



TALLINNA TEHNIKAÜLIKOO  
INSENERITEADUSKOND  
Kuressaare kolledž

Kristina Griškova

**EVALUATING THE RELATIVE INFLUENCE OF ONLINE  
REVIEWS AND PERSONAL RECOMMENDATIONS ON  
CONSUMER PURCHASE DECISIONS IN GENERATION Y AND  
GENERATION Z ON THE EXAMPLE OF BUYING BEAUTY  
PRODUCTS**

Bachelor's thesis

Supervisor: Olev Tõru, MSc

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I hereby declare that I have compiled the thesis independently and all works, important standpoints and data by other authors have been properly referenced and the same paper has not been previously presented for grading. The document length is 9940 words from the introduction to the end of the summary.

Kristina Griškova .....

Student code: 193229SDVR

Student email address: krgris@taltech.ee

The paper conforms to requirements in force.

Supervisor: Olev Tõru, MSc .....

Permitted to the defence.

Chairman of the Defence Committee:

Jana Raadik-Cottrell, Phd .....

.....

(name, signature, date)

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## **ABSTRACT**

This thesis provides a study of the influence of online reviews and personal recommendations on consumer purchase decisions within Generation Y and Generation Z on the example of buying beauty products. The study aims to find out which source has a greater influence on the purchasing choices of these generations, providing valuable insights into consumer preferences and decision-making patterns. Additionally, this study examines the differences in reliance on online reviews and personal recommendations between Generation Y and Generation Z consumers when purchasing beauty products.

In an increasingly digitalised marketplace characterised by the dominance of Generation Y and Z consumers, understanding the main factors behind consumer purchase decisions is essential for businesses and brands wanting to succeed. The research problem lies in the lack of a thorough examination of the subtle differences in consumer behaviour between these two generational cohorts within the specific market segment.

The theoretical part of this thesis includes an overview of the characteristics of Generations Y and Z, consumer decision-making processes, and the impact of online reviews and personal recommendations.

The study employs a quantitative research methodology using an online survey distributed through social media to collect information from respondents aged 18–44. The questionnaire consisted of 22 questions and received a total of 166 responses.

Keywords: Generation Y, Generation Z, consumer purchase decision, online reviews, personal recommendations, beauty products

## **INTRODUCTION**

In today's marketplace characterised by frequently changing consumer preferences, understanding the preferences of consumer behaviour across generations is essential for businesses looking to remain relevant and competitive. The diversity of consumer behaviour across generations requires an approach tailored to the unique characteristics of each cohort, resulting in the need to develop different marketing strategies and campaigns.

Generation Y (Millennials) and Generation Z (Zoomers) as significant consumer groups have changed the dynamics of consumer behaviour. These cohorts exhibit distinct characteristics shaped by their unique experiences, technological advances, and social influence. Thus, businesses and marketers must understand the preferences and decision-making patterns of these generations to effectively create their marketing strategies and product offerings.

The purpose of the research is to assess and compare the impact of online reviews and personal recommendations on consumer purchase decisions within Generation Y and Generation Z, specifically focusing on their buying behaviour in the example of buying beauty products. Through this evaluation, the study aims to identify which source holds a greater impact on influencing the purchasing choices of these generations, providing valuable insights into consumer preferences and decision-making patterns in the context of beauty product purchases. In pursuit of the purpose, two research questions were posed:

1. How does the influence of online reviews compare to personal recommendations on consumer purchase decisions among Generation Y and Generation Z in the beauty products market?
2. How do Generation Y and Generation Z consumers differ in their reliance on online reviews and personal recommendations when buying beauty products?

To address these questions, the study examines the theoretical foundations of Generations Y and Z, exploring their characteristics, communication habits, and social influences. Additionally, it explores the consumer decision-making process to provide a theoretical framework for

understanding how online reviews and personal recommendations impact different stages of purchasing behaviour.

Moreover, the study investigates the influence of online reviews and personal recommendations on consumer buying behaviour, highlighting the significance of these factors in shaping consumer perceptions and purchase decisions. Drawing on existing literature, the study examines the role of word-of-mouth (WOM) and electronic word-of-mouth (eWOM) in influencing consumer preferences.

This study conducts a quantitative study using an online questionnaire distributed on social networks among consumers of generations Y and Z. The purpose of the survey is to gather information about the preferences, attitudes and behaviour of respondents regarding online reviews and personal recommendations when purchasing beauty products.

The work consists of two chapters. The first chapter provides a theoretical overview of Generations Y and Z, the consumer decision-making process, the main characteristics shaping consumer behaviour within these generational cohorts, and the impact of online reviews and personal recommendations on the consumer purchasing process. The second part describes the research methodology and sample criteria, discusses the study results, draws conclusions and provides suggestions.

The author expresses deepest gratitude to all the participants who kindly contributed to this study, as well as to the supervisor Olev Tõru for their invaluable cooperation and guidance throughout the writing and research process.

# **1. THEORETICAL FOUNDATIONS OF GENERATIONS, CONSUMER PURCHASE DECISIONS, ONLINE REVIEWS AND PERSONAL RECOMMENDATIONS**

In this chapter, the author presents a theoretical overview of Generations Y and Z, the consumer decision-making process, the main characteristics shaping consumer behaviour within these generational cohorts, and the impact of online reviews and personal recommendations on the consumer purchasing process.

## **1.1. Overview of Generation Y and Generation Z**

Generational cohorts are defined as groups of people born in the same time interval and influenced by complex of social, economic, technological, and cultural factors (McCrimble, 2018; Howe & Strauss, 2000; Dimock, 2019). The information on these generational trends is the crucial element of the effective research of consumer behaviour, societal interactions, and cultural cooperation (McCrimble, 2014; Twenge, 2023; Seemiller & Grace, 2015). This thesis focuses on two generations: Generation Y, also known as the millennials, and Generation Z, also known as Zoomers. Whether a generation ends and the next begins is redefined constantly by researchers in the generational studies field. The presented study is based on Jean M. Twenge's classification of Generations Z and Y. People born between 1980 and 1994 are considered Generation Y, while the people born between 1995 and 2012 are Generation Z.

### **Generation Y**

Generation Y, also referred to as Millennials, comprises those born in the period between 1980 and 1994, which is noted for having an attitude of optimism and a tendency towards cooperation (Howe & Strauss, 2000; Twenge, 2023). Shaped as digital natives while growing up in a highly developed digital world, Millennials have been changed by the social transformation, which has influenced their communication habits, the way of information processing and their social life (McCrimble, 2014). By growing up in an era of the Internet, they are the first generation to comfortably embrace social media platforms not just as networking, but also as identity materials.

Generation Y is characterized by its efficiently oriented attitude, high-speed multitasking and technology competence. In addition to this, the constant demand for socializing with others characterizes the generation (Bolton *et al.* 2013; McCrindle, 2018). More than anything, the global financial crisis of 2008, rising unemployment and growing student loan debts had a direct impact on this generation (Howe & Strauss, 2000). The most notable influence of the economic downturn on Millennials is the tendency of prudence, pragmatism, and fiscal restraint, leaving a clear stamp on how they regard expenditure and saving, making an obvious impact on financial planning (Twenge, 2023).

Although they are widely regarded as the generation with the most confidence and assertiveness, Millennials deal with several life stressors and pressures which in turn lead to shaping their worldviews. In the book “Generation Me” (2014) Twenge unfolds the disposition of Millennials to self-centeredness, individualization, and individual expectations. In the following piece of literature, Twenge (2023) discusses some of the hurdles facing the Millennials and the effect this had on their inner self, especially concerning their self-esteem and mental health as well as the common beliefs the societies hold. Furthermore, they also face the challenges of economic uncertainties, debts and mental health disorders, which might lead to disillusionment and anxiety (Dimock, 2019).

## **Generation Z**

Generation Z, or Zoomers, the age group of people born from 1995 to 2012, has been the first generation to live in a completely digitalised world, which has formed their behaviours, perceptions of the world, and attitudes towards technology (Twenge, 2023; McCrindle, 2014). In a time ruled by technology devices, smartphones and networking, Generation Z is gaining more confidence in their digital communication capabilities which are often better than face-to-face interactions. Gen Z is the first generation born in a technology-oriented world with constant access to the Internet and online entertainment, whereas the role of social media has effectively and vividly shaped their values (Dimock, 2019; Seemiller & Grace, 2016). In addition, the technology reflects Gen Z’s superior online communication skills to all past generations (Seemiller & Grace, 2016; Turner, 2015). Among the prevailing characteristics of Generation Z, there are tendencies to choose speed over accuracy, practice over theory, and instant knowledge, which all correlate with their diverse approach to a quick-paced, parallel-processing lifestyle (McCrindle, 2014). Words like anxiety and equality are used commonly by Gen Z and reflect their concerns, including

authenticity, free speech issues, wide breaking of gender roles, and mental health matters (Twenge, 2023).

Generation Z communicates a deep wish to make a difference around the world and it draws attention to the existence of problems such as violence, cyberbullying and economic inequality (Turner, 2015). Systemic reform, encouraging collective unity and shared responsibility which they advocate for is the cause to stand against major issues like school shootings, cyberbullying, and corporate dominance. There is diversity in Generation Z when it comes to culture with blended families and non-traditional religious affiliations. Generation Z shows compassion and solidarity as they create a society where everybody has equal opportunity (Seemiller & Grace, 2016).

Different from the previous generations, fewer Gen Z people live in poverty at a similar age. Generation Z faces a unique set of challenges, among which are mental health and self-doubts. The less-optimistic view is held by more, with fewer young people expecting to work in professional jobs, get a graduate or professional degree, or own more than their parents. Gen Z never hesitates to abolish the stigma around mental health talks and call for their respective needs (Twenge, 2023).

## **1.2. Key characteristics shaping consumer behaviour in Generation Y and Z**

Consumers belonging to the Millennials generation are likely to use their peers and expert opinions instead of traditional brand messages (Fromm *et al.* 2011; Padveen, 2017). They have a high level of faith in personal references from friends and relatives who they believe to be more credible and authentic compared to normal advertisements. This dignity implicates the generation's close attachment to the real self and in-person interaction. Millennials quickly get accustomed to information in varied forms, moreover, they are known as the ones who demand personalized brand engagements which are specifically designed to their preferences and needs (Parment, 2014). Millennials have a higher degree of devotion to a comprehensive analysis of the products, and they turn to online sources of information in the process of decision-making (Melović *et al.* 2021). Social media channels, such as Instagram and YouTube, are the main ways of receiving product information and peer recommendations (Padveen, 2017; Fromm *et al.* 2011).

One of the key aspects influencing consumer behaviour in Generation Y is the brand experience as well as authenticity and personalisation that they seek, which is evidenced by the desire to

express themselves and show personality in items purchased (Fromm & Garton, 2013; Mangold & Smith, 2012). Compared to the previous generations, Millennials, for their meticulous habits in consumption put a high degree of importance on a positive brand image and reputation (Otaigbe, 2018). Millennials prefer brands which offer personalised experiences corresponding with their preferences and lifestyles as well as companies that show transparency and social consideration (Padveen, 2017).

Millennials consider both value and price while making purchasing decisions (Dash *et al.* 2021; Nartea *et al.* 2019). They value quality and authenticity, however, at the same time, they search for deals and discounts to extend their purchasing power. Generation Y emphasises quick transactions, as well as personal communications, which mostly take place through the use of vouchers or discount codes for promotional campaigns, rather than conventional marketing methods (Moreno *et al.* 2017). Millennials have learned to spend their time and money on goods that are available in the digital space, trying to eliminate visiting physical shops. Quickly losing interest in websites with overpriced goods and unfavourable shipping options, Millennial customers are usually attracted to illustrious graphics and individual messages. They mostly rely on online reviews to determine whether the customers have been satisfied with the quality. Word of mouth travels fast with Generation Y individuals who have a reputation for doing comprehensive product research. As a result, they are making well-informed choices which are price, quality and convenience-focused (Smith, 2011).

Gen Z exhibits specific consumer behaviour compared to previous generations, having spent their childhood surrounded by technology. Representing the generation born with internet access and advanced mobile technologies, Gen Z are used to constant marketing ads (McCrinkle, 2014). Values such as financial responsibility, open-mindedness, ongoing learning, and the importance of social connections are shaping their buying decisions (Turner, 2015).

Social media has significantly shaped their purchasing decisions as well as their perception towards brands. Social media has also been their major source of trends and peer recommendations thus they continue to be highly connected and influenced through an array of communication tools such as FaceTime, Snapchat, Skype and Google Hangouts. Gen Z are considered the most interconnected generation in history (Králová, 2020). In the review of the study by Francis & Hoefel (2018) for McKinsey&Company, almost 2 out of 3 consumers trust peer referrals as their most credible source of information about products. Gen Zers tend to do their research and make

decisions regarding products through the use of digital platforms. Gen Z is a generation that highly values authenticity and transparency. Thus, they are always on the lookout for products and services which align with their values and contribute to the social issues (Katz *et al.* 2022). To sound authentic, they will undoubtedly choose utility over brand names and prefer customised offers from brands that are designed to meet consumers' personal preferences (Francis & Hoefel, 2018; Fromm & Read, 2018). As well Zoomers tend to choose items easily and quickly as their online shopping habit is driven by the expectation of instant gratification, which comes along with the ease and convenience of online experience (Fromm & Read, 2018). The new generation prefers to use cards like Apple Pay, compared to the complicated online transactions of traditional banks. With transparency and traceability in their consumer journey, Gen Z is less concerned about the payment security issues that older generations face along the purchasing journey (Krállová, 2020). According to Dorsey and Villa (2020), Gen Z are known to value the money they spend as they regularly look for discounted items and personalised shopping experiences, as they are attracted to good deals and look for budget-friendly options available on Amazon.

