on the consumers between 18 to 35 years, as it was stated in the theoretical part that in Russia this particular group of the consumers is mostly concerned about sustainable problems and is receptive to ethical questions. However, still, a low percentage of this group is actually can identify and choose a cruelty-free brand. We would like to understand more in-depth what is the current level of knowledge and level of trust among these consumers and what are the differences in purchase

behavior and attitudes towards cruelty-free products among consumers with high versus low knowledge, as well as consumers with high versus low trust.

The experiments were conducted in an online survey format, which was considered the most efficient one in terms of self-isolation circumstances. To conduct the experiments, the online forms were sent to respondents both through the author's network and independent survey polls, as well as the link to the survey was placed at a special survey website (<https://anketolog.ru>). In total, around 2000 people got the link to this questionnaire.

Concerning the structure of the experiment, as was highlighted before there are four versions of experiments that differ from each other in terms of circumstances that participants were exposed to. As a first step of the experiment, all respondents were invited to choose a random group by themselves:

“The question presented in this section is used to allocate you to one of the groups for the experiment. Please pick any of the options below.

- 1) α
- 2) β
- 3) γ
- 4) δ ”

Each of the letters refers to a specific scenario. In the 1st part of the experiment respondents that chose α and β were exposed to a similar scenario where consumer knowledge about cruelty-free factors was tested. In the meantime, respondents that chose γ and δ in the 1st part were exposed to a similar scenario with some other questions, as the consumer trust factor was evaluated. In the 2nd part of the experiment, all groups were exposed to the influence of the particular reference group: for groups, α and γ as an influencer was a friend, while for groups β and δ the influencer was an expert from the cosmetic industry.

To summarize, the following scenarios were possible within our experiment:

- α – “consumer knowledge” + “friend influencer. Scenario 1”
- β – “consumer knowledge” + “expert influencer. Scenario 1”
- γ – “consumer trust” + “friend influencer. Scenario 2”
- δ - “consumer trust” + “expert influencer. Scenario 2

In the 3rd part of the experiment, all groups were asked the same general questions, mostly concerning demographic data.

Proceeding with the experimental design, after all, respondents were assigned into a specific group, they were all exposed to the same contextual information in order to give a brief understanding of why testing of cosmetics is necessary:

“To ensure quality and safety, cosmetic products are being tested in laboratories before they are placed in offline/online stores. This requirement is mandatory among all developed countries, including Russia.”

The first part of the experiment is focused on testing hypothesis H1 and H2:

H1: Consumers with low knowledge about cruelty-free testing are less likely to choose cruelty-free product compared to consumers with high knowledge about cruelty-free testing

H2: Consumers with low “consumer trust” are less likely to choose cruelty-free product compared to consumers with high “consumer trust”

Thus, the first step was to evaluate the current level of consumer knowledge or consumer trust. Respondents from groups α and β were asked the following three questions:

1. *My knowledge about how cosmetic products are being tested is*

Very low 1 2 3 4 5 6 7 Very high

2. *Is animal testing mandatory for cosmetic products in Russia?*

- a. *Yes*
- b. *No*
- c. *I don't know*

3. *Are there existing alternatives to animal testing of cosmetic products?*

- a. *Yes*
- b. *No*
- c. *I don't know*

Based on their answers will be identified two subgroups: consumers with low consumer knowledge about cruelty-free and consumers with high consumer knowledge about cruelty-free cosmetics. For that, the median of the answer among all respondents from groups α and β will be calculated and respondents above median will be assigned to a group with high consumer knowledge, while those scoring lower median will be assigned to a group with low consumer knowledge. The ones scoring median will be assigned to a certain group based on the distribution to have equal groups and to make a comparison between them.

In the meantime, respondents from groups γ and δ were exposed to the following statements and were evaluated through Likert scale, with answers ranging from 1 (strongly disagree) to 7 (strongly agree):

1. *I trust information that I see on the packaging of cosmetic product*

2. *I trust the brand when they announce publicly their products are not tested on animals*
3. *In general, I trust reviews that I hear from other people*
4. *In general, I trust opinions that I hear from my friends*
5. *In general, I trust opinions that I hear from people that are experts in a particular area*

Based on their answers to questions 1-2 will be identified two subgroups: consumers with a low level of trust and consumers with a high level of trust. For that first of all, the additional variable will be created by summing up the value of the question 1 and 2 for each respondent accordingly. On the 2nd step, the median of the new variable will be calculated and respondents will be distributed accordingly: respondents above median will be assigned to a group with high consumer trust, while those scoring lower median will be assigned to a group with low consumer trust. The ones scoring median will be assigned to a certain group based on the distribution to have equal groups and to make a comparison between them.

As a next step, all respondents were getting to the page with the scenario description. The respondents were asked to imagine themselves in a situation: they want to buy deodorant for themselves. They come to a supermarket here in Russia and they have only two options. Given their need, they decide to choose this occasion. They are unfamiliar with either of these brands and they don't know what it will be like. They want to make sure they buy the brand that will suit their beliefs and needs the most. In other words, they want to choose the right brand. The respondents were asked to spend some time and to look at the 2 brands they are offered to choose from (Figure 5).

Figure 5. Brands used in the experiment

| Brand A | Brand B |
|--|--|
| It is available in a standard package and comes with the fragrance you like | It is available in a standard package and comes with the fragrance you like |
| Brand A tests this deodorant on animals (such as bunnies, mice, or guinea pigs). | Brand B doesn't test this deodorant on animals (such as bunnies, mice, or guinea pigs). This brand uses an alternative way of testing its products. |
| The price is 130 RUB | The price is 350 RUB |

Based on this scenario respondents had to indicate their likelihood to buy Brand A – non-cruelty-free brand or Brand B – cruelty-free brand (respondents were asked to rank on the 7-points Likert scale their likelihood from very low to very high). Moreover, they were asked additional

questions to understand more in-depth their motives to prefer one product to another (answers were given in the form of Likert scale, with answers ranging from 1 (strongly disagree) to 7 (strongly agree)):

- *Buying “Brand X” feels right*
- *Buying “Brand X” makes sense*
- *Buying “Brand X” is a moral obligation*

In addition, respondents were offered to evaluate some general statements on the product category and price sensitivity:

- *In general, price is important in my decision making*
- *I am interested in the deodorant category in general*
- *The deodorant category is important to me*
- *I get involved with what deodorant brand I use*

In order to test hypotheses H1 and H2 mentioned above, we will conduct the repeated measures ANOVA for each of the hypotheses, since we are interested to compare buying likelihood of Brand A to Brand B. Before conducting the test, we will prepare consumer groups for comparison, for H1 – consumers with high/low knowledge, for H2 – consumers with high/low trust. Based on this segmentation, a new variable will be created and will be a between-subject variable in the analyses. Thus, we will have a two-level within-subject factor (Brand A and Brand B) and knowledge (for H1) or trust (for H2) variable for the between-subject factor.

The 2nd part of the survey was dedicated to the analysis of the influence of social stimuli on consumer knowledge/consumer trust and buying likelihood. Respondents from groups α and γ were exposed to an influencer that was a friend, while respondents from groups β and δ the influencer was an expert from the cosmetic industry. The detailed scenarios can be found in part 2 of the experiment (Appendix 1). After being exposed to the scenarios, respondents were asked to rank their perception of knowledge/trust towards cruelty-free testing in order to evaluate if exposure to the reference group changed it. Afterward, they were again asked the same questions in the same format about buying likelihood and reasons to choose a particular brand.

