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Handledare: Ilkin Mehrabov
Examinator: Nils Holmberg

White Nicotine Pouches of Freedom?

A quantitative study exploring the effect of Femvertising, Greenwashing, Healthwashing and Gender on consumers' intention to purchase white nicotine pouches.

EMMY NORDIN & MALIN NILSSON

Lunds universitet
Institutionen för strategisk kommunikation



Abstract

In today's digital climate, consumers are constantly exposed to marketing and communication from companies and organisations. The increase in marketing has subsequently led to the birth of new, and in some cases, misleading advertising strategies, such as Greenwashing and Healthwashing. Other marketing strategies such as Femvertising utilise societal movements in order to be effective. These marketing tactics have been studied and examined in areas such as the food industry, the automotive industry, and the beauty industry, however, research is lacking of the use and impact these communication techniques have within the nicotine industry. With the notable increase in the use of white nicotine pouches among women Gender may also play a role in purchase intention. This thesis uses a quantitative method to examine the effects of these marketing strategies (Femvertising, Greenwashing, Healthwashing, Gender) on consumers' subsequent intention to purchase white tobacco-free nicotine pouches. Data was collected through a web survey. The online survey produced 107 valid responses that were analysed using the help of SPSS. Using SPSS, a number of multiple regression analyses were performed to observe the relationship and predictive value of the independent variables, along with a Partial Correlation analysis. The final results showed statistical significance of the variables Perceived Greenwashing, Perceived Greenwashing/Healthwashing as well as Gender when removing the variable Perceived Femvertising. The findings from this study identifies the complexity of this phenomenon, indicating that there is a great need for further research on the topic.

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Keywords: Femvertising, Greenwashing, Healthwashing, Intention to Purchase, White Nicotine Pouches

Sammanfattning

I dagens samhälle är konsumenterna omgivna av marknadsföring och kommunikation från företag och organisationer. Den ökade marknadsföringen har lett till nya och i vissa fall även vilseledande annonser, som Greenwashing och Healthwashing. Andra marknadsföringsstrategier, t.ex. Femvertising, följer med på de samhälleliga rörelserna för att vara effektiva. Den markanta ökningen av användande av vita nikotinpåsar hos kvinnor antyder att Kön kan också ha en påverkan på Köpintention. Dessa marknadsföringsstrategier har studerats och undersökts inom områden som livsmedelsindustrin, bilindustrin och skönhetsindustrin, men inom nikotinindustrin saknas det forskning. Den här studien är en kvantitativ studie där en webenkätundersökning används för att undersöka dessa kommunikationsstrategiers (Femvertising, Greenwashing, Healthwashing, Kön) effekter på konsumenternas senare avsikt att köpa vita tobaksfria nikotinpåsar. Onlineundersökningen gav 107 giltiga svar som analyserades med hjälp av SPSS. Med hjälp av SPSS utfördes även ett flertal multipel regressionsanalys för att observera förhållandet och det prognostiska värdet av de oberoende variablerna, tillsammans med en partiell korrelationsanalys. Resultaten visade att Kön, Greenwashing och Healthwashing, när Femvertising exkluderades, producerar signifikanta resultat. Slutsatserna av denna studien är att detta forskningsområde är mycket komplicerat och det krävs vidare forskning inom detta ämne.

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Definitions

The following section provides a brief definition of terms used throughout the essay to ensure that all readers have an understanding of the topic and the main themes in this thesis.

White Tobacco-free nicotine pouches: Tobacco-free nicotine pouches are a fairly recently introduced product. The product itself is a small pouch that is placed under the lip of the consumer and nicotine then enters the body through a membrane in the mouth and reaches the pleasure centre of the brain (Livsmedelsverket, 2019). The manufacturing process of the product causes the tobacco to be removed while maintaining the nicotine (Whitepouches, n.d.).

Greenwashing: Greenwashing is a term used to describe communication that is vague or somehow misleading regarding the sustainability efforts of companies or organisations (Cambridge Dictionary, n.d.)

Healthwashing: Healthwashing is a term used to describe the marketing of unhealthy products in a manner that makes them seem healthy and misleading the consumer (Heiss, et al., 2020).

Femvertising: Femvertising is a technique within marketing used to market goods and services through feminist principles (Becker-Herby, 2016).