Gen Z values learning and creativity, choosing brands promoting personal growth (Koulopoulos & Keldsen, 2016). They focus on ethics and often prefer brands, that are seen as responsible and truthful (Katz *et al.* 2022). They show a broad community concern on social issues: environmentally sustainable development, and elimination of social inequalities. Gen Z is concerned about making positive changes to the world, following brands that have ethical principles, sell environmentally friendly products, and follow corporate social responsibility (Fromm & Read, 2018; Katz *et al.* 2022).

Their attention focus is shorter as a result of constant online distraction, and it means that marketing must be attention-catching. Gen Z have mixed emotions around ad avoidance, feeling both irritation and fear, which could be described as *FOMO* (Fear of Missing Out) (McKee, 2021). According to Francis & Hoefel (2018), the nickname of Gen Z, “True Gen”, reflects their predisposition towards dialogue-driven problem solving; they are open towards expressing themselves, aspire to change the world and make decisions analytically.

### 1.3. Consumer decision-making process

The process of consumer decision-making is a highly essential part of consumer behaviour that has been actively researched in marketing literature. Being based on various models and theories, the process outlines steps individuals undertake when making purchasing decisions. This thesis examines Kotler's five-stage buyer decision-making model. Each stage is described below based on the book *Principles of Marketing* written by Philipp Kotler and Gary Armstrong (2018).

The buyer decision-making process includes five stages: need recognition, information search, evaluation of alternatives, purchase decision, and post-purchase behaviour.

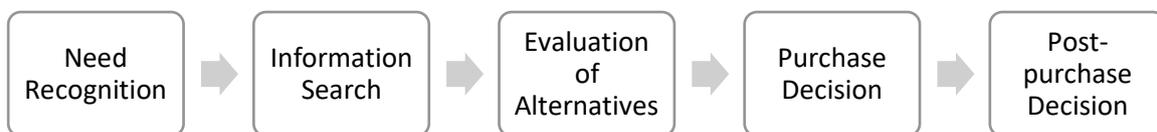


Figure 1. Stages of buying decision process

Source: Kotler & Armstrong (2018), made by author

#### **Need Recognition**

The consumer decision-making process begins with problem identification, at which point the consumer recognises the need for the product. This recognition may come from internal motivations, such as basic physiological needs; or by external motivations, such as advertising and conversations with friends (Kotler & Armstrong, 2018).

#### **Information Search**

The information search stage of the buyer decision process involves the consumer seeking more information to address their needs. Consumers gather information from multiple sources: personal sources include friends, family and colleagues; commercial sources include advertising, product packaging, and brands' websites; public sources include mass media, peer reviews, social media, rating and comparison websites), and experimental sources as using the product. While commercial sources provide information about a product to the buyer, personal sources often validate or evaluate products through real experience (Kotler & Armstrong, 2018).

#### **Evaluation of Alternatives**

The evaluation of alternatives stage involves using gathered information to assess various brand options within consumers' consideration set. Customers use different appraisal processes for the products they want to buy. It might be rational or intuitive decision-making depending on the individual customers. Consumers create an opinion about a product based on factors such as price, style, operating efficiency and performance (Kotler & Armstrong, 2018).

### **Purchase Decision**

At the stage of making a purchase decision, the consumer makes the choice; after evaluating various options and having a strong desire to purchase, the consumer usually chooses the most preferred product. At the current stage two factors may influence the final decision. First, consumer choice may be influenced by other people's attitudes, especially those whose opinion matters the most to the consumer. The second factor is unexpected situational factors, such as inflation, economic crisis or layoff. It can also change purchase intention. This means that consumer preferences and intentions do not always translate into actual purchasing decisions (Kotler & Armstrong, 2018).

### **Postpurchase Behaviour**

Postpurchase behaviour may be defined as the actions by consumers following the purchasing experience, being a reason for either disappointment or satisfaction. Customer satisfaction depends only on the association between expectations and the product's actual performance. When the items live up to expectations or exceed, the consumers are experiencing satisfaction or delight; if it does not happen, there will be dissatisfaction. Satisfied customers are more likely to re-purchase, recommend the brand to others and demonstrate brand loyalty. However, dissatisfied customers can trigger negative word-of-mouth (Kotler & Armstrong, 2018).

This thesis focuses on two factors of purchasing behaviour, online reviews and personal recommendations, which relate to the stages of need recognition, information search and purchase decision (Kotler & Armstrong, 2018).

#### 1.4. The influence of online reviews and personal recommendations on consumer buying process

This thesis focuses on two factors of purchasing behaviour, online reviews and personal recommendations, which relate to the stages of need recognition, information search and purchase decision in the consumer decision-making process (Kotler & Armstrong, 2018).

The findings from the Digital Democracy Survey (2015) study are shown in Figure 2. It reveals that 81% of survey respondents consider personal recommendations from friends, family, or acquaintances as influential in their purchasing decisions. Additionally, 61% of participants note that online reviews or recommendations from individuals within their social circle impact their purchase choices. Furthermore, 25% of respondents stated that endorsements from celebrities influence their purchasing decisions, while 24% attributed their purchase decisions to endorsements from online personalities. These findings validate that personal recommendations have the most significant influence on purchasing decisions.

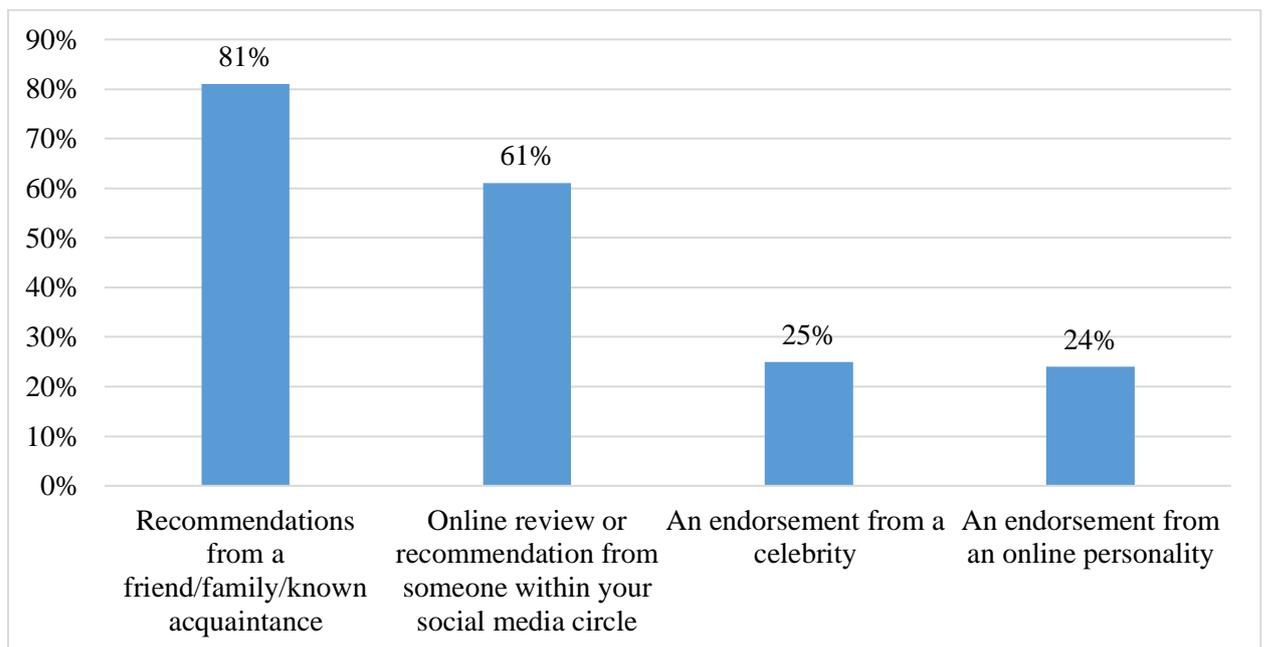


Figure 2. Buying Decision Influence

Source: Digital Democracy Survey (2015), made by author

In this study, online reviews (eWOM) are considered by the author as follows (Hennig-Thurau *et al.*, 2004):

- Online reviews/recommendations on social media from friends/family/colleagues/known acquaintances;
- Online reviews/recommendations on social media from an online personality.
- Online reviews/recommendations on social media from influencers;
- Online reviews on various online platforms, online stores, product comparison sites (Amazon.com, Sephora.com, Trustpilot.com, Reddit.com, YesStyle.com etc).

In this study, personal recommendations (WOM) are considered by the author as follows (Arndt, 1967):

- Personal recommendations from friends/family/known acquaintances;
- Personal recommendations from friends/family/colleagues/known acquaintances on social media (addressed directly to the consumer).

Following this, the author provides a theoretical overview of personal recommendations and online reviews.

#### **1.4.1. Personal recommendations (WOM)**

Word of mouth (WOM) is one of the most powerful factors that influence customer buying decisions. According to Ennew (2000) and Katz & Lazarsfeld (1955), word-of-mouth is client-to-client communication about products and services, spreading information about new goods and impacting consumer choice of brands. Arndt (1967) described WOM as oral, person-to-person communication between a receiver and a communicator who the receiver perceives as non-commercial communication about a brand, product or service. Thirty years later Anderson, (1998) described WOM as informal communication that could be used to rate products or evaluate services amongst private parties without having any official contact between consumers and the firm. Consumer-to-consumer communication happens through various channels, such as in-person conversations, phone calls, emails, or online platforms (Silverman, 2001).

The impact of WOM on buying decisions can be both positive and negative (Anderson, 1998). The spread of favourable opinions by consumers about some goods or services through positive word of mouth is opposed to negative word of mouth, which happens when people share unpleasant feedback. Many marketers regard positive word of mouth as one of the oldest forms of marketing communications. In many circumstances, it may also be one of the most powerful,

particularly if the provider of WOM is someone known and trusted by the consumer (family, social acquaintances) (Ennew, 2000). Word of mouth (WOM) significantly influences consumer buying decisions as it is considered the most trusted source of information, coming from peers rather than from the brands themselves (Zaraket, 2020). WOM has an impact when it comes to reliability, as it consists of real experiences and recommendations provided by trusted people (Silverman, 2001; Balter & Butman, 2005). According to Saad Aslam's research, consumers are heavily influenced by the word-of-mouth recommendations while shopping, ranging from such items as everyday items to long-term purchases. Particularly, close family members, friends, and acquaintances had the most significant influence on these consumer choices. According to McKinsey's research (2010), WOM is affected by the content of the message, the trustworthiness and knowledge of the sender, and the context in which it is said. Efforts to trigger or control WOM are unsuccessful, as nature remains uncontrollable, based on real consumer experiences and comments (Balter & Butman, 2005). As per Deloitte's (2015) survey, referrals and recommendations from peers are often more trusted rather than other forms of advertising.

#### **1.4.2. Online reviews (eWOM)**

Along with the advent of technology, traditional word-of-mouth has shifted to its digital form – eWOM, or electronic word-of-mouth, can be defined as the exchange of certain information about products, services or brands through the Internet (Hennig-Thurau *et al.* 2004). Unlike traditional word-of-mouth, eWOM usually takes place in an online environment where a large number of online users can be easily reached (Wang *et al.* 2018). eWOM gives people freedom of communication by allowing them to carry on discussions whenever they want (Toma *et al.* 2008). This includes customers expressing themselves through blogs, social networking, online talks, and web reviews (Weitzl, 2017).

Customers go online to use reviews, recommendations and social media platforms for discussions, gathering information and making decisions on the quality and credibility of a product (Dellarocas, 2003; Chevalier & Mayzlin, 2006). Positive eWOM boosts brand trust and reliability causing more people to be willing to buy, but negative eWOM can discourage potential clients and ultimately affect brand reputation (Hennig-Thurau *et al.* 2004). Furthermore, Sénécal & Nantel (2004) described eWOM as a social proof with a high-reliability factor in validating consumer choices and giving comfort during decision-making. e-WOM is an important factor in both consumer behaviour and marketing as it determines consumers' perceptions and buying decisions

(Dellarocas, 2003). Positive electronic word-of-mouth stimulates customer loyalty, while negative eWOM might affect brand reputation (Hennig-Thurau *et al.* 2004).

## **2. THE STUDY AND RESULTS OF THE IMPACT OF ONLINE REVIEWS AND PERSONAL RECOMMENDATIONS ON GENERATION Y AND Z**

The second part of the thesis outlines the research methodology and sample criteria, analyses the study results, and draws conclusions based on the research conducted. There are a total of 166 respondents in the sample, 82 of them belong to Generation Y, and 84 belong to Generation Z (Table 1). The purpose of this study is to explore how the influence of online reviews compares to personal recommendations when making purchasing decisions among Generations Y and Z through the example of purchasing beauty products, and how consumers of Generations Y and Z differ depending on online reviews and personal recommendations.

The main research questions of the thesis are the following:

1. How does the influence of online reviews compare to personal recommendations on consumer purchase decisions among Generation Y and Generation Z in the beauty products market?
2. How do Generation Y and Generation Z consumers differ in their reliance on online reviews and personal recommendations when buying beauty products?