Concerning the methodology of testing the following hypothesis:

H3a: When exposed to an influence of a reference group “consumers’ knowledge” increases

Paired Samples t-Test will be conducted to compare “consumer knowledge about cosmetic testing” before the exposure of the social influence and after the exposure of social influence.

H3b: The influence of a reference group on the consumers' knowledge is stronger when the influencer is an expert compared to when the influencer is a friend.

We will conduct the repeated measures ANOVA to test hypothesis H3b. Before conducting the test, we will create a between-subject variable that will distinguish respondents into 2 groups: those that participated in version α of the experiment and others that participated in version β . This will serve as a between-subject variable.

H3c: Increase in the "consumer knowledge" positively affects buying likelihood of cruelty-free products among consumers

For testing hypothesis H3c we will run a regression with buying likelihood as the dependent variable and as the independent variables will serve the difference between levels of consumer knowledge before exposure of reference group and after the exposure of the reference group.

Accordingly, the same methods will be used to test the hypothesis for the "consumer trust" factor.

H4a: When exposed to the influence of a reference group, "consumer trust" increases

H4b: The influence of a reference group on the consumers' trust is stronger when the influencer is a friend compared to when the influencer is an expert

H4c: Increase in the "consumer trust" positively affects buying likelihood of cruelty-free products among consumers

Finally, the third part of the questionnaire was about the respondents, their general characteristics like gender, age, level of income. Moreover, it was decided to add questions where respondents were offered a variety of labels and were asked to choose official cruelty-free labels. As it was mentioned in the literature, for all categories of consumers it is challenging to identify cruelty-free brands by labels, as there are many counterfeits. We would like to see, how many people actually know and can identify the right labels when they are exposed to the choice of multiple options.

The whole questionnaire with all sections and all questions asked can be found in Appendix 1.

Chapter 3. Findings and discussions

3.1 Data analysis and findings

After collecting the data in general we received 586 responses with respondents in the age from 18 to 35. In total, 4 versions of the survey were distributed among these people in an online survey format, the participants were exposed to choose one letter out of four to be randomly assigned to a certain version.

Based on the data collected, 56% of participants are females, 44% are males (Figure 6), most of the consumers are aged from 24 to 29 years (43% of the respondents), living in Moscow and Saint-Petersburg (Figure 6). Regarding the income distribution, most of the respondents (87% of a total number of respondents) indicated their income as average (4) or a bit higher (5) or lower (3) than average.

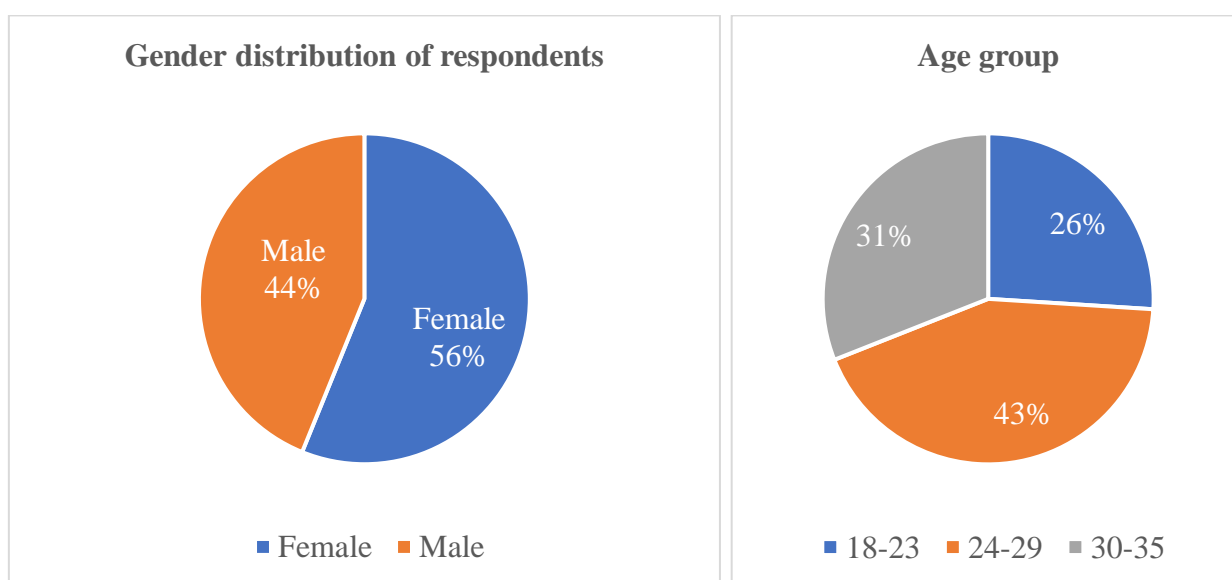


Figure 6. Studied audience demographics.

3.1.1 Analysis of the “consumer knowledge” factor

The first step of our data analysis is to divide all the respondents from experiments' α and β into two groups: consumers with a high level of knowledge about cosmetic testing and consumers with a low level of knowledge about cosmetic testing. Based on their answers on the Q1-Q3 of the survey (Appendix 1) were identified two subgroups. For that the median of the answer among all respondents from groups α and β was calculated – it equals 4. Thus, respondents scoring above 4 were assigned to a group with high consumer knowledge, while those scoring lower than 4 were assigned to a group with low consumer knowledge. The ones scoring median will be assigned to a low knowledge consumer group based on the distribution to have equal groups. Thus, we have two subgroups: low knowledge consumers – 149 respondents and high

knowledge consumers – 143 respondents. Based on this segmentation, a new variable was created, where consumers with high knowledge score 1 and consumers with low knowledge score – 2.

The 2nd step is to test the validity of our 1st hypothesis:

H1: Consumers with low knowledge about cruelty-free testing are less likely to choose cruelty-free product compared to consumers with high knowledge about cruelty-free testing

In order to test hypothesis H1, we conducted the repeated measures ANOVA to analyze buying likelihood of Brand A to Brand B between high and low knowledge consumer categories. Thus, we will have two levels within-subject factor (buying likelihood of Brand A and buying likelihood of Brand B) and consumer knowledge as between-subject factor.

The statistical hypotheses for this test are the following:

Ho: The buying likelihood is equal for Brand A and Brand B for different consumer categories (low vs high knowledge consumers)

Ha: The buying likelihood is not equal for Brand A and Brand B for different consumer categories (low vs high knowledge consumers)

| Tests of Within-Subjects Effects | | | | | | |
|----------------------------------|--------------------|-------------------------|---------|-------------|---------|-------|
| Measure: buying likelihood | | | | | | |
| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. |
| Buyinglikelihood | Sphericity Assumed | 66,648 | 1 | 66,648 | 45,095 | <.001 |
| | Greenhouse-Geisser | 66,648 | 1,000 | 66,648 | 45,095 | <.001 |
| | Huynh-Feldt | 66,648 | 1,000 | 66,648 | 45,095 | <.001 |
| | Lower-bound | 66,648 | 1,000 | 66,648 | 45,095 | <.001 |
| Buyinglikelihood * Lvlknowledge | Sphericity Assumed | 952,676 | 1 | 952,676 | 644,593 | <.001 |
| | Greenhouse-Geisser | 952,676 | 1,000 | 952,676 | 644,593 | <.001 |
| | Huynh-Feldt | 952,676 | 1,000 | 952,676 | 644,593 | <.001 |
| | Lower-bound | 952,676 | 1,000 | 952,676 | 644,593 | <.001 |
| Error(brand) | Sphericity Assumed | 428,605 | 290 | 1,478 | | |
| | Greenhouse-Geisser | 428,605 | 290,000 | 1,478 | | |
| | Huynh-Feldt | 428,605 | 290,000 | 1,478 | | |
| | Lower-bound | 428,605 | 290,000 | 1,478 | | |