1.0 Introduction

Edward Bernays, sometimes referred to as the father of public relations (Amos & Haglund, 2000), launched a campaign in 1929 in New York called “Torches of Freedom”. The campaign was aimed at the emancipation of the women of the 1920s. Previous to this era, smoking had largely been deemed a masculine practice. For women, smoking had been seen as dirty, distasteful, and inappropriate. However, the post world war one women of this era had gradually begun to claim parts of masculinity; such as cutting their hair, donning trousers, and finally lighting their cigarettes (Amos & Haglund, 2000). The Torches of Freedom campaign and Bernays joined this movement, and a group of women took to the streets of New York and proudly lit their cigarettes as a metaphor for their emancipation and feminism (Amos & Haglund, 2000).

The manipulation of hegemonic masculinity, in this case, the notion that the use of tobacco products was inherently masculine, to empower women led to a significant increase in the use of these products amongst the females of this era and in the years to come. Amos and Haglund (2000) report that within 20 years of women being targeted in the marketing of tobacco products over half of the young women in Britain had become smokers.

Today, almost 100 years after Bernays Torches of Freedom's campaign, an increase of women using snus and white nicotine pouches could suggest that a similar course of events is unfolding in Sweden. Snus is a product that has existed in Sweden since 1600-1700 (Swedish Match, n.d.) and users of the product have typically been men (Snusrapporten, 2020). Although in recent years, with the introduction of tobacco-free snus, these products have become more popular amongst women as well. Like Bernays Torches of Freedom, these products have been marketed in a slightly different way, partly because of the laws governing the marketing of products containing tobacco, but also because of the new customer segment that has been born through the female adoption of these products.

As Femvertising is a communication strategy that is aimed towards female consumers, the notion that gender may have an effect on purchasing behaviour became of interest. Gender has been said to be an significant factor in the purchase behaviour of consumers and the interpretation of marketing and communication strategies (Liang, Chen, Duan & Ni, 2013).

Furthermore, Svenska Dagbladet (2021) reports that there has been a drastic increase in the consumption of white nicotine pouches, especially among women. This in turn raised the question if gender may be an important factor in the purchase intention of white nicotine pouches.

In interviews with the women who partook in Bernay's campaign it became clear that these women were not aware, as many others in this era, of the health risks of smoking. Another interesting parallel can be seen today. Non-smoking Generation (2020) reported that today many consumers of white nicotine pouches are under the impression that white nicotine pouches are "healthier" for you than traditional tobacco snus. There seems to be a similar misunderstanding of the health effects of these products among today's consumers, as there was among the smokers of the 1920's.

Although Greenwashing was not prevalent in Bernay's era, the rise of Femvertising and Healthwashing raises questions about what other marketing strategies are being used to market products that are dangerous to consumers today. Greenwashing is becoming more common in today's society as many of us are growing more aware of the urgency of the global climate situation (Delmas & Burbano, 2012). Companies and organisations are growing wise of this rising concern and using it to their advantage by portraying themselves as more sustainable than they are. Does this phenomenon stop at the motor vehicle, clothing and food industries or has it bled into the nicotine industry as well?

In this essay, the topic of how white nicotine pouches are marketed today will be explored, and more specifically whether techniques similar to those used by Bernays are being used today. Through exposing the chosen target group to Instagram-posts from two of the biggest brands of white nicotine pouches in Sweden, VELO and ZYN, we aim to explore digital marketing's impact on consumers' purchase intention. Are the products marketed as a way for women to achieve empowerment or live a certain lifestyle? Do women need to purchase products to express their feminism and is feminism becoming a commodity in today's society? Are today's consumers aware of the health risks of these products? Are companies being transparent about their modus operandi? The findings will then help answer the question of whether using Femvertising, Greenwashing and Healthwashing as marketing tools will lead to a certain brand opinion or ascription of a brand reputation and subsequently leading to a behavioural response in the form of a purchase intention.