The research methodology was selected by the author to address the aforementioned research questions.

### **2.1. Research method and sample criteria**

Based on the purpose of the study, the author has decided to conduct a quantitative study among the Y and Z generations. The study was conducted in the form of a survey. Surveys use questionnaires that provide quantitative data. A questionnaire is a form of asking research subjects questions and recording answers to solve a research problem (Õunapuu 2014, 160). The quantitative study was conducted in the form of an online survey (Appendix 1) created on the Google Forms platform. The survey was distributed on the social media website Facebook, where

respondents were invited to voluntarily participate in the study by answering the questionnaire. People of all ages were invited to take part in the survey, but the sample only included responses from people aged 18–44 years.

The research employs consumer purchases of beauty products as a case study. Within this context, beauty products include skincare, personal care, fragrance, haircare, and makeup items. The list of these products was included in the questionnaire to provide clarity to respondents regarding the specific categories that fall under the definition of beauty products.

The questionnaire consisted of 22 questions. The questionnaire mainly consisted of closed questions and Likert scale questions. There are two types of closed questions: questions that collect background information (for example, gender, age or year of birth, location), and questions that provide the respondent with a choice of answers from which he must find one or more suitable ones. The author decided to use single-choice, multiple-choice and Likert-scale questions in the questionnaire. The goal was to simplify the process of answering the questionnaire for respondents since often people are not willing to write long answers themselves, which could lead to the number of respondents being too small. Some questions also had an “Other” with the option for the respondents to add their answers. An open-ended question was also presented at the end of the survey to allow respondents to express their views.

The demographic groups for the survey were defined as:

1. People aged 18–29 years, since they belong to Generation Z, that is, people born between 1995–2006;
2. People aged 30–44 years, since they belong to Generation Y, that is, people born between 1980–1994.

As of April 1, 2024, responses to the questionnaire were received from 107 respondents. During the initial data analysis, the author determined that the responses did not provide sufficient information to fully answer the research questions. In this regard, it was decided to consider the first survey a test study. The author has updated the original questionnaire, adding more in-depth questions that provide more extensive answers, and conducted the online survey again.

Responses to the questionnaire were collected during the period 01.04.2024–10.04.2024. As of 10.04.2024, responses were received from 190 respondents. Respondents under 18 years of age

and over 44 years of age were not included in the sample. Twenty-four people over 44 years of age responded to the questionnaire and their responses were not included in the sample. The total number of online questionnaire respondents included in the sample was n=166. The frequency of respondents' demographic characteristics and their distribution are presented in Table 1.

Table 1. Frequency of respondents' demographic characteristics and their distribution

		n	%
<b>Gender</b>	Female	152	91%
	Male	12	7%
	Non-binary	2	1%
<b>Generation</b>	Y	82	49%
	Z	84	51%

152 women and 12 men responded to the survey, representing 92% and 7% of respondents, with 2 respondents indicating that their gender was non-binary (1%). By age, 49% of respondents belonged to the Y-generation (n=82) and 51% to the Z-generation (n=84).

The author believes that these results are suitable for describing the average representative of both Z and Y generations, therefore, using the example of this work, general conclusions about generations can be drawn.

## **2.2. The influence of online reviews and personal recommendations on consumer purchase decisions among Generation Y and Z**

To begin with, the author wanted to find out how often consumers of Generations Y and Z in general buy beauty products to understand the general interest in this area. 3% of respondents answered that they purchase beauty products once a year, 17% of respondents – 2-3 times a year, 15% of respondents – once every few months, 31% of respondents – once a month, 26% of respondents – 2-3 times a year. month, 7% of respondents – once a week, and 1% of respondents – 2-3 times a week, respectively (Figure 3).

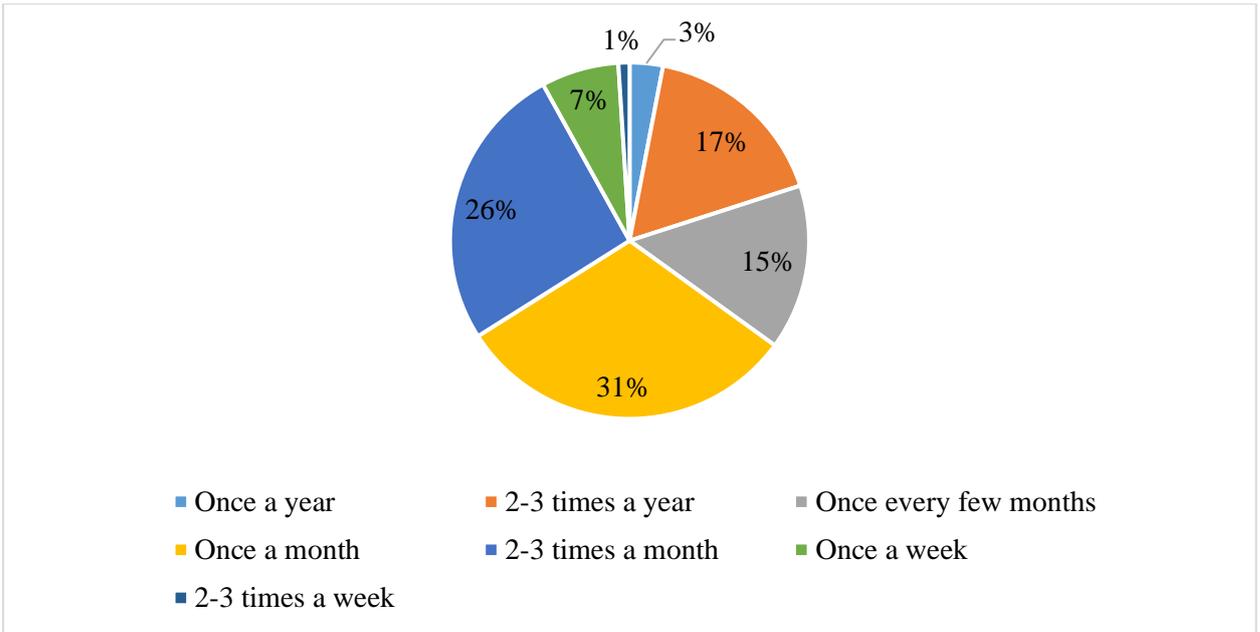


Figure 3. The purchasing frequency of beauty products (skincare, personal care, fragrance, haircare, makeup products) among Generations Y and Z consumers

The author then compares how likely it is that Gen Y and Gen Z consumers overall will make a purchase of beauty products based solely on personal recommendations from friends, family members or acquaintances, and based solely on online reviews. The respondents were asked on a scale from 1-5 (1 – very unlikely, 2 – unlikely, 3 – neutral, 4 – likely, 5 – very likely), how likely are they to purchase a beauty product based only on personal recommendations from one of their friends, family members, acquaintances and based only on online reviews (Table 2). The mean value for personal recommendations is 3.22, while the standard deviation is 1.33. As for online reviews, the mean value is 3.81, while the standard deviation is 1.18.

Table 2. The likelihood of purchasing beauty products solely based on personal recommendations and online reviews

Factor	Mean	Mode	Median	Standard Deviation
Personal recommendations	3.22	4	4	1.33
Online reviews	3.81	4	4	1.18

The respondents were asked on a scale from 1-5 (1 – never, 2 – rarely, 3 – sometimes, 4 – often, 5 – always), how frequently they ask for advice from friends, family members or acquaintances, and how frequently they read online reviews before purchasing a beauty product. As seen in Table 3, the respondents prefer to read online reviews before making a purchase, with a mean value of 4.37 and a standard deviation of 0.95. Seeking advice from friends, family or acquaintances turned out to be the least preferable, showing a mean value of 2.73 and standard deviation of 1.33. Comparing the answers of respondents, the author believes that consumers of Generations Y and Z are not particularly inclined to ask for advice from friends, family members or acquaintances before buying beauty products. In contrast, the respondents are more inclined to always read online reviews before buying a beauty product.

Table 3. Frequency of seeking advice from friends, family members, or acquaintances and reading online reviews before purchasing beauty products

Factor	Mean	Mode	Median	Standard Deviation
Seeking advice	2.73	3	3	1.33
Reading online reviews	4.37	5	5	0.95

Next, the author analyses the responses on a Likert scale. Respondents were asked to indicate on a scale of 1 to 5 the overall importance of personal recommendations and online reviews on their purchasing decisions for beauty products (Figure 4). 41% of respondents answered that online reviews are very important for them, 35% of respondents – somewhat important, 13% of respondents remained neutral, 9% of respondents answered that online reviews are of little importance and 2% answered that online reviews are not at all important to them. When assessing the importance of personal recommendations, 20% of respondents found them very important, 31% found them somewhat important, 20% of respondents remained neutral, 23% of respondents responded that personal recommendations were of little importance and 6% responded that online reviews were not at all important to them. From this analysis, it follows that online reviews are of great importance on the decision to purchase beauty products among a larger number of respondents from generations Y and Z.

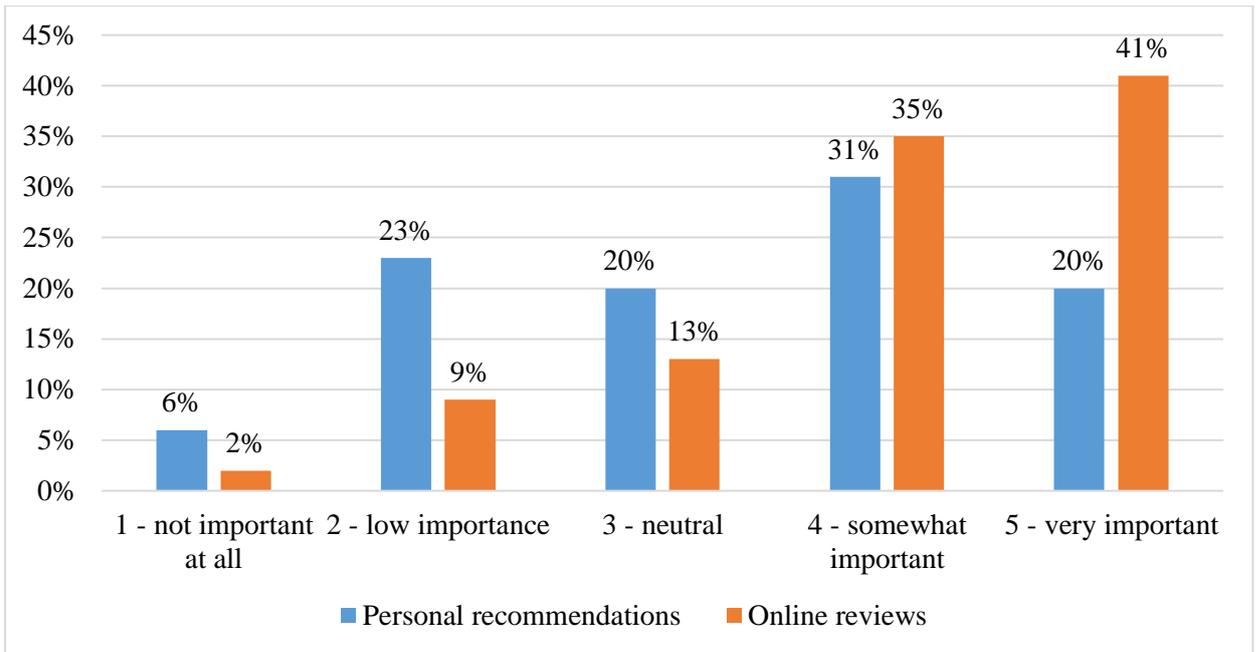


Figure 4. The overall importance of personal recommendations and online reviews on purchasing decisions among Generation Y and Z for beauty products

To measure consumers' inclination toward considering the purchase of new beauty products based on various factors, respondents were asked to rate different factors on a scale ranging from 1 to 5, where 1 indicates “very unlikely”, 2 – “unlikely”, 3 – “neutral”, 4 – “likely”, and 5 – “very likely”. The author has decided to employ descriptive statistics for analysis (Table 4). The data revealed that reviews on online platforms (such as Amazon.com, Sephora.com, Yesstyle.com, Reddit.com, etc.) garnered the highest mean value of 3.91. Following closely behind were personal recommendations from friends and family members, registering a mean value of 3.41. Furthermore, online reviews on social media from friends, family members and acquaintances received a mean value of 3.17. Online reviews on social media from influencers and any online persona received mean values of 3.08 and 3.04 respectively. Personal recommendations from acquaintances received a mean value of 2.95. Based on the presented data, it follows that consumers from Generations Y and Z are most inclined to consider purchasing a new beauty product after reading reviews on online platforms (mean value 3.91) and receiving personal recommendations from friends or family members (mean value 3.41).