Figure 7. Tests of Within-Subjects Effects

| Tests of Between-Subjects Effects | | | | | |
|-----------------------------------|-------------------------|-----|-------------|------------|------|
| Measure: MEASURE_1 | | | | | |
| Transformed Variable: Average | | | | | |
| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| Intercept | 10381.027 | 1 | 10381.027 | 17,973.829 | .000 |
| LVLKNOWLEDGE | 6.452 | 1 | 6.452 | 11.171 | .001 |
| Error | 167.493 | 290 | .578 | | |

Figure 8. Tests of Between-Subjects Effects

As it can be seen from the results (Figure 7) and (Figure 8), the p-value (<001) is lower than 0,05 in both cases, which means that the null statistical hypothesis is rejected and the alternative hypothesis is accepted. That means that hypothesis H1 is accepted.

Looking closer to the means of the buying likelihood of brands (Brand A –“1”; Brand B –“2”) among our 2 groups of the consumers (Figure 9), it can be observed that high knowledge consumer preferences can be considered “stronger” than low knowledge consumer preferences. As we can see from the table, for high knowledge consumers mean of buying brand A is 2,5/7 and buying brand B 5,7/7, while for low knowledge consumers the mean of buying brand A and brand B has a smaller difference, it is 5,3/7 and 3,4/7 accordingly. Thus, consumers with high knowledge might be more radical regarding their purchase decisions, while consumers with low knowledge tend to be rather neutral regarding their preferences.

| LVLKNOWLEDGE | Buyinglikelihood | Mean | Std. Error | 95% Confidence Interval | |
|--------------|------------------|-------|------------|-------------------------|-------------|
| | | | | Lower Bound | Upper Bound |
| 1.00 | 1 | 2.497 | .096 | 2.307 | 2.686 |
| | 2 | 5.727 | .071 | 5.587 | 5.868 |
| 2.00 | 1 | 5.262 | .094 | 5.076 | 5.447 |
| | 2 | 3.383 | .070 | 3.245 | 3.520 |

Figure 9. Estimates

Thus, we can conclude there is a significant difference between consumers with low knowledge about cosmetic testing and consumers with high knowledge about cosmetic testing in regards to their purchase preferences of Brand A(non-cruelty-free) and Brand B(cruelty-free brand).

The 3rd step is to test the validity of our 2nd hypothesis related to the influence of the reference group on the consumers’ knowledge:

H3a: When exposed to an influence of a reference group “consumers’ knowledge” increases

For testing this hypothesis we conduct a Paired Samples t-Test to compare “consumer knowledge” – Q1 (KN₀- before respondents were exposed to the social influence) and Q16 (KN₁ - after respondents were exposed to the influence).

$$H_0: KN_1 - KN_0 \leq 0$$

$$H_A: KN_1 - KN_0 > 0$$

| Paired Samples Statistics | | | | | |
|---------------------------|-----|--------|-----|----------------|-----------------|
| | | Mean | N | Std. Deviation | Std. Error Mean |
| Pair 1 | KN2 | 5.0890 | 292 | 1.29456 | .07576 |
| | KN1 | 4.1678 | 292 | 1.99723 | .11688 |

| Paired Samples Test | | | | | | | | | |
|---------------------|-----------|--------------------|----------------|-----------------|---|---------|--------|-----|-----------------|
| | | Paired Differences | | | | | t | df | Sig. (2-tailed) |
| | | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | | | |
| | | | | | Lower | Upper | | | |
| Pair 1 | KN2 - KN1 | .92123 | 1.25069 | .07319 | .77718 | 1.06528 | 12.587 | 291 | <.001 |

Figure 10. The paired t-test between consumer knowledge before exposure to the influencer and after

The studied audience estimates their knowledge about cosmetic testing at the beginning of the experiment as 4.17/7 and after they were exposed to the scenario with more information about cosmetic testing as 5.08/7, t-test p-value = 0.00 (Figure 10). Hence, the null hypothesis is rejected. Meaning that we accept hypothesis H3a and consumers ‘knowledge increases when the consumer is exposed to additional information coming from a reference group.

| Paired Samples Correlations | | | | |
|-----------------------------|-----------|-----|-------------|------|
| | | N | Correlation | Sig. |
| Pair 1 | KN2 & KN1 | 292 | .793 | .000 |

Figure 11. Paired t-test correlations

Moreover, we can see that correlation between these 2 variables is high – 0,793 (Figure 11). Meaning that some respondents had consistency in their answers and they had similar estimates of their knowledge in both cases. Looking closer at the data, we can see that most of the respondents from the group with high consumer knowledge had the same answer to the Q1 and Q16 of the survey. Thus, we can conclude that the information we provided was already known by this group of consumers. However, we observe a significant difference in the means between our compared variables, which can be explained by the fact that consumers with low knowledge were exposed to new information for them and it had a significant impact on their understanding of the topic.

The next step of our analysis plan is to evaluate whether there is a significant difference in the consumers' knowledge when the influencer is an expert versus a friend. The hypothesis is formulated the following way:

H3b: The influence of a reference group on the consumers' knowledge is stronger when the influencer is an expert compared to when the influencer is a friend

Ho: The change in the consumer knowledge is equal for respondents from groups α and β .

Ha: The change in consumer knowledge is not equal for respondents from groups α and β .

In order to test this hypothesis, we conduct the repeated measures ANOVA between-subject variable – belonging to a group α and β , Q16 and Q1 – within-subject variable.

| Tests of Within-Subjects Effects | | | | | | |
|----------------------------------|--------------------|-------------------------|---------|-------------|---------|-------|
| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. |
| Consumerknowledge | Sphericity Assumed | 121,251 | 1 | 121,251 | 154,846 | <.001 |
| | Greenhouse-Geisser | 121,251 | 1,000 | 121,251 | 154,846 | <.001 |
| | Huynh-Feldt | 121,251 | 1,000 | 121,251 | 154,846 | <.001 |
| | Lower-bound | 121,251 | 1,000 | 121,251 | 154,846 | <.001 |
| Consumerknowledge * GroupAB | Sphericity Assumed | ,512 | 1 | ,512 | ,653 | ,420 |
| | Greenhouse-Geisser | ,512 | 1,000 | ,512 | ,653 | ,420 |
| | Huynh-Feldt | ,512 | 1,000 | ,512 | ,653 | ,420 |
| | Lower-bound | ,512 | 1,000 | ,512 | ,653 | ,420 |
| Error(brand) | Sphericity Assumed | 227,083 | 290 | ,783 | | |
| | Greenhouse-Geisser | 227,083 | 290,000 | ,783 | | |
| | Huynh-Feldt | 227,083 | 290,000 | ,783 | | |
| | Lower-bound | 227,083 | 290,000 | ,783 | | |

Figure 12. Tests of Within-Subjects Effects

As it can be seen from the results (Figure 12) and (Figure 13), the p-value is higher than 0,05, which means that the null statistical hypothesis is accepted and the alternative hypothesis is rejected. That means that hypothesis H1 is accepted.

| Tests of Between-Subjects Effects | | | | | |
|-----------------------------------|-------------------------|-----|-------------|-----------|------|
| Transformed Variable: Average | | | | | |
| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| Intercept | 12415.303 | 1 | 12415.303 | 2,535.489 | .000 |
| GroupAB | .851 | 1 | .851 | .174 | .667 |
| Error | 1420.017 | 290 | 4.897 | | |

Figure 13. Tests of Between-Subjects Effects

Thus we can conclude that consumers' perception of the information and its impact on the consumer knowledge does not differ between 2 scenarios: when consumers were exposed to an expert as a reference and when consumers were exposed to a friend as a reference.