1.1 Swedish Regulations and White Nicotine Pouches

In 2019 the Swedish government organ, Livsmedelsverket, states that white nicotine pouches fall into a grey zone as they cannot be classified as food or eatable products (Livsmedelsverket, 2019), but nor do they fall under the classification of tobacco products as they per the manufacturing process, do not contain any tobacco. According to Konsumentverket (2020), products containing tobacco cannot be marketed in any other places than where they are sold. This marketing may only convey basic information about the products that do not encourage the use or consumption of these products (Konsumentverket, 2020). Furthermore, the regulation states that these tobacco products are not allowed to be handed out in “test portions” as this can encourage non-users to start using the products (Konsumentverket, 2020).

White nicotine pouches have been excluded from the regulations concerning eatable/food products as well, as according to Livsmedelsverket (2019) products under this category must be consumed via the stomach. Thus, white nicotine pouches, which are placed under the lip and then spat out, are not included in this category (Livsmedelsverket, 2019).

Therefore, white tobacco-free nicotine pouches fall into a grey area. The marketing is not as regulated and they can therefore not be stopped from handing out testers and being present at large events to gain awareness of the products. This allows for brands such as ZYN and VELO to market in a much broader spectrum than traditional snus can.

1.2 ZYN

ZYN is a line of products from the Swedish “snus-giant”, Swedish Match (Swedish Match, n.d.). The line of products exclusively includes white, tobacco-free nicotine pouches sold in various fruit, mint, or coffee flavours in varying strengths and sizes. ZYN originally launched its products in the United States of America and later launched in Sweden at the end of 2016 (Swedish Match, n.d.). Today ZYN is sold in the USA, Sweden, Denmark, Estonia, Czech Republic, Russia, Austria, Slovenia, Croatia, Great Britain, and New Zealand (Swedish Match, n.d.).

Since the launch of the product the sales and use of ZYN's nicotine pouches have increased dramatically and today ZYN is the largest brand within nicotine pouches globally. Swedish Match explains how the sales of ZYN nicotine pouches in America increased by 50,4 million servings of nicotine pouches from 2019 to 2021, with a total of 114,1 million portions sold (Swedish Match, 2020). ZYN is one of the biggest producers of white nicotine pouches in the Swedish market as well as being an affiliate of Swedish Match (Snusbolaget, n.d.), because of this we can assume that they have established marketing and communication techniques of which we can use in this study.

1.3 VELO

Lyft is undergoing a name change in 2022, changing the brand name to VELO. Therefore, the brand will be referred to as VELO throughout this study. VELO is a white nicotine-pouch brand owned by the tobacco giant British American Tobacco (Snusbolaget, 2021). Before the launch of the white nicotine pouches containing no tobacco, the brand was called Epok, owned by Winnington. Epok was the first white snus with flavouring on the market. British American Tobacco introduced a new manufacturing process which removes the tobacco whilst containing the nicotine, creating the VELO products and brand. The pouches contain a combination of artificial flavours and aromas, nicotine conducted from the tobacco plant, as well as fibres from pine. The brand offers a variety of flavours, strengths, and sizes. VELO was launched on the Swedish market in 2018 and has since gained huge popularity. In the year 2021, VELO was the second most popular brand in the snus- industry, and the number one choice in the category of white nicotine pouches (Snusbolaget, 2021).

Snusbolaget (2020) reports that, like ZYN, VELO is one of the most popular brands of white nicotine pouches. Furthermore, they are an affiliate of the established British American Tobacco (Snusbolaget, 2020), meaning that this brand has an established method of communicating and marketing. This provides us with useful material to be used as graphic communication for the purpose of this study.

1.4 Problem Discussion

The increased use of social media and smartphones has led to a constant presence and exposure of marketing and ads in the everyday life of the larger parts of the population. The constant exposure of marketing, messaging and other forms of interactions from retailers, marketers and so on has increased the importance of strategic marketing techniques. Countless new marketing methods have been developed and adopted by organisations in order to achieve the goals of marketing and reach the target audience effectively. Communication techniques such as Greenwashing and Healthwashing have more recently been largely discussed because of their controversial nature, raising questions about the ethical aspects of marketing. Organisations within all different sorts of branches have applied these communication techniques, leading to an increased interest in the impact these techniques have on consumers’.

The marketing technique Femvertising was used when marketing cigarettes to women in the post world war one era. As the use of white nicotine pouches has increased significantly in a short period of time, especially among females, there is a possibility that this marketing technique could be used today. Therefore, it is of great interest to explore what parallels can be drawn, and if history may be repeating itself.