Table 4. Descriptive Statistics: the likelihood of considering the purchase of a new beauty product among consumers of Generation Y and Z based on various factors (n=166)

Factor	Generation	Mean	Mode	Median	Standard Deviation
Receiving a recommendation from one of acquaintances	Total	2.95	3	3	0.93
	Y	3.07	3	3	0.86
	Z	2.83	3	3	0.98
Receiving a recommendation from one of friends or family members	Total	3.41	3	3	0.98
	Y	3.5	3	3	0.92
	Z	3.32	3	3	1.03
Seeing an online review on social media by one of friends, family members or acquaintances	Total	3.17	3	3	0.96
	Y	3.24	3	3	0.92
	Z	3.11	3	3	0.99
Seeing an online review on social media from an influencer	Total	3.08	3	3	1.12
	Y	2.95	3	3	1.21
	Z	3.21	4	3	1.03
Seeing an online review on social media from any online persona	Total	3.04	3	3	1.07
	Y	2.84	3	3	1.09
	Z	3.23	4	3	1.01
Reading online reviews on various platforms such as online stores and product comparison websites	Total	3.91	4	4	1.04
	Y	3.8	4	4	1.16
	Z	4.01	4	4	0.9

Assessing the various factors influencing the purchasing decision, the most influential factor was online reviews on various platforms (online stores and product comparison websites) with a mean value of 3.75. Following next, personal recommendations from friends and family members got a mean value of 3.29. Online reviews on social media from friends, family or acquaintances and any online persona showed mean values of 3.07 and 3.02 respectively. The least influential became online reviews on social media from any online persona and personal recommendations from acquaintances – with mean values of 2.98 and 2.79 respectively (Table 5).

Table 5. Descriptive Statistics: the influence of personal recommendations and online reviews on consumers of Generation Y and Z's decision to purchase beauty products (n=166)

Factor	Generation	Mean	Mode	Median	Standard Deviation
Personal recommendations from acquaintances	Total	2.79	3	3	1.04
	Y	2.76	3	3	0.86
	Z	2.82	3	3	1.04
Personal recommendations from friends or family members	Total	3.29	3	3	1.06
	Y	3.32	3	3	0.92
	Z	3.26	3	3	1.07
Online reviews on social media from influencers	Total	2.98	3	3	1.31
	Y	2.74	3	3	0.92
	Z	3.21	4	3	1.02
	Total	3.07	3	3	1.03

Online reviews on social media from friends, family or acquaintances	Y	3.09	3	3	1.21
	Z	3.06	3	3	1.02
Online reviews on social media from any online persona	Total	3.02	3	3	1.17
	Y	2.73	3	3	1.09
	Z	3.3	3	3	1.04
Online reviews of products on various platforms such as online stores and product comparison websites	Total	3.75	4	4	1.19
	Y	3.62	5	4	1.1
	Z	3.87	4	4	1.08

Figure 5 shows the various factors that influence the decision of Generation Y and Generation Z consumers to purchase beauty products. Respondents were given multiple-choice answers. From most to least influential, the following factors were reviews on various online platforms (73%), personal recommendations from friends and family members (40%), online reviews on social networks from influencers (28%), online reviews on social networks from any online persons (23%), online reviews on social networks from friends, family members or acquaintances (19%), personal recommendations from acquaintances (15%).

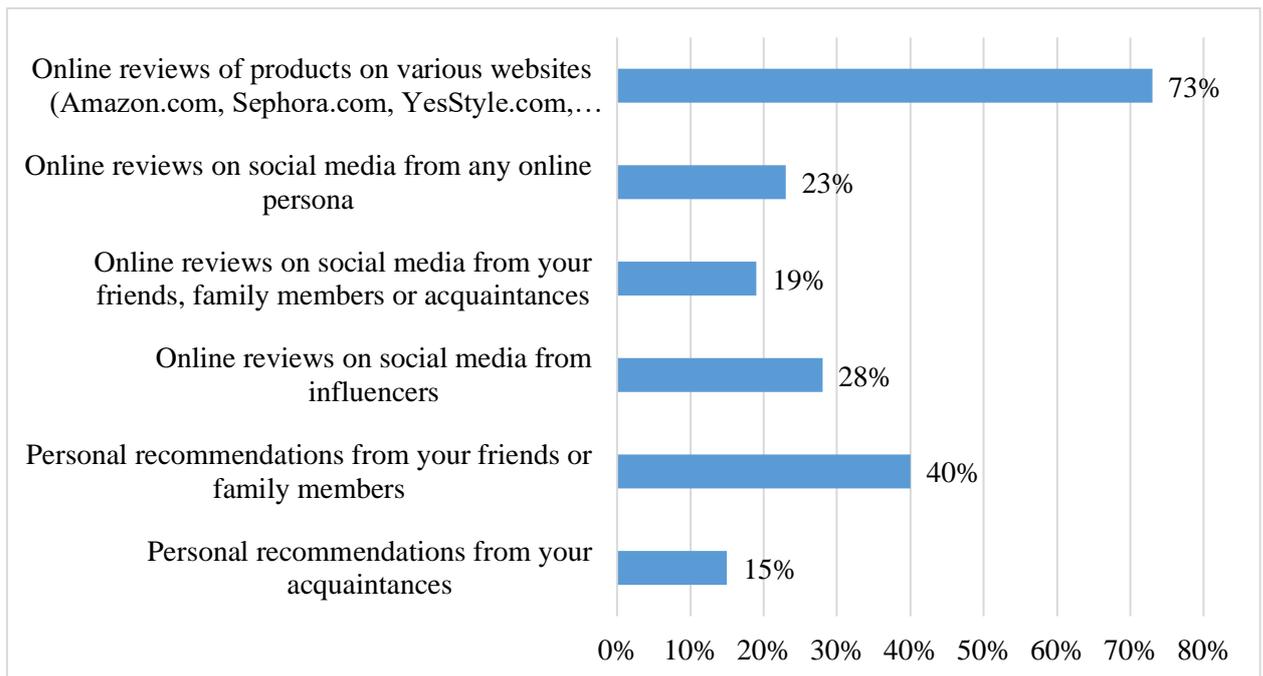


Figure 5. Factors that have the biggest influence on consumers of Generation Y and Z decisions when buying beauty products (multiple choice)

The author also wanted to find out to what extent Gen Y and Z consumers trust the following factors when making decisions about purchasing beauty products. Figure 6 shows that from most

to least trustworthy were the following factors: reviews on various online platforms (64%), personal recommendations from friends and family members (51%), online reviews on social media from friends, family members or acquaintances (34%), personal recommendations from acquaintances (31%), online reviews on social media from influencers (28%), online reviews on social media from any online persona (27%). These figures include respondents' answers "very much" and "completely".

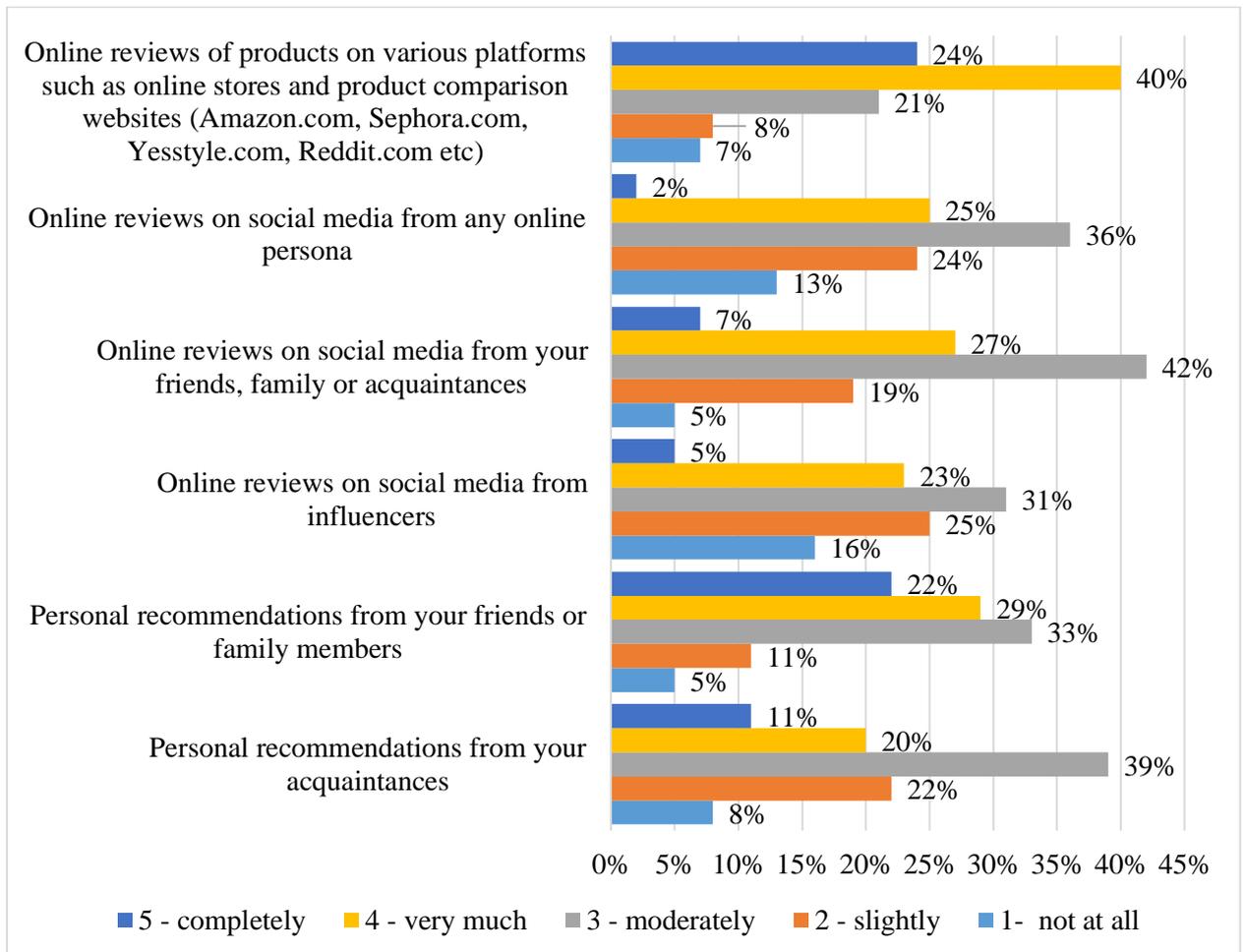


Figure 6. The trust levels of Generation Y and Z consumers in various factors influencing their beauty product purchasing decisions

Furthermore, the author wanted to find out how likely consumers of generations Y and Z would purchase a beauty product after receiving a negative personal recommendation from friends, family members or acquaintances and after seeing negative online reviews. As shown in Table 6, the consumer behaviour of Generation Y and Z respondents is more likely to be influenced by negative online reviews, which brings a mean value of 1.99 and a standard deviation of 0.98. As for negative personal recommendations, the mean value is 2.24 and the standard deviation is 1.01.

The data shown in Table 6 suggests that overall consumers of generations Y and Z are very unlikely to purchase beauty products after receiving negative personal recommendations, as well as after seeing negative online reviews.

Table 6. The likelihood of purchasing beauty products after receiving negative personal recommendations and seeing negative online reviews

Factor	Mean	Mode	Median	Standard Deviation
Negative personal recommendations	2.24	2	2	1.01
Negative online reviews	1.99	2	2	0.98

The author aimed to understand the willingness of Generation Y and Z consumers to share product information, including personal recommendations and online reviews. This exploration extended to cases where consumers were both satisfied and unsatisfied with their beauty product purchases. In Table 7, respondents demonstrated a higher tendency to share personal recommendations with friends, family members or acquaintances when satisfied with their beauty product purchase (mean value of 4.27), as well as sharing personal recommendations when unsatisfied with their purchase (mean value of 4.05). Respondents were least inclined to share online reviews in both cases of satisfaction (mean value of 3.05) and dissatisfaction (mean value of 3.00) with their beauty products purchases.

Table 7. The willingness of Generation Y and Z consumers to share personal recommendations and online reviews if they're satisfied or unsatisfied with beauty products purchased

Factor	Mean	Mode	Median	Standard Deviation
Personal recommendations (satisfaction)	4.27	4	4	0.73
Online reviews (satisfaction)	3.05	2	2	1.19
Personal recommendations (unsatisfaction)	4.05	4	4	0.85

Online reviews (unsatisfaction)	3.00	2	4	1.21
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To receive a better understanding of consumer behaviour regarding online reviews, the author aimed to identify the preferred platforms for accessing online reviews (Figure 7). Among respondents, the most to least used platforms were: Amazon (64%), Instagram (50%), YouTube (49%), Sephora (39%), TikTok (32%), YesStyle (29%), Reddit (28%), Facebook (19%), and Other (13%).