The last step of our analysis is to evaluate whether the increase in consumer knowledge increases consumer buying likelihood of Brand B (cruelty-free brand). The hypothesis stated as a following:

H3c: Increase in the “consumer knowledge” positively affects buying likelihood of cruelty-free products among consumers

We need to run a regression with a delta of buying likelihood as the dependent variable and as the independent variables will serve the delta of consumer knowledge (difference between levels of consumer knowledge before exposure of reference group and after the exposure of the reference group).

| Model Summary ^b | | | | | | | | | |
|----------------------------|-------------------|----------|-------------------|----------------------------|-----------------|-------------------|-----|-----|---------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | R Square Change | Change Statistics | | | Sig. F Change |
| | | | | | | F Change | df1 | df2 | |
| 1 | .401 ^a | .161 | .158 | .82444 | .161 | 55.156 | 1 | 288 | <.001 |

a. Predictors: (Constant), deltaKN

b. Dependent Variable: deltaBL

Figure 14. Regression significance

Based on the results of the regression analysis (Figure 14 and Figure 15), we can conclude that the model is significant, as shows us the results of the F-test. However, adjusted R square equals 0,158 and is rather low. Meaning that an increase in the consumer knowledge (our independent variable) explains only 15,8% of the variance in the change of the buying likelihood. Thus, there might be other variables that also impact the buying likelihood. However, the coefficient of our independent variable is positive and equals 0,289. Moreover, the coefficient is significant according to the t-test.

| ANOVA ^a | | | | | | |
|--------------------|------------|----------------|-----|-------------|--------|-------------------|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 37.490 | 1 | 37.490 | 55.156 | <001 ^b |
| | Residual | 195.755 | 288 | .680 | | |
| | Total | 233.245 | 289 | | | |

a. Dependent Variable: deltaBL
b. Predictors: (Constant), deltaKN

| Coefficients ^a | | | | | | |
|---------------------------|------------|-----------------------------|------------|---------------------------|-------|------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .443 | .061 | | 7.320 | <001 |
| | deltaKN | .289 | .039 | .401 | 7.427 | <001 |

a. Dependent Variable: deltaBL

Figure 15. Regression analysis

Overall, we conclude that hypothesis H3c is accepted. Thus, an increase in consumer knowledge increases the buying likelihood of cruelty-free brands. However, the current model explains a low part of the variance, meaning that some other factors should be added in the regression model. In our case, there might be two potential explanations for that. First of all, Brand A is two times less expensive than Brand B, meaning that consumers with higher price sensitivity might not be able to switch between two options, as their preferences are based on the lower price. Secondly, there might be some nuances in the consumer knowledge estimation. In particular, even though some consumers did not identify the change in their consumer knowledge, however exposure to the additional information about cosmetic testing recalled information from their memory and thus their buying likelihood of cruelty-free brand changed.

In the conclusion to this part of the analysis, we would like to summarize that three out of four hypotheses were accepted.

3.1.2 Analysis of the “consumer trust” factor

The 2 other versions γ and δ of the experiment analyzed the consumer trust factor and its influence on the buying likelihood of the cruelty-free cosmetic product. Before proceeding with testing H2, we separated all the respondents from experiments γ and δ into two groups: consumers with a high level of trust and consumers with a low level of trust. To identify two subgroups we use the median value of the sum of the questions Q1 and Q2 (Appendix 1). Thus, respondents scoring above 8 were assigned to a group with high consumer trust, while those scoring lower than 8 were assigned to a group with low consumer trust. The ones scoring median 8 were assigned to a high trust consumer group based on the distribution to have equal groups. Thus, we have two subgroups: consumers with low trust – 153 respondents and consumers with high trust – 143

respondents. Based on this segmentation, a new variable was created, where consumers with a high trust score of 2 and consumers with a low trust score of 1.

H2: Consumers with low “consumer trust” are less likely to choose cruelty-free product compared to consumers with high “consumer trust”

In order to test hypothesis H2, we conducted the repeated measures ANOVA to analyze buying likelihood of Brand A to Brand B between high and low trust consumer categories. Thus, we will have a two-level within-subject factor (Brand A and Brand B) and trust for the between-subject factor.

The statistical hypotheses for this test are the following:

Ho: The buying likelihood is equal for Brand A and Brand B for different consumer categories (low vs high trust consumers)

Ha: The buying likelihood is not equal for Brand A and Brand B for different consumer categories (low vs high trust consumers)

| Tests of Within-Subjects Effects | | | | | | |
|----------------------------------|--------------------|-------------------------|---------|-------------|----------|-------|
| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. |
| Buyinglikelihood | Sphericity Assumed | 171,226 | 1 | 171,226 | 295,192 | <.001 |
| | Greenhouse-Geisser | 171,226 | 1,000 | 171,226 | 295,192 | <.001 |
| | Huynh-Feldt | 171,226 | 1,000 | 171,226 | 295,192 | <.001 |
| | Lower-bound | 171,226 | 1,000 | 171,226 | 295,192 | <.001 |
| Buyinglikelihood * LvlTrust | Sphericity Assumed | 640,460 | 1 | 640,460 | 1104,150 | <.001 |
| | Greenhouse-Geisser | 640,460 | 1,000 | 640,460 | 1104,150 | <.001 |
| | Huynh-Feldt | 640,460 | 1,000 | 640,460 | 1104,150 | <.001 |
| | Lower-bound | 640,460 | 1,000 | 952,676 | 1104,150 | <.001 |
| Error(brand) | Sphericity Assumed | 169,954 | 293 | 0,580 | | |
| | Greenhouse-Geisser | 169,954 | 293,000 | 0,580 | | |
| | Huynh-Feldt | 169,954 | 293,000 | 0,580 | | |
| | Lower-bound | 169,954 | 293,000 | 0,580 | | |

Figure 16. Tests of Within-Subjects Effects

As it can be seen from the results (Figure 16) and (Figure 17), the p-value (<001) is lower than 0,05 in both cases, which means that the null statistical hypothesis is rejected and the alternative hypothesis is accepted. That means that hypothesis H2 is accepted.

| Tests of Between-Subjects Effects | | | | | |
|-----------------------------------|-------------------------|-----|-------------|------------|------|
| Transformed Variable: Average | | | | | |
| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| Intercept | 9562.245 | 1 | 9562.245 | 25,439.256 | .000 |
| LVLTrust | 20.618 | 1 | 20.618 | 54.852 | .000 |
| Error | 110.134 | 293 | .376 | | |