As the use white nicotine pouches have significantly increased in popularity in a very short time, especially among young women, there is a high need for research to investigate as to why this is.

The laws governing the marketing and advertising of tobacco and nicotine products in Sweden have traditionally been strict and restrictive. Laws have been put in place that essentially forbids these kinds of products from being marketed at all due to their addictive nature. Snus is a product that has fallen within these rules and regulations, up until the release of white nicotine pouches. The pouches, because of the manufacturing process, do not contain any tobacco and do therefore not fall within these regulations (Konsumentverket, 2020) .

Limited previous research has explored the marketing of these products towards women specifically and some research has been done into the misconceptions surrounding the health risks of these products. An information gap was found regarding the connection between these communication techniques on white nicotine pouches and their effect on consumer behaviour, more specifically the intention to purchase. This study is therefore aimed at exploring the perceived Femvertising, Healthwashing and Greenwashing of these products in order to try to

discover which method has the biggest impact on the intention to purchase white nicotine pouches. By exposing respondents to advertisements posted on the Instagram pages of the two most popular brands of white nicotine pouches, ZYN and VELO, the consumers' perception of the brands marketing techniques impact on purchase intentions will be measured.

The findings of this study can be useful for both marketers, to understand which techniques are most effective, as well as consumers in order to better understand which communication techniques they are being exposed to.

1.5 Purpose & Research Question

The aim of this study is to investigate and gain knowledge about the impact of Femvertising, Healthwashing as well as Greenwashing. More specifically, the main purpose of this thesis is to discover if any of the four factors show a significant impact on consumers' intention to purchase white nicotine pouches. In order to reach further understanding about the chosen topic, the impact of gender in relation to purchase intention of white nicotine pouches will be investigated. In order to collect quantitative data, a web survey was conducted, presenting advertisements posted by two popular white nicotine pouch brands in Sweden, ZYN and VELO. The respondents' perception of marketing and communication techniques will be measured through a variety of questions. Finally, respondents' current and future purchase intentions will be explored. The results will provide adequate answers to the research question presented below.

RQ: *Does the perception of the communication techniques of Femvertising, Healthwashing, or Greenwashing, as well as the variable gender have an impact on consumers' intention to purchase white nicotine pouches?*

2. Literature Review & Theoretical Framework

2.1 Intention to purchase

Intention to purchase is a theory stemming from the Theory of Planned Behavior. Intention to purchase according to Ken & Hsu (2021) concerns the extent to which consumers are affected by external elements and subjective consciousness when in a purchasing situation. Purchase intention is often correlated with the consumers' behaviour, perceptions and attitudes, and the purchase decision process is complicated, dependent on many different external and internal factors (Mirabi, Akbariyeh & Tahmasebifard, 2015). Research presents 6 dimensions to the consumer buying process; awareness, knowledge, interest, preference, persuasion and purchase (Kotler & Armstrong, 2010; Kawa et al., 2013). Furthermore, purchase intention can also be affected by external factors such as price, quality as well as brand image. The authors explain that the higher the intention to purchase is, the higher the subsequent purchase probability is (Ken & Hsu, 2021). One could say that intention to purchase is a determinant of purchase probability and can be used as a tool for predicting the consumer buying process (Mirabi, et al., 2015). In order to get measurable results of the impact of the four marketing and communication efforts used by the brands ZYN and VELO on Instagram, intention to purchase will be used as the independent variable in this thesis.

2.2 Femvertising

As explained by Becker-Herby (2016) Femvertising was born from *Commodity Feminism* and *Third-wave feminism*. Commodity feminism is a term coined by Goldman, Heath, and Smith (1991) describing the use of “the emancipation of women to sell goods and services” (Becker-Herby, 2016), whilst Third Wave Feminism is a term used to describe the newer

generation of feminism where the label “feminist” is associated with a trend and being an intellectual woman. Furthermore, third-wave feminism also welcomes intersectionality and individualism (Becker-Herby, 2016).

The term *Femvertising* was coined by Samantha Skey in 2014, and was described as “advertising that employs pro-female talent, messages and imagery to empower women and girls” (Becker-Herby, 2016). It is a marketing method that has transformed the communication to female customers by depicting women in a new and different way by abandoning traditional gender stereotypes and portraying women in a positive and multidimensional way. Instead of women having a supporting role to men, the woman now takes centre-stage and has the main role in the advertising and marketing portrayal (Becker-Herby, 2016). Marketing that falls within Femvertising will honour women and portray women in authentic real-life scenarios.