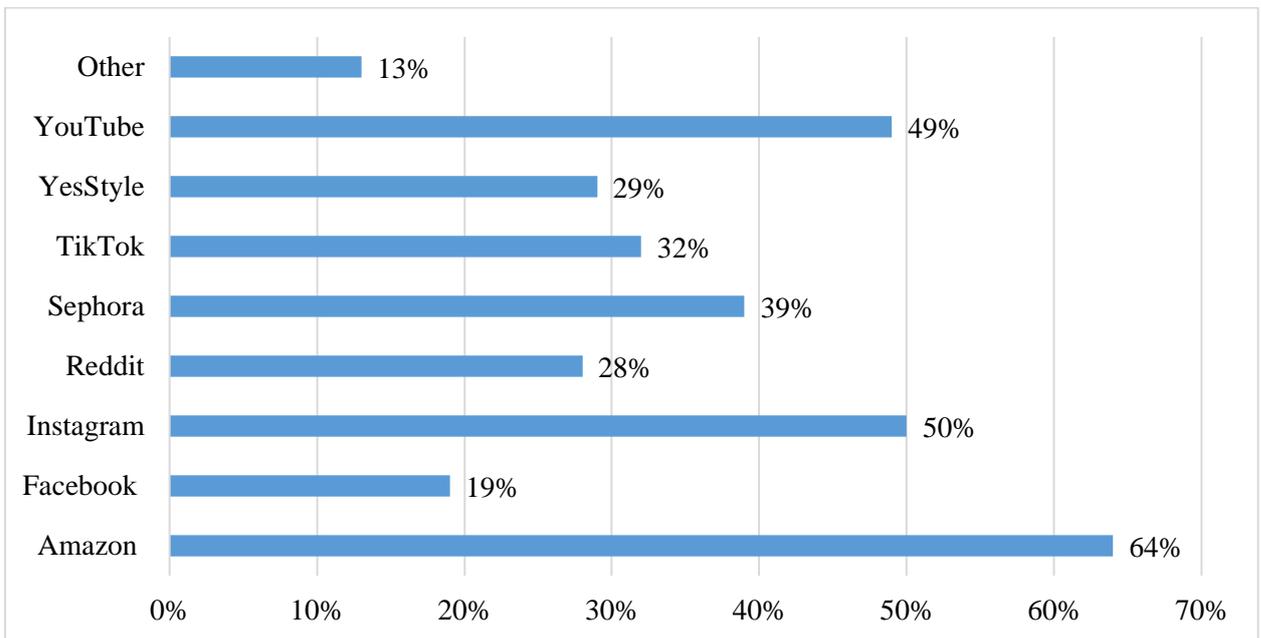


Figure 7. Generation Y and Z consumers' preferred platforms for accessing online reviews of beauty products

This concludes the analysis of the research findings on the influence of online reviews and personal recommendations on consumer purchase decisions. Next, the author moves to a comparative examination of Generations Y and Z.

### 2.3. Comparison analysis of Generation Y and Z

In this part, the author compares how Generation Y and Generation Z consumers differ in their reliance on online reviews and personal recommendations when buying beauty products. In total, 82 participants from Generation Y and 84 participants from Generation Z took part in the survey.

To analyse generational differences, the author selected questions 8-14 (Appendix 1). The author has decided to employ descriptive statistics to receive a better understanding and analyse variations in respondents' responses.

Results displayed in Table 8 show the frequency of Gen Y and Z consumers seeking advice from their friends, family members or acquaintances, and the frequency of reading online reviews before purchasing a beauty product. Generation Y respondents were more inclined to seek advice before purchasing a beauty product, presenting a mean value of 3.28 and a standard deviation of 1.35. In comparison to Generation Y, Generation Z respondents were slightly less inclined to seek advice before purchasing a beauty product, presenting a mean value of 3.17 and a standard deviation of 1.32. Conversely, Generation Z respondents were found to be more inclined to read online reviews before purchasing a beauty product, presenting a mean value of 4.06 and a standard deviation of 1.01. In comparison to Generation Z, Generation Y respondents were found to be slightly less inclined to read online reviews before making a beauty product purchase, presenting a mean value of 3.56 and a standard deviation of 1.35.

Table 8. Frequency of seeking advice from friends, family members, or acquaintances and reading online reviews before purchasing beauty products, comparison between generations (n=166)

Factor	Generation	Mean	Mode	Median	Standard Deviation
Seeking advice	Y	3.28	4	4	1.35
	Z	3.17	4	4	1.32
Reading online reviews	Y	3.56	4	4	1.29
	Z	4.06	4	4	1.01

Respondents were asked to rate on a scale of 1 to 5 how important personal recommendations and online reviews are to them overall when making decisions about purchasing beauty products (Figure 10). Among Gen Z, online reviews have a mean value of 4.20, while among Gen Y, online reviews have a mean value of 3.90. Regarding personal recommendations, among Generation Z, have a mean value of 3.29, and the mean value among Generation Y was 3.43. Based on these results, the author believes that Gen Z consumers find online reviews more important when making

purchasing decisions. While overall, Gen Y consumers find online reviews more important when making purchasing decisions, when comparing mean value for personal recommendations, Gen Y consumers find personal recommendations slightly more important than Gen Z consumers.

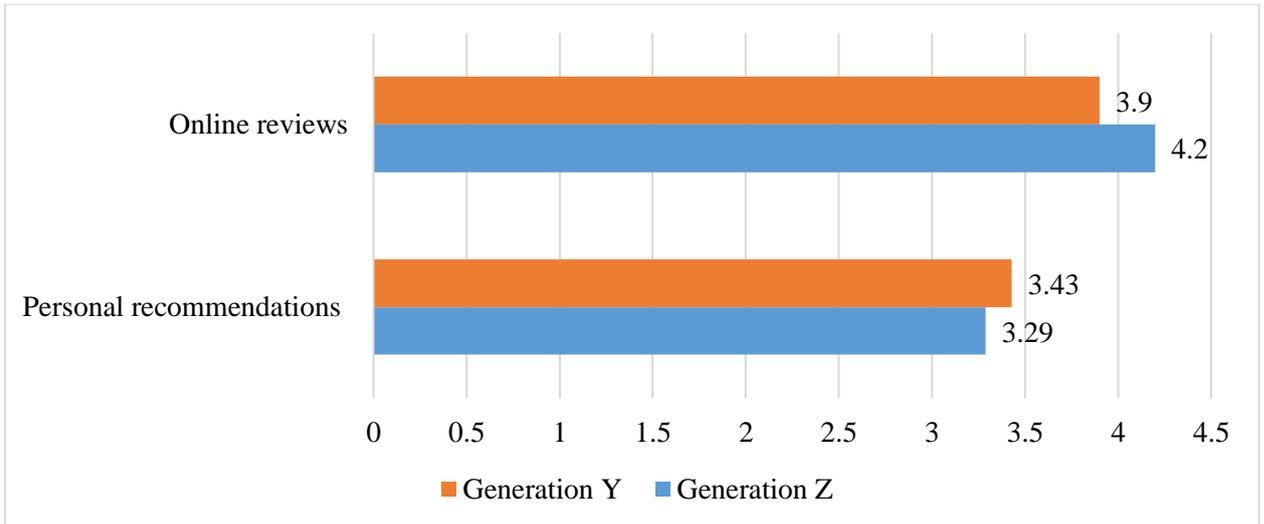


Figure 10. The overall importance of personal recommendations and online reviews on purchasing decisions for beauty products in generations (n=166)

Based on Figure 11, Generation Y respondents are more likely than Generation Z respondents to consider a purchase after receiving a personal recommendation for a beauty product from friends or family members (mean value 3.50 vs. 3.32) and after seeing online reviews from their friends, family or acquaintances (mean value 3.24 vs 3.11) and after receiving personal recommendations from friends (mean value 3.07 vs. 2.83). Generation Z respondents are most likely to consider a purchase after reading reviews on online platforms (mean value 4.01 vs. 3.8), after seeing an online review from any online person on social media (mean value 3.23 vs. 2.28), and after seeing an online review from a social media influencer (mean value 3.21 vs. 2.95). By analysing the data and comparing the responses of the two generations, the author concluded that Generation Z respondents would be more likely to consider purchasing a new beauty product after seeing online reviews than Generation Y respondents, while Generation Y respondents would be more likely to consider purchasing new beauty product after receiving a personal recommendation than Gen Z respondents.

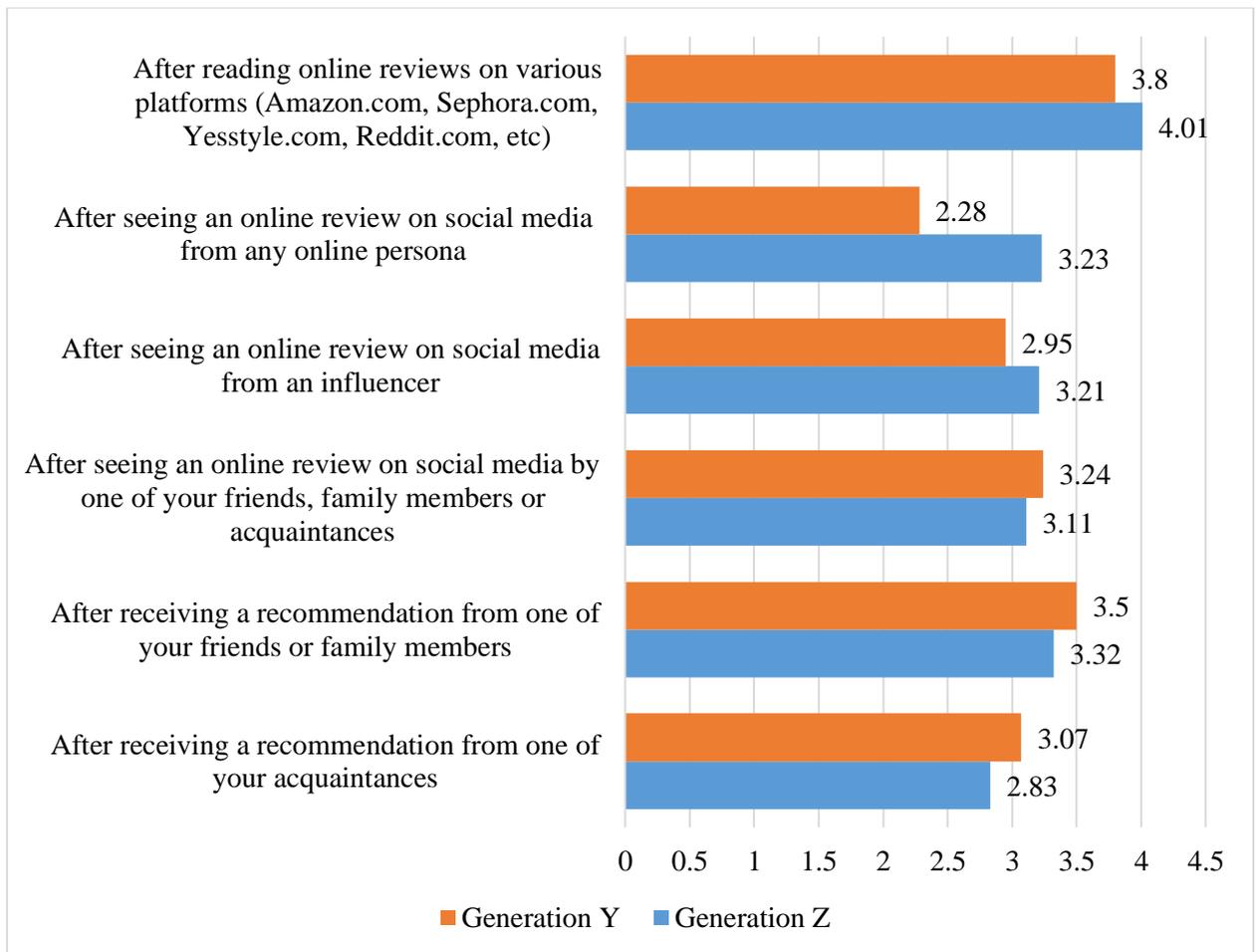


Figure 11. The likelihood of considering the purchase of a new beauty product among consumers of Generations Y and Z based on various factors, comparison between generations (n=166)

Figure 12 displays the mean value of the assessment of the influence of factors on the purchasing decision among generations Y and Z. Comparing generations Y and Z, among respondents of generation Y the following factors were most preferred: personal recommendations from friends or family members (mean value 3.32 vs. 3.26), and online reviews from friends, family members or acquaintances (mean value 3.09 vs. 3.06). Comparing the answers of Generations Y and Z, among Generation Z respondents the following factors were most preferred: reviews on online platforms (mean value 3.87 vs. 3.62), online reviews on social networks from any online person (mean value 3.30 vs. 2.73), online reviews from influencers on social networks (mean value 3.21 vs. 2.74), as well as personal recommendations from friends (mean value 2.86 vs. 2.76).