Figure 17. Tests of Between-Subjects Effects

Looking closer to the means of the buying likelihood of brands (Brand A –“1”; Brand B – “2”) among our 2 groups of the consumers (Figure 18), it can be observed that consumers with low trust have more radical preferences regarding choice of the brand than consumers with high trust. As we can see from the table, for consumers with low trust the mean of buying brand A is 5,8/7 and buying brand B 2,6/7, it can be explained that with the low level of trust, they prefer the cheapest option, as other factors are not so important to them due to their skepticism towards cruelty-free characteristics. Basically, due to the low level of trust cruelty-free status of the brand is not significant to such a group of consumers.

| LVLTrust | Buyinglikelihood | Mean | Std. Error | 95% Confidence Interval | |
|----------|------------------|-------|------------|-------------------------|-------------|
| | | | | Lower Bound | Upper Bound |
| 1.00 | 1 | 5.797 | .055 | 5.689 | 5.906 |
| | 2 | 2.634 | .057 | 2.523 | 2.745 |
| 2.00 | 1 | 3.338 | .057 | 3.225 | 3.451 |
| | 2 | 4.345 | .059 | 4.229 | 4.461 |

Figure 18. Estimates

Thus, we can conclude there is a significant difference between consumers with low trust and consumers with high trust in regards to their purchase preferences of Brand A(non-cruelty-free) and Brand B(cruelty-free brand).

The next step of our analysis is to evaluate how and if “consumer trust” increases when the consumer is exposed to the influence of a reference group.

H4a: When exposed to the influence of a reference group, “consumer trust” increases

For testing this hypothesis we conduct a Paired Samples t-Test to compare “consumer trust” – before the influence TR1= (Q1+Q2) and after the influence TR2=(Q18+19)

$$H_0: TR_1 - TR_0 \leq 0$$

$$H_A: TR_1 - TR_0 > 0$$

According to our data, at the beginning of the experiment consumer trust (based on 2 questions) was estimated by the respondents as 7,28/14 and after they were exposed to the scenario with a reference the estimation changed to 8.38/14, t-test p-value = 0.00 (Figure 19). Hence, the null hypothesis is rejected. Meaning that we accept hypothesis H4a and consumers' trust increases when the consumer is exposed to additional information coming from a reference group.

| Paired Samples Statistics | | | | | |
|---------------------------|-----|--------|-----|----------------|-----------------|
| | | Mean | N | Std. Deviation | Std. Error Mean |
| Pair 1 | TR2 | 8.3898 | 295 | 1.41201 | .08221 |
| | TR1 | 7.2847 | 295 | 1.43105 | .08332 |

| Paired Samples Test | | | | | | | | | |
|---------------------|-----------|--------------------|----------------|-----------------|---|---------|--------|-----|-----------------|
| | | Paired Differences | | | | | t | df | Sig. (2-tailed) |
| | | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | | | |
| Pair 1 | TR2 - TR1 | 1.10508 | 1.10309 | .06422 | Lower | Upper | | | |
| | | | | | .97869 | 1.23148 | 17.207 | 294 | <.001 |

Figure 19. The paired t-test between consumer trust before exposure to the influencer and after

Additionally, we conducted two independent two-paired t-tests to compare how answers to Q1 and Q18 – “I trust information that I see on the packaging of cosmetic product“, and Q2 and Q19 - “I trust the brand when they announce publicly their products are not tested on animals” (Appendix 2). Based on these tests we can conclude that the variation of the consumer trust before and after exposure to a reference is to the largest extent explained by the variation of consumers' answers to the Q2/Q19. Indeed, in our scenario, we provided consumers with a justification of the fact that company B is officially certified with cruelty-free status and it confirmed the belief of the respondents in the cruelty-free status of the brand (which was announced at the first part of the experiment).

The next step of our analysis plan is to evaluate whether there is a significant difference in the consumers' trust when the influencer is an expert versus a friend. The hypothesis is formulated the following way:

H4b: The influence of a reference group on the consumers' trust is stronger when the influencer is a friend compared to when the influencer is an expert

$$H_0: \text{The change in the consumer trust is equal for respondents from groups } \gamma \text{ and } \delta.$$

$$H_a: \text{The change in the consumer trust is not equal for respondents from groups } \gamma \text{ and } \delta.$$

In order to test this hypothesis, we conduct the repeated measures ANOVA between-subject variable – belonging to a group γ and δ , TR2 = (Q18+19) and TR1 = (Q1+Q2) – within-subject variable.

| Tests of Within-Subjects Effects | | | | | | |
|----------------------------------|--------------------|-------------------------|---------|-------------|---------|------|
| Source | | Type III Sum of Squares | df | Mean Square | F | Sig. |
| consumertrust | Sphericity Assumed | 175.339 | 1 | 175.339 | 304.558 | .000 |
| | Greenhouse-Geisser | 175.339 | 1.000 | 175.339 | 304.558 | .000 |
| | Huynh-Feldt | 175.339 | 1.000 | 175.339 | 304.558 | .000 |
| | Lower-bound | 175.339 | 1.000 | 175.339 | 304.558 | .000 |
| consumertrust * GROUPEXP | Sphericity Assumed | 10.186 | 1 | 10.186 | 17.693 | .000 |
| | Greenhouse-Geisser | 10.186 | 1.000 | 10.186 | 17.693 | .000 |
| | Huynh-Feldt | 10.186 | 1.000 | 10.186 | 17.693 | .000 |
| | Lower-bound | 10.186 | 1.000 | 10.186 | 17.693 | .000 |
| Error(consumertrust) | Sphericity Assumed | 168.685 | 293 | .576 | | |
| | Greenhouse-Geisser | 168.685 | 293.000 | .576 | | |
| | Huynh-Feldt | 168.685 | 293.000 | .576 | | |
| | Lower-bound | 168.685 | 293.000 | .576 | | |

Figure 20. Tests of Within-Subjects Effects

As it can be seen from the results (Figure 20) and (Figure 21), the p-value is lower than 0,05, which means that the null statistical hypothesis is rejected and the alternative hypothesis is accepted. That means that hypothesis H1 is accepted.

| Tests of Between-Subjects Effects | | | | | |
|-----------------------------------|-------------------------|-----|-------------|------------|------|
| Transformed Variable: Average | | | | | |
| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| Intercept | 36059.196 | 1 | 36059.196 | 10,680.328 | .000 |
| GROUPEXP | 20.146 | 1 | 20.146 | 5.967 | .000 |
| Error | 989.234 | 293 | 3.376 | | |

Figure 21. Tests of Between-Subjects Effects

Thus, we can conclude that consumers' perception of the reference and its impact on consumer trust does differ between 2 scenarios: when consumers were exposed to an expert as a reference and when consumers were exposed to a friend as a reference.

| Descriptive Statistics | | | | |
|------------------------|----------|--------|----------------|-----|
| | GROUPEXP | Mean | Std. Deviation | N |
| TRdelta1 | 1.00 | 7.2286 | 1.53774 | 140 |
| | 2.00 | 7.3355 | 1.33035 | 155 |
| | Total | 7.2847 | 1.43105 | 295 |
| TRdelta2 | 1.00 | 8.0571 | 1.40795 | 140 |
| | 2.00 | 8.6903 | 1.35113 | 155 |
| | Total | 8.3898 | 1.41201 | 295 |

Figure 22. Estimates

Moreover, we can see that indeed the influence of a friend on the consumer trust is stronger compared to the influence of the expert (Figure 22). That means that hypothesis H4b is accepted.