Becker-Herby (2016) identified five common characteristics among advertisements that can be classified as Femvertising:

1. Utilisation of diverse female talent.
2. Messaging that is inherently pro-female
3. Pushing gender-norm boundaries/stereotypes; challenging perceptions of what a woman/girl “should” be.
4. Downplaying of sexuality; sexuality that does not cater to the male gaze.
5. Portraying women in an authentic manner.

The author goes on to explain that authenticity may be the central theme of femvertising (Becker-Herby, 2016). Today’s consumer expects organisations to be open and honest about their values and the way in which the company functions. A central part of Femvertising is the expectation that organisations not only are authentic in relation to the goods and services they market but also regarding the ethos and goals of the organisation itself (Becker-Herby, 2016). This moral authenticity is communicated in Femvertising through the communication with customers and how women are portrayed in said communication. This communication can either create a feeling of authenticity or the opposite if not executed correctly (Becker-Herby, 2016).

Some criticisms of Femvertising have been that this kind of marketing technique that is largely based on trends within society and potential pressure within a cultural group is according to Lazaar (2006) “rarely genuinely progressive” (Becker-Herby, 2016). Furthermore, organisations have admitted that the Femvertising trend is not necessarily aimed at creating a

societal revolution and that it, like traditional marketing, is aimed at selling goods and services (Becker-Herby, 2016). Some argue that today's feminism shares similar issues with commodity feminism. The advertising of such rose-colored feminism can be said to be taking the spotlight away from the real deep-seated social inequality that feminism set out to address (Ziesler in Becker-Herby, 2016).

The concept of Femvertising is relevant for this study as news media channels have highlighted the increase of use of these products among young women in Sweden. Svenska Dagbladet (2021) published an article calling attention to the significant increase in consumption of white nicotine pouches among young women in Sweden. Furthermore, as a result of vigorous influencer marketing the number of young female users of white nicotine pouches has increased sevenfold (Resume, 2022). This begs the question, could Femvertising be an aspect in why specifically young women have begun to use these products, hence why we chose to include this theory as an independent variable in this study.

H1: The perception of Femvertising has a significant impact on the intention to purchase white nicotine pouches.

2.3 Greenwashing

The rise of environmental awareness and sustainability paved the way for a trend to be born within marketing which is now commonly known as *Greenwashing*. Greenwashing is defined by Nancy Furlow as the “dissemination of false or incomplete information by an organisation to present an environmentally responsible public image” (Furlow, 2010). In other words, the concept of Greenwashing can be seen as companies or organisations presenting themselves as more environmentally friendly than they are to appease today’s sustainable consumers. This can involve organisations communicating information that may be false but can also be done by presenting information that is vague and can therefore easily be misinterpreted by the consumer (Furlow, 2010). As the term Greenwashing is a fairly new concept, the definitions vary. Whilst some researchers use the term as a name for a broad spectrum of environmental issues, including social and economical issues, others use the term when describing sustainability issues. Another topic being discussed by researchers is whether there is intent to mislead consumers and stakeholders or not.

Frequently used marketing strategies when using Greenwashing are misleading and persuasive use of imagery and rhetoric, debatable credentials and labels, empty promises of green policies, etc. This phenomenon has become so common that a tool has been created to monitor Greenwashing. This tool is the Greenwashing Index and is used to examine the claims being made by organisations (Furlow, 2010). Despite the Greenwashing Index, Delmas and Burbano (2011) explain that Greenwashing is still extremely difficult to mitigate. The Greenwashing Index is a tool relying on the initiative of individual users when they find a claim to be questionable or that may be the product of Greenwashing (Furlow, 2010), making it somewhat unreliable.

According to A Non Smoking Generation (2021) many consumers of white nicotine pouches are under the impression that these products are more sustainable and environmentally friendly than traditional snus because they are marketed as tobacco free, causing them to choose these products for this reason. Although, as the nicotine in the products comes from the same tobacco used in traditional snus this is a misconception. Greenwashing therefore became an interesting aspect to introduce to the study and was therefore introduced as an independent variable.