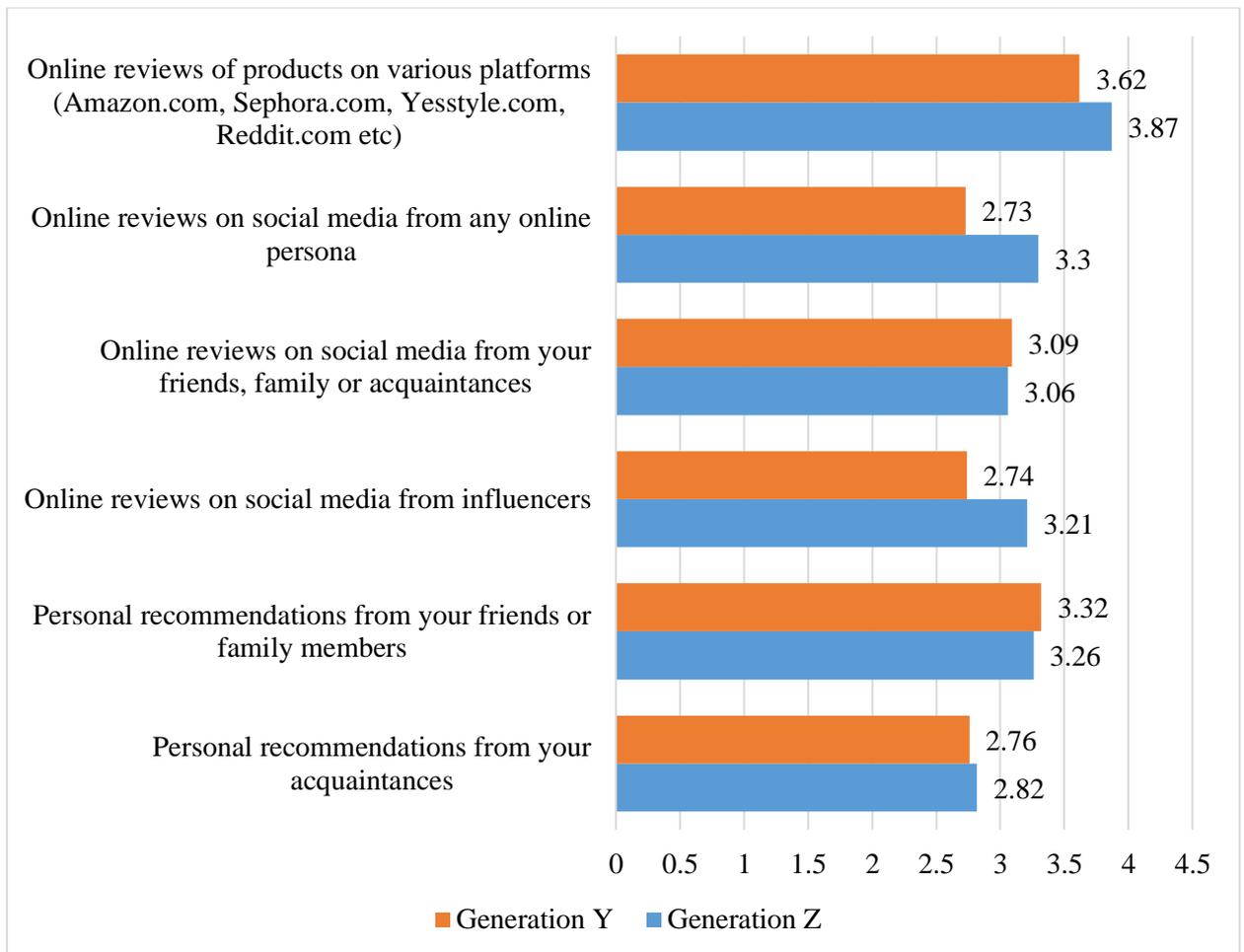


Figure 12. The influence of personal recommendations and online reviews on consumers of Generation Y and Z's decision to purchase beauty products, comparison between generations (n=166)

Figure 13 shows the total number of responses regarding various factors that influence the decision of Generation Y and Z consumers to purchase beauty products. Respondents were given a choice of several answer options. Comparing the responses of Generation Y and Generation Z respondents, Generation Y respondents gave more preference than Generation Z respondents to personal recommendations from friends and family members (49% of Generation Y respondents) as well as online reviews from friends, family members and acquaintances (20% of Generation Y respondents). Generation Z respondents gave more preference than Generation Y respondents to reviews on various online platforms (77% of Generation Z respondents), and online reviews on social media from any online persona (27% of Generation Z respondents).

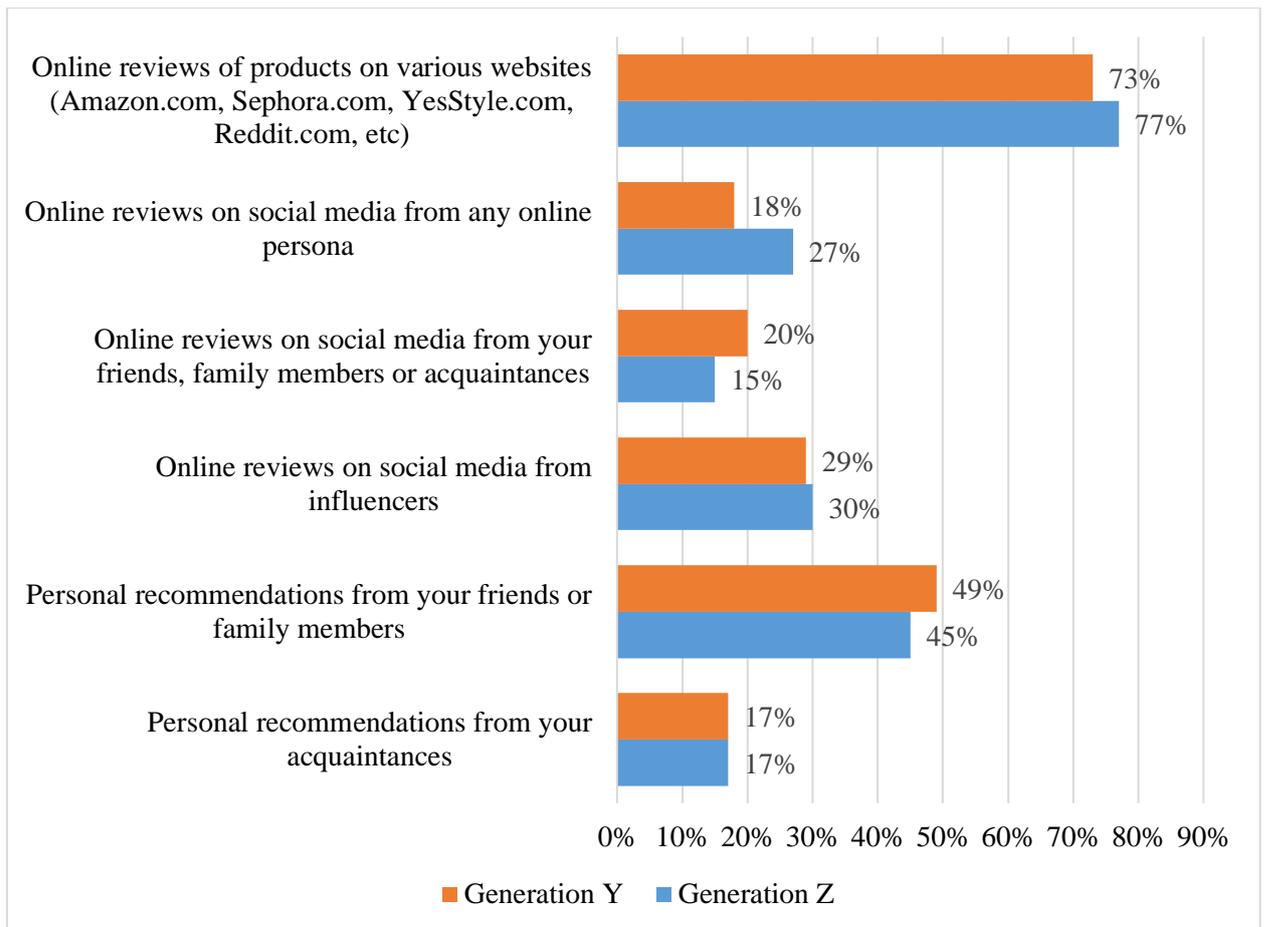


Figure 13. Factors that have the biggest influence on consumers of Generation Y and Z's decision when buying beauty products (multiple choice), comparison between generations (n=166)

The final analysis compares the degree to which Gen Y and Gen Z consumers trust various factors when making decisions about purchasing beauty products. Figure 14 displays the mean value when assessing factors from 1 to 5. Comparing the answers of respondents of generations Y and Z, it was revealed that respondents of Generation Y are more likely than respondents of Generation Z to trust personal recommendations from friends and family members (mean value 3.60 vs. 3.46), recommendations from acquaintances (mean value 3.17 vs. 2.92), as well as online reviews from friends, family members and acquaintances (mean value 3.18 vs. 3.06). Continuing with the comparison of the responses of consumers of Generations Y and Z, it was found that respondents of Generation Z are more likely than respondents of Generation Y to trust reviews on online platforms (mean value 3.79 vs. 3.51), online reviews on social networks from any online persona (mean value 3.02 vs. 2.55), online reviews from influencers on social networks (mean value 2.90 vs. 2.59).

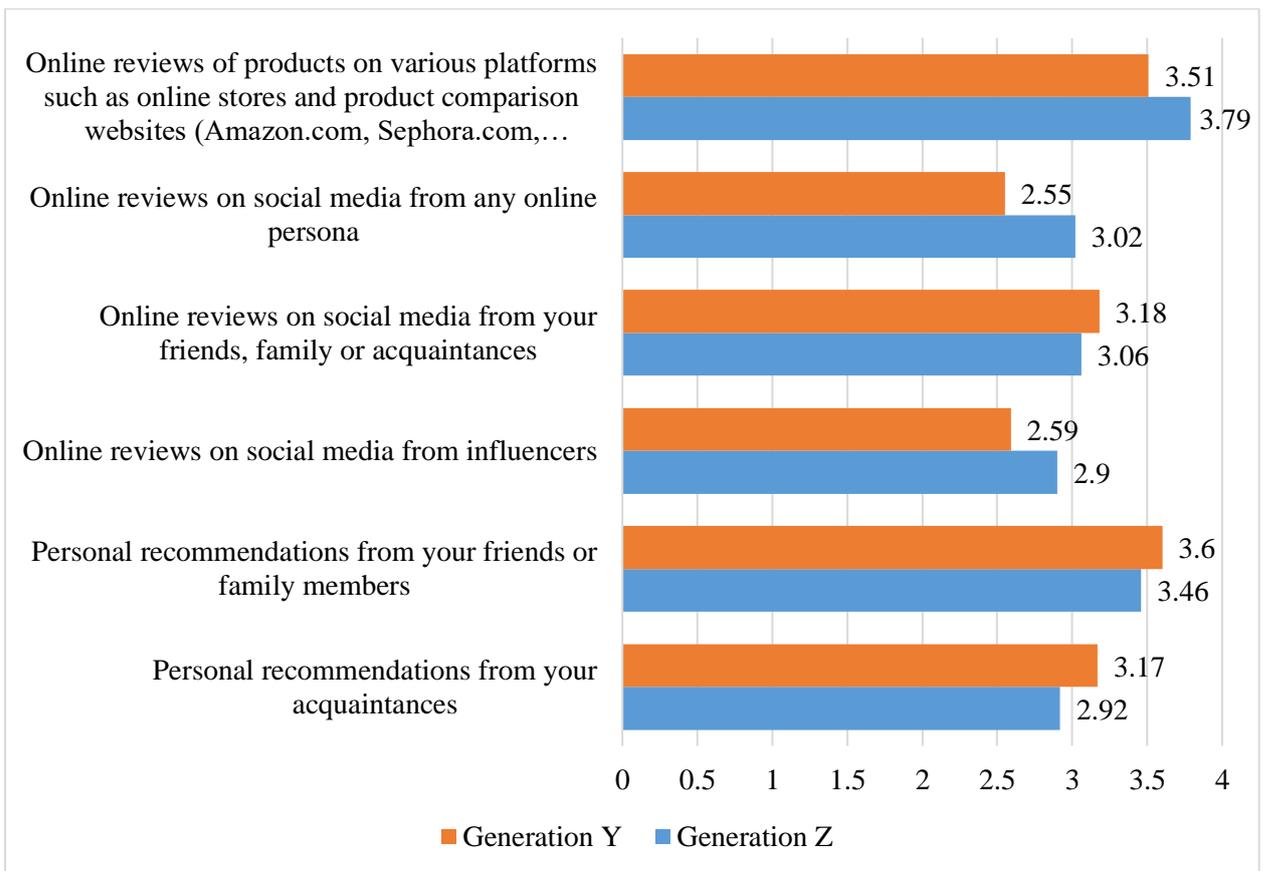


Figure 14. The trust levels of Generation Y and Z consumers in various factors influencing their beauty product purchasing decisions, comparison between generations (n=166)

Next, the author proceeds to sum up the results and provide conclusions based on the analysis of the obtained data.

## 2.4. Conclusions and suggestions

In the following part, the author highlights the most important findings of the study, as well as suggestions for businesses and marketers. The purpose of the study was to compare the impact of online reviews and personal recommendations on consumer purchasing decisions within Generation Y and Generation Z on the example of buying beauty products. To reach the purpose, answers to the research questions posed will be provided:

1. How does the influence of online reviews compare to personal recommendations on consumer purchase decisions among Generation Y and Generation Z in the beauty products market?

The results of this study revealed a clear inclination among respondents towards relying on online reviews when making purchasing decisions for beauty products. Notably, a substantial proportion of respondents expressed a high likelihood of making a purchase based solely on online reviews rather than personal recommendations. Additionally, the study revealed a notable tendency: a significant proportion of consumers consistently prioritize reading online reviews over seeking advice from their immediate social circle before making a purchase decision. Additional significant insight is that while online reviews hold a greater influence on consumers' purchasing decisions, in cases of receiving a negative personal recommendation or facing negative online reviews, consumers are unlikely to proceed with a purchase thereafter. Among online reviews, the ones shared on various online platforms such as Amazon, Sephora, and YesStyle were found as the most influential. The spread of online reviews across diverse digital platforms provides access to product information and empowers consumers to make informed choices. The observed preference for online reviews marks a fundamental shift in consumer behaviour, with traditional advertising and marketing methods increasingly being replaced by digital interactions.

2. How do Generation Y and Generation Z consumers differ in their reliance on online reviews and personal recommendations when buying beauty products?