The last step of our analysis is to evaluate whether the increase in consumer trust increases the consumer buying likelihood of Brand B (cruelty-free brand). The hypothesis is stated as a following:

H4c: Increase in the “consumer trust” positively affects buying likelihood of cruelty-free products among consumers

We need to run a regression with a delta of buying likelihood as the dependent variable and as the independent variables will serve the delta of consumer trust (difference between levels of consumer knowledge before exposure of reference group and after the exposure of the reference group).

Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .355 ^a | .126 | .123 | .98903 |

a. Predictors: (Constant), TRchange
b. Dependent Variable: deltaB

ANOVA^a

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|--------|--------------------|
| 1 | Regression | 40.967 | 1 | 40.967 | 41.881 | <.001 ^b |
| | Residual | 283.673 | 290 | .978 | | |
| | Total | 324.640 | 291 | | | |

a. Dependent Variable: deltaB
b. Predictors: (Constant), TRchange

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|-------|-------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .445 | .081 | | 5.494 | <.001 |
| | TRchange | .341 | .053 | .355 | 6.472 | <.001 |

a. Dependent Variable: deltaB

Figure 23. Regression analysis

Based on the results of the regression analysis (Figure 23), we can conclude that the model is significant, as shows us the results of the F-test. However, adjusted R square equals 0,123 and is rather low. Meaning that an increase in consumer trust (our independent variable) explains only 12,3% of the variance in the change of the buying likelihood. Thus, there might be other variables that also impact the buying likelihood. However, the coefficient of our independent variable is positive and equals 0,341. Moreover, the coefficient is significant according to the t-test.

Overall, we conclude that hypothesis H4c is accepted. Thus, an increase in consumer trust increases the buying likelihood of cruelty-free brands. However, the current model explains a low part of the variance, meaning that some other factors might be missing.

In the conclusion to this part of the analysis, we would like to summarize that all our hypotheses were accepted.

3.2 Theoretical contributions and managerial implications

Based on the research and the analysis that was described earlier we can conclude that the results of this research paper have both practical and theoretical contributions to the sphere of management, marketing, and consumer behavior. In total, only 1 out of 8 hypotheses were rejected (Appendix 3) which means that most of the research papers found as a basis for this paper were relevant for the case when Russian consumers are making a choice between a cruelty-free and non-cruelty-free brand.

From a theoretical point of view, the research that was made broadens the previous studies such as the general focus of the majority of studies on analyzing personal factors like age, gender, occupation (Olli et al., 2001; Diamantopoulos et al., 2003; Lee, 2009; Starr, 2009), especially in the context of the Russian market. Since there was a certain level of criticism associated with this approach, which was revealed in the theoretical part of the work, it was important in this work to focus precisely on the analysis of socio-cultural characteristics without delving into the difference between different generations and other demographic (personal) characteristics. In addition, as it was stated at the beginning of research, covid-19 resulted in certain changes in the consumer behavior, shifting their attitudes towards more sustainable consumption and making them more predisposed to new habits and behaviors. Thus, there was a need to update past researches.

Moreover, this study focuses on a rather specific product category from the cosmetic market. Compared to other research papers, we decided not to focus on typical products such as mascara, lipstick, etc. However, we chose a gender-neutral product (deodorant) for the experiments, which makes this research different compared to others, as it is not only focused on the products that are mainly used by women. Furthermore, we specifically narrowed the consumer

category to the low-involvement product that was not used before for the studies in the area of cruelty-free cosmetics. Additionally, there is a place for further research and new experiments concerning high-involvement cosmetic products.

In addition, the study that was conducted provides a new set of data characterizing a new market that was not investigated before. For example, Toma et al. (2011) studied the sociocultural determinants of desire to switch to animal-friendly products for nine European countries (Great Britain, Finland, Ireland, Lithuania, Malta, the Netherlands, Poland, Portugal, and Spain). In our study, we focused on the Russian market and studied peculiarities of Russian consumers, so the study brings a piece of new information about the behavior of Russian consumers on the Russian beauty market which is very different from the range of developed and emerging markets.

Regarding the practical contribution for the managers, entrepreneurs, and marketers, the research is also bringing some interesting insights. First of all, as it was mentioned in the theoretical part there is a significant intention-behavior gap among Russian consumers regarding their attitude and actual behavior towards cruelty-free consumption. As our data shows, consumers with a higher level of consumer knowledge about cruelty-free cosmetic testing are more willing to choose a cruelty-free product and their choice is more consistent compared to consumers with a low level of knowledge. This means that companies that produce and sell cruelty-free products in Russia need to incorporate in their strategy more materials that increase consumers' knowledge in three dimensions: system knowledge, action-related knowledge, and effective knowledge. By communicating openly and educating the audience about the consequences of animal testing, alternatives to animal testing, peculiarities of Russian regulations, such companies will be able to broaden their target audience by including new consumers prior to the exposure. Moreover, as our data shows the increase in the knowledge about cosmetic testing has a significant impact on the buying likelihood. However, a journey from a consumer with “low knowledge” about animal testing to becoming a consumer with “high knowledge” does not take one iteration, as it was in the case of our experiment. Definitely, it requires a longer roadmap to change the established behavior of the consumer, especially when the new behavior implies more involvement and a higher price. Even though our research showed that there are some consumers that are not willing to change their preferences, there is a large percentage that is ready to rethink their purchase decision in a favor of the cruelty-free product when they are exposed to more facts to take a final decision.

In addition, even though using cruelty-free labels is a common practice across cruelty-free brands all over the world. However, our research showed that even consumers with a high level of knowledge cannot identify the official (“right”) cruelty-free label when he/she exposed to the choice between real and fake cruelty-free labels. Meaning that educating about labels can be

another policy adopted by cruelty-free brands. Moreover, as it was mentioned before in the conditions of the Russian market it is not wise to count that consumers will be able to identify and will be ready to choose a brand only because of the label.

This is also connected with the other factor that was also evaluated in our series of the experiment – consumer trust. In general, according to our data the level of trust among Russian consumers is rather low. Even though consumers with higher trust levels are more likely to purchase the cruelty-free brand, however, they have less polarised preferences between cruelty-free and non-cruelty-free brands. Meaning that a lack of trust in the brands, packaging, and other attributes is a serious barrier for Russian consumers to choose a more expensive cruelty-free product. Basically, consumers are not sure whether they believe in what they are paying for. However, when their trust level is increased, the buying likelihood of cruelty-free products is also increased. Meaning, that for the companies selling cruelty-free beauty products in Russia it is essential to establish trust between their brand and Russian consumers. Interestingly, in our data set consumers tend to believe more to their friend rather than an expert from the cosmetic industry. It can be connected with the fact that respondents might perceive an expert as more biased regarding his/her opinion, whereas their friend is a more trustworthy person. This leads to an implication that for building trust around the cruelty-free topic with Russian consumers, companies might prefer to use influencers that are outside of the beauty market industry and are perceived by consumers as honest opinion leaders.

In general, we can see that there are both managerial and theoretical implications of this research. Thus, as a result of this work, we completed the tasks, thereby achieving the goal of the work: we identified the main factors affecting the decision of Russian consumers to buy cruelty-free cosmetics, quantified their impact, and developed recommendations for companies from the beauty market industry.