H2: The perception of Greenwashing has a significant impact on the intention to purchase white nicotine pouches.

2.4 Healthwashing

The term Healthwashing is a fairly unexplored phenomenon. Similar to other “washing” techniques, the term Healthwashing involves misleading or giving false or vague information regarding a product. The term is described by Heiss, Nadered, & Matthes (2021) as “the strategy of presenting genuinely unhealthy products in a misleading context of fitness, sports or other activities related to a healthy lifestyle”. Within Healthwashing, one central technique is creating a connection between sports events or outstanding individuals within these events and the company in question, and the products they market (Heiss et. al., 2021). This creates an association between the healthy and sporty lifestyle that is linked with these people or these events. An example of this is Coca-Cola, whose products are high in sugar (Feldman, 2019), but are in partnership with FIFA and market heavily at these events.

Healthwashing is a collective term that includes advertising products as more beneficial for personal health than they are (Heiss, et. al., 2021). Research indicates that the misleading advocating for personal health increases consumers' positive attitude regarding products (Heiss, et. al., 2021) Claims including products to be low in sugar, organic, and therefore healthier, etc are often used in marketing in order to manipulate consumers perception on products nutritional value. In today's society, consumers are becoming more health-conscious, prioritising products that have a positive impact on health over unhealthier options. Increased knowledge of products' impact on personal health is forcing brands to develop their production and marketing strategy to meet the high demands of the consumers. Furthermore, Healthwashing is said to be effective in cases where the consumer is not aware of the health risks of the products, hence, the more educated the consumers are, the less effective this method will be (Heiss et. al., 2021). Consumers that are aware of the persuasive and misleading health claims often become more reluctant to consume or purchase the product in question.

Current research on the phenomenon of Healthwashing is almost exclusively within the food industry. As mentioned above, the topic is fairly unexplored, resulting in many gaps in knowledge. However, as Healthwashing is a rather broad definition of masking health risks, the phenomenon can be applied in other areas beyond the food industry. A Non Smoking Generation (2020) briefly introduced the topic of the use of misleading health claims and marketing techniques by white nicotine pouch-brands, and the impact this has on the use of these products. However, the report did not provide any further information about the phenomenon of Healthwashing, confirming that there is a need to investigate the topic further.

The concept of Healthwashing can be applied to this topic as the marketing of white nicotine pouches as tobacco free has led to the misconception that these products are less detrimental to one's health than traditionally tobacco snus (A Non Smoking Generation, n.d.). These products do in fact have negative health impacts, but marketing has lead to confusion and misunderstanding among consumers,

H3: The perception of Healthwashing has a significant impact on consumers' intention to purchase white nicotine pouches.