The results of this study revealed that Generation Z consumers demonstrate a higher propensity to seek advice from their social circles before purchasing beauty products, as evidenced by their greater frequency of seeking advice from friends, family members, or acquaintances compared to Generation Y consumers. Both generations showed a strong inclination towards reading online reviews before buying beauty products. Moreover, when considering factors influencing their purchasing decisions, comparing both Generations, Generation Z consumers place greater emphasis on online reviews from various platforms, online reviews from influencers and any online persona on social networks, whereas Generation Y consumers prioritize personal recommendations from their friends, family and acquaintances, and also online reviews from friends, family, and acquaintances. Additionally, the survey findings suggest that in terms of trust, Generation Y consumers show greater trust in personal recommendations from their social circles, while Generation Z consumers place more trust in online reviews, particularly those from online platforms and influencers on social media. Moreover, Generation Y is more inclined to make a purchase based on personal recommendations from trusted sources, whereas Generation Z tends

to be more influenced by online reviews before making a buying decision. To sum up, while both Generation Y and Generation Z consumers value online reviews and personal recommendations in their beauty product purchasing decisions, their preferences and reliance differ, with Generation Z showing a stronger inclination towards online reviews and Generation Y placing slightly more trust in personal recommendations from their social circles.

The author then provides conclusions from the research and suggestions for the marketers.

### **New findings from the study**

The study reveals several new insights that contribute to the existing literature on the consumer behaviour of Generations Y and Z in the context of purchasing beauty products:

- Preference for online reviews over personal recommendations

The research results indicate a significant preference for online reviews over personal recommendations among both generations when purchasing beauty products. This behaviour highlights the growing influence of digital interactions and platforms in shaping consumer decisions, suggesting a shift from traditional word-of-mouth marketing to the distribution of information online.

- The influence of negative reviews and recommendations on purchasing decisions

The results show that both negative personal recommendations and negative online reviews significantly keep consumers from making a purchase. This highlights the critical role of online presence and brand reputation management for marketers.

- Tendency to share personal recommendations

Despite the greater influence of online reviews on purchasing decisions, consumers are more likely to share personal recommendations with friends, family members or acquaintances, regardless of their satisfaction with the product. This behaviour highlights a discrepancy: although the digital environment is evolving and online reviews are becoming increasingly important, many consumers remain reluctant to post their own reviews online.

- Generational differences in levels of trust

The study found subtle differences in trust levels between generations, with Gen Y showing slightly higher trust in personal recommendations and Gen Z showing more trust in online reviews. This insight highlights the importance of understanding generational differences in consumer behaviour and adapting marketing strategies.

## **Differences and similarities in consumer behaviour among Generation Y and Z**

The study reveals several similarities and differences in consumer behaviour among Generations Y and Z in the context of purchasing beauty products:

- Trust in online reviews

Both Gen Y and Gen Z consumers demonstrate a strong tendency to read online reviews before making a purchasing decision. This points to a general reliance on digital platforms to gather product information and make informed choices.

- Preference for review platforms and personal recommendations by trusted sources

Both generations prioritize reviews on various online platforms such as Amazon.com, Reddit.com and Sephora.com, as well as personal recommendations from trusted sources such as friends and family members.

- Tendency to seek advice

Gen Z consumers demonstrate a higher propensity to seek advice from their social circles before making purchasing decisions. This is reflected in the fact that they are more likely to seek advice from friends, family members or acquaintances compared to Generation Y consumers.

- Impact of social media reviews

Generation Y consumers are least influenced by reviews from influencers and other online persona on social media. In contrast, Gen Z consumers find these sources more influential in their decision-making process.

- Differences in trust levels

While both generations value online reviews and personal recommendations when making beauty product purchasing decisions, their preferences and levels of trust differ. Generation Z shows a stronger trust towards online reviews, while Generation Y is slightly more trusting of personal recommendations from trusted sources. Additionally, Generation Y is more inclined to make a purchase based on personal recommendations from trusted sources, whereas Generation Z tends to be more influenced by online reviews before making a buying decision.

## **Recommendations for marketers**

Based on the study's findings, there are several key recommendations that could be considered by marketers seeking to reach Generation Y and Generation Z consumers in the beauty market:

- Prioritising online presence

Brands should increase their online visibility as online reviews have a significant impact on purchasing decisions for both generations.

- Collaboration with influencers

Engaging with influencers and encouraging user-generated content can increase brand awareness and authority on digital platforms. This helps establish trust and engagement with Gen Y and Z consumers.

- Communication strategies

Marketers need to adapt their messaging and communication strategies to meet the unique preferences of each generation. As study results suggest, Generation Y needs to emphasise trusted sources and genuine connections to ensure a more effective response. For Generation Z it is important to focus on creating visually appealing and socially relevant content to capture their attention better.

By understanding and using these insights from the study about consumer behaviour in Generation Y and Z consumers, marketers could develop more targeted and effective strategies. The author believes that this approach aims to increase engagement among Gen Y and Z consumers in the beauty market.

## **SUMMARY**

The thesis explores the theoretical fundamentals of consumer behavior of Generations Y and Z on the example of buying beauty products, highlighting their distinctive characteristics, communication habits and social influence. In today's dynamic marketplace, understanding the preferences and decision-making patterns of these cohorts is critical for businesses and marketers seeking to maintain relevance and competitiveness, as well as connect with their core audiences. It also examines the consumer decision-making process, using Kotler's five-stage consumer decision-making model as a framework for analysis. Additionally, the study examines the impact of online reviews and personal recommendations on consumer purchasing behaviour, highlighting their importance in shaping consumer preferences and purchasing decisions, and also provides insights from existing literature on word of mouth (WOM) and electronic word of mouth (eWOM).

The purpose of the research was to assess and compare the impact of online reviews and personal recommendations on consumer purchase decisions within Generation Y and Generation Z on the example of buying beauty products. Through this evaluation, the study aims to identify which source holds a greater impact on influencing the purchasing choices of these generations, providing valuable insights into consumer preferences and decision-making patterns in the context of beauty product purchases. In pursuit of the purpose, two research questions were posed:

1. How does the influence of online reviews compare to personal recommendations on consumer purchase decisions among Generation Y and Generation Z in the beauty products market?
2. How do Generation Y and Generation Z consumers differ in their reliance on online reviews and personal recommendations when buying beauty products?

To achieve the purpose of the study, a quantitative study was conducted. Using an online questionnaire distributed on social networks, the study collected data from 166 respondents of Generations Y and Z. In total, 82 participants from Generation Y and 84 participants from Generation Z took part in the survey.

According to the study's findings, the author compares the impact of online reviews and personal recommendations on consumer purchasing decisions within Generation Y and Generation Z on the example of buying beauty products. The findings highlight a clear preference among respondents for online reviews over personal recommendations when making beauty product purchases. Interestingly, consumers are more likely to trust online reviews from various platforms like Amazon and Sephora, indicating a shift in consumer behaviour towards digital interactions. Generation Z consumers tend to seek advice from their social circles more frequently than Generation Y consumers, although both generations value online reviews in general. However, there are differences in their reliance and trust levels, with Generation Y placing slightly more trust in personal recommendations, while Generation Z leans towards online reviews. Additionally, Generation Y is more inclined to make a purchase based on personal recommendations from trusted sources, whereas Generation Z tends to be more influenced by online reviews before making a buying decision. These findings effectively address the research questions and indicate that the purpose of the study was successfully achieved.

For beauty brands, crafting tailored marketing strategies that leverage online platforms and influencers helps to engage with Generations Y and Z effectively. In conclusion, this thesis highlights the influential role of online reviews, digital platforms, and generational dynamics in shaping consumer behaviour in the beauty product market. By understanding and adapting to these trends, businesses can improve their marketing strategies and develop stronger connections with their target audience, achieving sustainable growth in today's competitive market.

## KOKKUVÕTE

Töös uuritakse põlvkondade Y ja Z tarbijakäitumise teoreetilisi aluseid ilutoodete ostmise näitel, tuues välja nende eripärad, suhtlemisharjumused ja sotsiaalne mõju. Tänapäeva dünaamilisel turul nende kohortide eelistuste ja otsustusmodelite mõistmine on oluline ettevõtete ja turundajate jaoks, kes soovivad säilitada asjakohasust ja konkurentsivõimet ning ühendada oma põhipublikuga. Samuti uuritakse tarbija otsustusprotsessi, kasutades analüüsi raamistikuna Kotleri viieastmelist tarbija otsustusmodelit. Lisaks uuritakse veebiülevaadete ja isiklike soovitude mõju tarbijate ostukäitumisele, rõhutades nende tähtsust tarbijate eelistuste ja ostuotsuste kujundamisel, samuti antakse ülevaade olemasolevast kirjandusest suusõna (WOM) ja elektroonilise suusõna (eWOM) kohta.

Uurimistöö eesmärk oli hinnata ja võrrelda veebiarvustuste ja isiklike soovitude mõju tarbijate ostuotsustele Y- ja Z-põlvkonnas ilutoodete ostmise näitel. Selle hindamise eesmärk on välja selgitada, milline allikas avaldab suuremat mõju nende põlvkondade ostuvalikute mõjutamisele, pakkudes väärtuslikke teadmisi tarbijate eelistustest ja otsustusmuutritest ilutoodete ostude kontekstis. Eesmärgi saavutamiseks esitati kaks uurimisküsimust:

1. Kuidas on võrreldav veebiarvustuste mõju isiklike soovitudega tarbijate ostuotsuste tegemisel Y-põlvkonna ja Z-põlvkonna seas ilutoodete turul?
2. Kuidas eristuvad Y- ja Z-põlvkonna tarbijad ilutoodete ostmisel toetudes veebiarvustustele ja/või isiklikele soovitudele?

Uuringu eesmärgi saavutamiseks viidi läbi kvantitatiivne uuring. Sotsiaalmeedias levitatava veebiküsitluse abil koguti 166 Y- ja Z-põlvkonna vastajate andmed. Kokku osales uuringus 82 osalejat Y-põlvkonnast ja 84 osalejat Z-põlvkonnast. Uuringu tulemuste põhjal võrdleb autor veebiarvustuste ja isiklike soovitude mõju Y- ja Z-põlvkonna tarbijate ostuotsustele ilutoodete ostmise näitel.

Tulemused rõhutavad vastajate selget eelistust veebiarvustuste osas isiklikele soovitudele ilutoodete ostude tegemisel. On huvitav, et tarbijad usaldavad suurema tõenäosusega veebipõhiseid arvustusi erinevatelt platvormidelt nagu Amazon ja Sephora, mis viitab

tarbijakäitumise muutumisele digitaalsete interaktsioonide suunas. Z-põlvkonna tarbijad küsivad oma suhtlusringkondadelt nõu sagedamini kui Y-põlvkonna tarbijad, kuigi üldiselt mõlemad põlvkonnad hindavad veebiarvustusi. Siiski on erinevused nende sõltuvus ja usaldus tasemetes, kuna Y-põlvkond usaldab veidi rohkem isiklike soovitusi, samas kui Z-põlvkond kaldub veebiülevaadete poole. Lisaks on Y-põlvkond rohkem valmis ostma usaldusväärsete allikate isiklike soovitusete põhjal, samas kui Z-põlvkonda kipuvad enne ostuotsuse tegemist mõjutama veebiülevaadet. Need leiud käsitlevad tõhusalt uurimisküsimusi ja näitavad, et uuringu eesmärk saavutati edukalt.

Ilubrändide jaoks aitab kohandatud turundusstrateegiate koostamine, mis võimendavad veebiplatvorme ja mõjutajaid tõhusalt suhelda Generations Y ja Z-ga. Kokkuvõtteks toob käesolev töö välja veebiarvustuste, digitaalsete platvormide ja põlvkondade dünaamika mõjuka rolli tarbijakäitumise kujundamisele ilutoodete turul. Mõistes ja kohandades neid suundumusi, saavad ettevõtted parandada oma turundusstrateegiaid ja arendada tugevamaid sidemeid oma sihtrühmaga, saavutades jätkusuutliku kasvu tänapäeva konkurentsivõimelisel turul.

## REFERENCES

- Anderson, E. W. (1998). Customer Satisfaction and Word of Mouth. *Journal of Service Research*, 1(1), 5–17. DOI: 10.1177/109467059800100102
- Arndt, J. (1967). Role of Product-Related Conversations in the Diffusion of a New Product. *Journal of Marketing Research*, 4(3), 291. DOI: 10.2307/3149462
- Balter, D., & Butman, J. (2005). *Grapevine: The new art of word-of-mouth marketing*. New York: Portfolio.
- Bolton, R. N., Parasuraman, A., Hoefnagels, A., Migchels, N., Kabadayi, S., Gruber, T., Komarova Loureiro, Y., & Solnet, D. (2013). Understanding Generation Y and their use of social media: a review and research agenda. *Journal of Service Management*, 24(3), 245–267. DOI: 10.1108/09564231311326987
- Bughin, J., Doogan, J., & Vetvik, O. J. (2010). A new way to measure word-of-mouth marketing. *McKinsey Quarterly*, 2(1), 113-116. Available online: <https://yuswohady.com/wp-content/uploads/2010/11/Measuring-WOM-Marketing-McKinsey-Quarterly.pdf>, 05.03.2024
- Chevalier, J. A., & Mayzlin, D. (2006). The Effect of Word of Mouth on Sales: Online Book Reviews. *Journal of Marketing Research*, 43(3), 345–354. DOI: 10.1509/jmkr.43.3.345
- Dash, G., Kiefer, K., & Paul, J. (2021). Marketing-to-Millennials: Marketing 4.0, customer satisfaction and purchase intention. *Journal of Business Research*, 122, 608–620. DOI: 10.1016/j.jbusres.2020.10.016
- Dellarocas, C. (2003). The Digitization of Word of Mouth: Promise and Challenges of Online Feedback Mechanisms. *Management Science*, 49(10), 1407–1424. DOI: 10.1287/mnsc.49.10.1407.17308
- Digital Democracy Survey. (2015). Deloitte. Available online: [https://www2.deloitte.com/content/dam/Deloitte/se/Documents/technology-media-telecommunications/Digital-Democracy-Survey-DDS\\_Executive\\_Summary\\_Report\\_Final\\_2015-04-20-tmt.pdf](https://www2.deloitte.com/content/dam/Deloitte/se/Documents/technology-media-telecommunications/Digital-Democracy-Survey-DDS_Executive_Summary_Report_Final_2015-04-20-tmt.pdf), 26.02.2024.
- Dimock, M. (2019). Defining generations: Where Millennials end and Generation Z begins. Pew Research Center, 17(1), 1-7. Available online: <http://tony-silva.com/eslefl/miscstudent/downloadpagearticles/defgenerations-pew.pdf>, 19.02.2024.
- Dorsey, J. R., & Villa, D. (2020). *Zconomy: How Gen Z Will Change the Future of Business—and what to do about it*. HarperBusiness.