3.3 Limitations and future research

It is worth noting that this study is focused on a rather narrow research area of cruelty-free consumption, as it is limited to specific Russian cities, age groups, low involvement, and gender-neutral product and influence of particular sociocultural factors. Therefore, there are opportunities to deepen research in this area.

First of all, further research might take as independent variables not only consumer knowledge about cosmetic testing, consumer trust, and social influence but other factors that characterize and differ the respondents. For example, some additional factors that were mentioned in the theoretical part of this research can be studied. Moreover, regression analysis can be used to the degree of influence and the relationship of these factors on cruelty-free consumption.

Secondly, some limitations related to the sample formation. Respondents of a specific age group were included in the sample, however, studying other age groups and comparing different generations can be useful to obtain a more in-depth understanding across generations. Moreover, since this study was conducted for respondents living in St. Petersburg and Moscow, further research can be expanded on the other regions in order to see the full picture and compare the differences. In addition, due to the current pandemic situation, all the experiments were conducted online, however, this might have resulted in the accuracy of the obtained data. Thus, conducting an offline field experiment might be helpful to have more control over the sample and results.

Thirdly, for the empirical part of the research, we chose deodorant – a product that is characterized as a low-involvement product and gender-neutral (used by both men and women). However, the beauty industry has some products that can be classified as high involvement products, for example, fragrances, etc. There are some peculiarities in consumer behavior related to the level of involvement with the product, that's why we believe that conducting an experiment with high involvement products can be a decent way to develop more suitable recommendations for such a product. Moreover, certain cosmetic categories are used more by women and some that are used more by men. Thus, analysis of not only gender-neutral products may be necessary for the future.

The before mentioned points can be great opportunities to extend research in the field of cruelty-free consumption in the beauty market in Russia. Therefore, this area will be fully investigated and the beauty companies will receive recommendations for balanced development of their cosmetic products.

Conclusion

In this work, we examined theoretical aspects of cruelty-free consumption, including, in particular, the theory of planned behavior framework and consumer knowledge, consumer trust, and social influence as the main factors that influence cruelty-free consumption. The literature review starts with an observation of existing definitions and classifications of ethical and cruelty-free consumption. Besides, we explored the current socio-cultural environment in Russia and the way it affects consumers' preferences towards cruelty-free cosmetics. This work fills a substantial gap by exploring the specifics of cruelty-free consumption in the Russian beauty market.

An experimental approach was applied to evaluate the influence of the before mentioned factors on consumers' decision to purchase cruelty-free cosmetic product instead of cosmetic product that was tested on animals. Also, through the experiment, the social influence through the different types of reference (friend/expert) on the before mentioned factors and cruelty-free behavior of consumers was evaluated. We identified that all three factors have a significant impact on the cruelty-free consumption of cosmetics. In total, 7 out of 8 our hypotheses were accepted.

Based on both the theoretical part and empirical part of the research we provided some recommendations to the companies selling cruelty-free beauty products in Russia. Because consumers ultimately decide to accept or reject animal-friendly products, consumer buying behavior presents a powerful drive or a barrier for the development of a market for such products. Thus it is essential to understand how to impact consumer choices in order to tackle existing challenges and opportunities in the Russian beauty market. Developing a long-term strategy that is based on constantly increasing consumers' knowledge and awareness about animal testing, as well as using the right instruments to increase and develop trust in the brand is essential for success. All in all, we conclude that through a thorough analysis we achieved a deeper understanding of the nature of the phenomena and this research paper provides both substantial theoretical and practical contributions.

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Appendix

Appendix 1 – Questionnaire

This is the questionnaire about the beauty product market. You will participate in a study investigating consumers' attitudes towards a gender-neutral cosmetic product. The study will take X minutes. Thank you for your participation!

The question presented in this section is used to allocate you to one of the groups for the experiment. Please pick any of the options below:

- 1) α
- 2) β
- 3) γ
- 4) δ

Part 1.

To ensure quality and safety, cosmetic products are being tested in laboratories before they are placed in offline/online stores. This requirement is mandatory among all developed countries, including Russia.

| Group α and β | |
|--|---|
| 1. My knowledge about how cosmetic products are being tested is | |
| | 1 2 3 4 5 6 7 |
| Very Low | <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> |
| | Very high |
| 2. Is animal testing mandatory for cosmetic products in Russia? | |
| a. Yes | |
| b. No | |
| c. I don't know | |
| 3. Are there existing alternatives to animal testing of cosmetic products? | |
| a. Yes | |
| b. No | |
| c. I don't know | |

Group γ and δ

1. I trust information that I see on the packaging of cosmetic products

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

2. I trust the brand when they announce publicly their products are not tested on animals

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

3. In general, I trust reviews that I hear from other people

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

4. In general, I trust opinions that I hear from my friends

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

5. In general, I trust opinions that I hear from people that are experts in a particular area

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

Please spend some time to familiarize yourself with the following scenario.

Imagine that you want to buy deodorant for yourself. You come to a supermarket here in Russia and you have only two options. Given your need, you decide to choose this occasion.

| Brand A | Brand B. |
|--|--|
| It is available in a standard package and comes with the fragrance you like | It is available in a standard package and comes with the fragrance you like |
| Brand A tests this deodorant on animals (such as bunnies, mice, or guinea pigs). | Brand B doesn't test this deodorant on animals (such as bunnies, mice, or guinea pigs). This brand uses an alternative way of testing its products. |
| The price is 130 RUB | The price is 350 RUB |

You are unfamiliar with either of these brands and you don't know what they will be like. You want to make sure you buy the brand that will suit your beliefs and needs the most. In other words, you want to choose the right brand.

Based on this information, please respond to the following questions below:

1. My likelihood of buying "Brand A" is

| | | | | | | | | |
|----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Very low | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Very high |

2. My likelihood of buying "Brand B" is

| | | | | | | | | |
|----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Very low | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Very high |

3. Buying "Brand A" feels right

| | | | | | | | | |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|
| Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree |
| | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | |

4. Buying "Brand B" feels right

| | | | | | | | | |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|
| Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree |
| | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | |

5. Buying "Brand A" makes sense

| | | | | | | | | |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|
| Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree |
| | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | |

6. Buying "Brand B" makes sense

| | | | | | | | | |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|
| Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree |
| | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | |

7. Buying "Brand A" is a moral obligation

| | | | | | | | | |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|
| Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree |
| | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | |

8. Buying "Brand B" is a moral obligation

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

9. In general, price is important in my decision making

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

10. I am interested in the deodorant category in general

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

11. The deodorant category is important to me

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

12. I get involved with what deodorant brand I use

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

Part 2.