- Ennew, C. T., Banerjee, A. K., & Li, D. (2000). Managing word of mouth communication: empirical evidence from India. *International Journal of Bank Marketing*, 18(2), 75–83. DOI: 10.1108/02652320010322985
- Francis, T., & Hoefel, F. (2018). ‘True Gen’: Generation Z and Its Implications for Companies. McKinsey&Company. Available online: <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/true-generation-z-and-its-implications-for-companies>, 26.02.2024
- Fromm, J., & Garton, C. (2013). Marketing to millennials: Reach the largest and most influential generation of consumers ever. Amacom.
- Fromm, J., Lindell, C., & Decker, L. (2011). AMERICAN MILLENNIALS: Deciphering the Enigma Generation. Barkley. Available online: <https://barkley.s3.amazonaws.com/barkleyus/AmericanMillennials.pdf>, 06.03.2024.
- Fromm, J., & Read, A. (2018). Marketing to Gen Z: The rules for reaching this vast--and very different--generation of influencers. Amacom.
- Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet? *Journal of Interactive Marketing*, 18(1), 38–52. DOI: 10.1002/dir.10073
- Howe, N., & Strauss, W. (2000). *Millennials Rising: The Next Great Generation*. Vintage.
- Katz, E., & Lazarsfeld, P. F. (1955). *Personal Influence: The Part Played by People in the Flow of Mass Communications*. Free Press.
- Katz, R., Ogilvie, S., Shaw, J., & Woodhead, L. (2022). *Gen Z, explained: The art of living in a digital age*. University of Chicago Press.
- Kotler, P., & Armstrong, G. (2018). *Principles of marketing*, 17th edition. Pearson Education. Available online: [https://opac.atmaluhur.ac.id/uploaded\\_files/temporary/DigitalCollection/ODIjY2E4ODIyODViZjFkODgzNDUxYWZlNWZhZmY2MGE5MDc0ZDVmYWw=.pdf](https://opac.atmaluhur.ac.id/uploaded_files/temporary/DigitalCollection/ODIjY2E4ODIyODViZjFkODgzNDUxYWZlNWZhZmY2MGE5MDc0ZDVmYWw=.pdf), 20.02.2024.
- Koulopoulos, T., & Keldsen, D. (2016). *Gen Z Effect*. Routledge. DOI: 10.4324/9781315230337
- Králová, P. J. P. (2020). Customer insights and online shopping attitude of Gen Z. The 14th International Days of Statistics and Economics, Prague.
- Mangold, W. G., & Smith, K. T. (2012). Selling to Millennials with online reviews. *Business Horizons*, 55(2), 141–153. DOI: 10.1016/j.bushor.2011.11.001
- McCrinkle, M. (2014). The ABC of XYZ: Understanding the Global Generations. Available online: [http://www.saspa.com.au/wp-content/uploads/2016/02/The-ABC-of-XYZ\\_Chapter-1.pdf](http://www.saspa.com.au/wp-content/uploads/2016/02/The-ABC-of-XYZ_Chapter-1.pdf), 25.02.2024.

- McCordle, M. (2018). The ABC of XYZ: Understanding the Global Generations. McCordle Research. Available online: [https://www.researchgate.net/publication/328347222\\_The\\_ABC\\_of\\_XYZ\\_Understanding\\_the\\_Global\\_Generations](https://www.researchgate.net/publication/328347222_The_ABC_of_XYZ_Understanding_the_Global_Generations), 25.02.2024.
- McKee, K. (2021). Actions Speak Louder than Words: How Social Influence Affects Gen Z'S Attitude Toward Personalized Marketing, Brand Loyalty, Ad Avoidance, and Brand Avoidance Behaviors. (Doctoral Dissertation, University of Wisconsin-Whitewater).
- Melović, B., Šehović, D., Karadžić, V., Dabić, M., & Ćirović, D. (2021). Determinants of Millennials' behavior in online shopping – Implications on consumers' satisfaction and e-business development. *Technology in Society*, 65, 101561. DOI: 10.1016/j.techsoc.2021.101561
- Moreno, F. M., Lafuente, J. G., Carreón, F. Á., & Moreno, S. M. (2017). The Characterization of the Millennials and Their Buying Behavior. *International Journal of Marketing Studies*, 9(5), 135. DOI: 10.5539/ijms.v9n5p135
- Nartea, M., Jamice, J., & Goyenechea, A. (2019). Exploring the characteristics of millennials in online buying behavior. *Asia Pacific Journal of Multidisciplinary Research*, 7(4), 1-9. Available online: [https://www.researchgate.net/publication/338448057\\_Exploring\\_the\\_Characteristics\\_of\\_Millennials\\_in\\_Online\\_Buying\\_Behavior](https://www.researchgate.net/publication/338448057_Exploring_the_Characteristics_of_Millennials_in_Online_Buying_Behavior), 01.03.2024.
- Otaigbe, E. E. (2018). Exploring Satisfaction and Retention Strategies for Generation Y Customers. (Doctoral Study, Walden University).
- Padveen, C. (2017). *Marketing to Millennials for dummies*. John Wiley & Sons.
- Parment, A. (2014). *Marketing to the 90s generation: Global data on society, consumption, and identity*. Springer.
- Seemiller, C., & Grace, M. (2015). *Generation Z goes to college*. John Wiley & Sons.
- Sénécal, S. and Nantel, J. (2004). The influence of online product recommendations on consumers' online choices. *Journal of Retailing*, 80(2), 159-169. DOI: 10.1016/j.jretai.2004.04.001
- Silverman, G. (2001). *The secrets of word-of-mouth marketing: How to trigger exponential sales through runaway word of mouth*. Amacom.
- Smith, K. T. (2011). Digital marketing strategies that Millennials find appealing, motivating, or just annoying. *Journal of Strategic Marketing*, 19(6), 489–499. DOI: 10.2139/ssrn.1692443
- Toma, C. L., Hancock, J. T., & Ellison, N. B. (2008). Separating Fact From Fiction: An Examination of Deceptive Self-Presentation in Online Dating Profiles. *Personality and Social Psychology Bulletin*, 34(8), 1023–1036. DOI: 10.1177/0146167208318067

- Turner, A. (2015). Generation Z: Technology and Social Interest. *The Journal of Individual Psychology*, 71(2), 103–113. DOI: 10.1353/jip.2015.0021
- Twenge, J. M. (2014). Generation Me-revised and updated: Why Today's Young Americans Are More Confident, Assertive, Entitled—and More Miserable Than Ever Before. Simon and Schuster.
- Twenge, J. M. (2023). *Generations: The Real Differences Between Gen Z, Millennials, Gen X, Boomers, and Silents—and What They Mean for America's Future*. Simon and Schuster.
- Wang, J.-J., Wang, L.-Y., & Wang, M.-M. (2018). Understanding the effects of eWOM social ties on purchase intentions: A moderated mediation investigation. *Electronic Commerce Research and Applications*, 28, 54–62. DOI: 10.1016/j.elerap.2018.01.011
- Weitzl, W. (2017). *Measuring Electronic Word-of-Mouth Effectiveness*. Springer Fachmedien Wiesbaden. DOI: 10.1007/978-3-658-15889-7
- Zaraket, S. (2020). *Consumer Behaviour and Social Network Sites*. Routledge. DOI: 10.4324/9781003081272
- Õunapuu, L. (2014) *Kvalitatiivne ja kvantitatiivne uurimisviis sotsiaalteadustes*. Tartu: Tartu Ülikool

# APPENDICES

## Appendix 1. Online survey questions in English

1. How old are you?

—

2. What is your gender?

- Male
- Female
- Other

3. How often do you buy beauty products (skincare, personal care, fragrance, haircare, makeup products)?

- Once a year
- 2-3 times a year
- Once every few months
- Once a month
- 2-3 times a month
- Once a week
- 2-3 times a week

4. In the past year, have you purchased a beauty product only based on personal recommendations from one of your friends/family members/acquaintances?

- Yes
- No
- Other

5. In the past year, have you purchased a beauty product only based on online reviews?

- Yes
- No
- Other

6. How likely are you to purchase a beauty product based only on personal recommendations from one of your friends/family members/acquaintances?

- Very likely
- Likely
- Neutral
- Unlikely
- Very unlikely

## Appendix 1 sequel

7. How likely are you to purchase a beauty product based only on online reviews?

- Very likely
- Likely
- Neutral
- Unlikely
- Very unlikely

8. How often do you ask for advice from friends/family members/acquaintances before purchasing a beauty product?

- Always
- Often
- Sometimes
- Rarely
- Never

9. How often do you read online reviews before purchasing a beauty product?

- Always
- Often
- Sometimes
- Rarely
- Never

10. On a scale of 1 to 5, please rate the overall importance of personal recommendations and online reviews on your purchasing decisions for beauty products, where 1 - not important at all, 2 - low importance, 3 - neutral, 4 - somewhat important, 5 - very important)

- Personal recommendations
- Online reviews

11. On a scale from 1 to 5, please rate how likely are you to consider buying a new beauty product based on different factors, where 1 - very unlikely, 2 - unlikely, 3 - neutral, 4 - likely, 5 - very likely

- After receiving a recommendation from one of your acquaintances
- After receiving a recommendation from one of your friends or family members
- After seeing an online review on social media by one of your friends, family members or acquaintances
- After seeing an online review on social media from an influencer
- After seeing an online review on social media from any online persona (In this case, an "online persona" refers to an internet user who is neither an influencer nor someone you personally know)

## Appendix 1 sequel

- After reading online reviews on various platforms such as online stores and product comparison websites (Amazon.com, Sephora.com, Yesstyle.com, Reddit.com, etc)

12. On a scale from 1 to 5, please rate how influential each factor is on your decision to purchase a beauty product, where 1 – does not influence at all, 2 – slightly influential, 3 – somewhat influential, 4 – very influential, 5 – extremely influential

- Personal recommendations from your acquaintances
- Personal recommendations from your friends or family members
- Online reviews on social media from influencers
- Online reviews on social media from your friends, family or acquaintances
- Online reviews on social media from any online persona
- Online reviews of products on platforms such as online stores and product comparison websites (Amazon.com, Sephora.com, YesStyle.com, Reddit.com, etc)

13. Please select the factors (you can choose multiple) that have the biggest influence on your decision when buying beauty products

- Personal recommendations from your acquaintances
- Personal recommendations from your friends or family members
- Online reviews on social media from influencers
- Online reviews on social media from your friends, family members or acquaintances
- Online reviews on social media from any online persona
- Online reviews of products on various websites (Amazon.com, Sephora.com, YesStyle.com, Reddit.com, etc)

14. To what extent do you trust the following factors when deciding to purchase beauty products? Please rate each of them on a scale from 1 to 5, where 1 – not at all, 2 – slightly, 3 – moderately, 4 – very much, 5 – completely

- Personal recommendations from your acquaintances
- Personal recommendations from your friends or family members
- Online reviews on social media from influencers
- Online reviews on social media from your friends, family members or acquaintances
- Online reviews on social media from any online persona
- Online reviews of products on various websites (Amazon.com, Sephora.com, YesStyle.com, Reddit.com, etc)

15. How likely are you to purchase a beauty product after receiving a negative personal recommendation from one of your friends/family members/acquaintances?

- Very likely
- Likely
- Neutral
- Unlikely
- Very unlikely

## Appendix 1 sequel

16. How likely are you to purchase a beauty product after seeing negative online reviews?

- Very likely
- Likely
- Neutral
- Unlikely
- Very unlikely

17. If you were satisfied with a beauty product you purchased, would you recommend it to your friends, family or acquaintances?

- Definitely yes
- Probably yes
- Might or might not
- Probably not
- Definitely not

18. Would you share an online review if you were satisfied with a beauty product you purchased?

- Definitely yes
- Probably yes
- Might or might not
- Probably not
- Definitely not

19. Would you inform your friends, family members, or acquaintances if you were unsatisfied with a beauty product you purchased?

- Definitely yes
- Probably yes
- Might or might not
- Probably not
- Definitely not

20. Would you share an online review if you were unsatisfied with a beauty product you purchased?

- Definitely yes
- Probably yes
- Might or might not
- Probably not
- Definitely not

## Appendix 1 sequel

21. What platforms do you usually use to access online reviews for beauty products? (multiple choice)

- Amazon
- Facebook
- Instagram
- Reddit
- Sephora
- TikTok
- YesStyle
- YouTube
- Other \_\_\_\_

22. If there are any additional insights or comments you would like to add about how online reviews and personal recommendations influence your decisions when purchasing beauty products, please share them here

—

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