| Group α | Group β |
|--|--|
| Now imagine that before your decision you heard the following information from your friend: | Now imagine that before your decision you heard the following information from an independent expert in cosmetic products: |
| <p>“In Russia testing of cosmetic products on animals is not banned by regulations. On the other hand, in most developed countries animal testing is banned. Research indicates that alternative methods of testing are more accurate than tests on animals. Nevertheless, every year millions of animal carcasses used in research laboratories are discarded and are mostly contaminated with toxic and hazardous chemicals.”</p> | |

| Group α | Group β | | | | | | | | | | | | | | | | | | |
|---|---------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|---|--|----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
| <p>Based on this information above, please respond to the following questions:</p> <p>1. Given the information you received from your friend (expert), how would you rate your knowledge on cosmetic products being tested:</p> | | | | | | | | | | | | | | | | | | | |
| <table style="width: 100%; border: none;"> <tr> <td style="width: 10%;"></td> <td style="width: 10%; text-align: center;">1</td> <td style="width: 10%; text-align: center;">2</td> <td style="width: 10%; text-align: center;">3</td> <td style="width: 10%; text-align: center;">4</td> <td style="width: 10%; text-align: center;">5</td> <td style="width: 10%; text-align: center;">6</td> <td style="width: 10%; text-align: center;">7</td> <td style="width: 10%;"></td> </tr> <tr> <td style="text-align: left;">Very low</td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: right;">Very high</td> </tr> </table> | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | Very low | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Very high |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | | | | | | | | | |
| Very low | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Very high | | | | | | | | | | | |

| Group γ | Group δ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|---|----------------|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--|-------------------|---|---|---|---|---|---|---|----------------|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--|
| <p>Now imagine that before your decision you heard the following information from your friend:</p> | <p>Now imagine that before your decision you heard the following information from an independent expert in cosmetic products:</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>“I know Brand B, they are officially certified with cruelty-free status by PETA. Thus, they don’t use animals for their tests.”</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Based on this information above, please respond to the following questions:</p> <p>1. I trust information that I see on the packaging of cosmetic products</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 10%; text-align: left;">Strongly disagree</td> <td style="width: 10%; text-align: center;">1</td> <td style="width: 10%; text-align: center;">2</td> <td style="width: 10%; text-align: center;">3</td> <td style="width: 10%; text-align: center;">4</td> <td style="width: 10%; text-align: center;">5</td> <td style="width: 10%; text-align: center;">6</td> <td style="width: 10%; text-align: center;">7</td> <td style="width: 10%; text-align: right;">Strongly agree</td> </tr> <tr> <td></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td></td> </tr> </table> <p>2. I trust the brand when they announce publicly their products are not tested on animals</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 10%; text-align: left;">Strongly disagree</td> <td style="width: 10%; text-align: center;">1</td> <td style="width: 10%; text-align: center;">2</td> <td style="width: 10%; text-align: center;">3</td> <td style="width: 10%; text-align: center;">4</td> <td style="width: 10%; text-align: center;">5</td> <td style="width: 10%; text-align: center;">6</td> <td style="width: 10%; text-align: center;">7</td> <td style="width: 10%; text-align: right;">Strongly agree</td> </tr> <tr> <td></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td style="text-align: center;"><input type="radio"/></td> <td></td> </tr> </table> | | Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree | | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree | | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | |
| Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

1. My likelihood of buying “Brand A” is

| | | | | | | | | |
|----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Very low | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Very high |

2. My likelihood of buying “Brand B” is

| | | | | | | | | |
|----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
| Very low | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very high |
| | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | |

3. Buying “Brand A” feels right

| | | | | | | | | |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|
| Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree |
| | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | |

4. Buying “Brand B” feels right

| | | | | | | | | |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|
| Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree |
| | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | |

5. Buying “Brand A” makes sense

| | | | | | | | | |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|
| Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree |
| | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | |

6. Buying “Brand B” makes sense

| | | | | | | | | |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|
| Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree |
| | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | |

7. Buying “Brand A” is a moral obligation

| | | | | | | | | |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|
| Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree |
| | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | |

8. Buying “Brand A” is a moral obligation

| | | | | | | | | |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|
| Strongly disagree | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Strongly agree |
| | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | |

Part 3.

1. Please identify which of the following signs means that the product is not tested on animals (multiple choice):

a)



b)



c)



d)



e)



2. Please, indicate your gender

- Male
- Female

3. Indicate your age ____

4. Would you consider your disposable income to be

| | | | | | | | | |
|----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| Very low | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Very high |

Appendix 2 – Two-Paired T-test for trust factors

A two-paired test comparing “trust factor 1” before respondents were exposed to the scenario with influencer and after:

- I trust information that I see on the packaging of cosmetic products

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

Paired Samples Statistics

| | | Mean | N | Std. Deviation | Std. Error Mean |
|--------|-----|--------|-----|----------------|-----------------|
| Pair 1 | TR1 | 3.7051 | 295 | 1.03566 | .06030 |
| | TR2 | 3.6271 | 295 | .99486 | .05792 |

Paired Samples Correlations

| | | N | Correlation | Sig. |
|--------|-----------|-----|-------------|------|
| Pair 1 | TR1 & TR2 | 295 | .008 | .885 |

Paired Samples Test

| | | Mean | Std. Deviation | Std. Error Mean | Paired Differences | | t | df | Sig. (2-tailed) |
|--------|-----------|--------|----------------|-----------------|---|--------|------|-----|-----------------|
| | | | | | 95% Confidence Interval of the Difference | | | | |
| | | | | | Lower | Upper | | | |
| Pair 1 | TR1 – TR2 | .07797 | 1.43001 | .08326 | -.08589 | .24182 | .936 | 294 | .350 |

A two-paired test comparing “trust factor 2” before respondents were exposed to the scenario with influencer and after:

- I trust the brand when they announce publicly their products are not tested on animals

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

Paired Samples Statistics

| | | Mean | N | Std. Deviation | Std. Error Mean |
|--------|-------|--------|-----|----------------|-----------------|
| Pair 1 | TR1.2 | 3.8305 | 295 | .98202 | .05718 |
| | TR2.2 | 4.5661 | 295 | 1.03092 | .06002 |

Paired Samples Correlations

| | | N | Correlation | Sig. |
|--------|---------------|-----|-------------|------|
| Pair 1 | TR1.2 & TR2.2 | 295 | -.002 | .968 |

Paired Samples Test

| | | Mean | Std. Deviation | Std. Error Mean | Paired Differences | | t | df | Sig. (2-tailed) |
|--------|---------------|---------|----------------|-----------------|---|---------|--------|-----|-----------------|
| | | | | | 95% Confidence Interval of the Difference | | | | |
| | | | | | Lower | Upper | | | |
| Pair 1 | TR1.2 – TR2.2 | -.73559 | 1.42544 | .08299 | -.89893 | -.57226 | -8.863 | 294 | <.001 |

Appendix 3– The hypothesis testing summary

| The hypothesis “Consumer knowledge” | Status |
|--|-----------------|
| <i>H1: Consumers with low knowledge about cruelty-free testing are less likely to choose cruelty-free product compared to consumers with high knowledge about cruelty-free testing</i> | Accepted |
| <i>H3a: When exposed to an influence of a reference group “consumers’ knowledge” increases</i> | Accepted |
| <i>H3b: The influence of a reference group on the consumers’ knowledge is stronger when the influencer is an expert compared to when the influencer is a friend</i> | Rejected |
| <i>H3c: Increase in the “consumer knowledge” positively affects buying likelihood of cruelty-free products among consumers</i> | Accepted |

| The hypothesis “Consumer trust” | Status |
|---|-----------------|
| <i>H2: Consumers with low “consumer trust” are less likely to choose cruelty-free product compared to consumers with high “consumer trust”</i> | Accepted |
| <i>H4a: When exposed to the influence of a reference group, “consumer trust” increases</i> | Accepted |
| <i>H4b: The influence of a reference group on the consumers’ trust is stronger when the influencer is a friend compared to when the influencer is an expert</i> | Accepted |
| <i>H4c: Increase in the “consumer trust” positively affects buying likelihood of cruelty-free products among consumers</i> | Accepted |