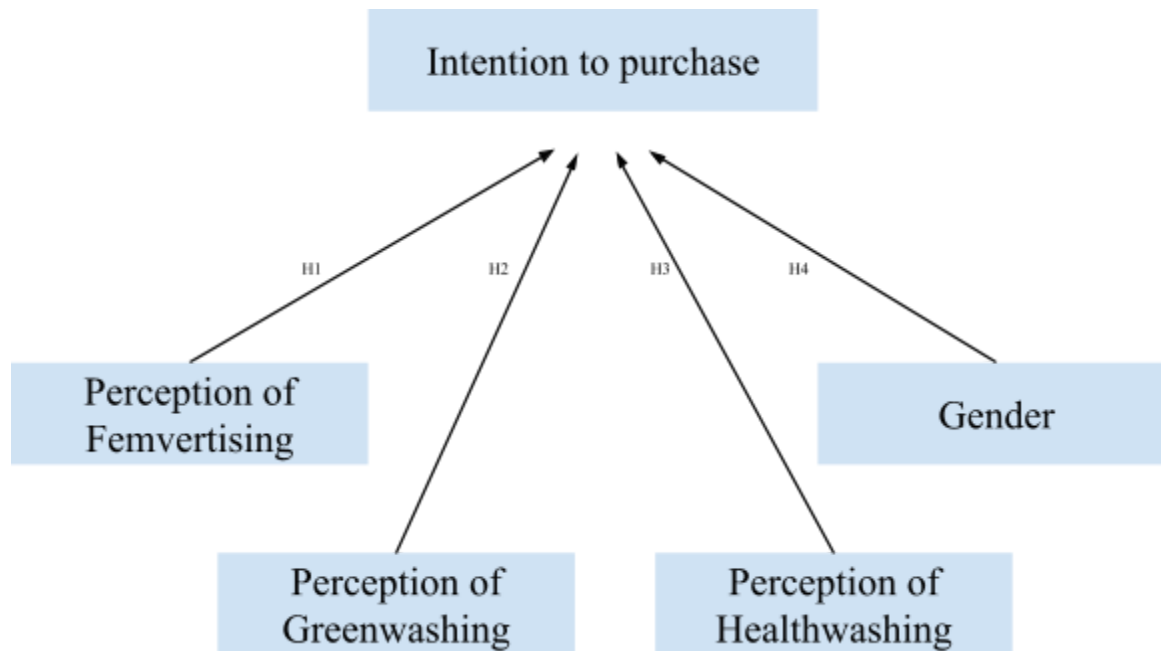
2.5 Gender

According to a study conducted by the Public Health Agency of Sweden (2021) 20 % of men in the sample claim to use traditional tobacco-pouches on a regular basis. Meanwhile, only approximately 7% of the female respondents reported to be using traditional tobacco pouches. However, when measuring the consumption of white nicotine pouches, results suggest that women are more prone to regular use of the white nicotine pouches compared to men (Folkhälsomyndigheten, 2021). In addition, the biggest online retailer of snus in Sweden, Snusbolaget (2021) reports significant differences in consumer habits and use of tobacco- and nicotine pouches between men and women. In 2021, 70% of the female respondents claimed to be regular consumers of white nicotine pouches, an increase of 18% from the previous year. Only 32% of men reported consumption of products in the same category (Snusbolaget, 2021). As the topic of gender is well discussed on the topic of nicotine pouches it is of high relevance to examine the connection between marketing and female consumption.

H4: Females have a higher intention to purchase white nicotine pouches.

2.6 Construction of Model and Hypotheses

A model was developed in order to investigate the relationship between the chosen marketing strategies and intention to purchase. Through a literature review of previous studies on consumption and attitudes toward white nicotine pouches in Sweden, the techniques of Greenwashing and Healthwashing were chosen. As the use of white nicotine pouches has increased in the female population, we found it relevant to include the Femvertising aspect of marketing as well. The theme of gender became of interest and we decided to include this as the third and final variable. Four hypotheses were created and tested through the survey and analysis.



Model 1. Model presenting the independent variables, *Femvertising*, *Greenwashing*, *Healthwashing* and *Gender*, presumed impact on the dependent variable *Intention to purchase*.

The model includes four independent variables, *Femvertising*, *Greenwashing*, *Healthwashing*, and *Gender*. *Intention to purchase* is the chosen dependent variable. To gain knowledge about the variables in question, as well as explore the hypotheses, a survey was conducted. For each variable several items were developed, providing information to explain the research questions.

Hypothesis 1: *The perception of Femvertising has a significant impact on consumers' intention to purchase white nicotine pouches.*

Hypothesis 2: *The perception of Greenwashing has a significant impact on consumers' intention to purchase white nicotine pouches.*

Hypothesis 3: *The perception of Healthwashing has a significant impact on consumers' intention to purchase white nicotine pouches.*

Hypothesis 4: *Women have a higher intention to purchase white nicotine pouches than men.*

2.6.1 **H1**: *The perception of Femvertising has a significant impact on consumers' intention to purchase white nicotine pouches.*

The first hypothesis is built on the notion that the perception of Femvertising in graphic communication will have a significant effect on the subsequent purchase intention of the consumer. Femvertising involves the use of pro-female messaging and authentic portrayals of women that are based on feminist principles in advertising. Previous research suggests that Femvertising can in some cases have a significant impact on a consumer's general attitude towards a brand (Abitbol & Sternadori, 2016). To observe this connection the concept has been deconstructed into four survey items with a connection to four main elements of Femvertising as proposed by Becker-Herby (2016); *authentic female representation, messaging that is inherently pro-female, female-centred products and pushing gender-norm boundaries*. Previous research of the effects of Femvertising is mainly focused on advertising within the beauty or clothing industry, however research done on Femvertising within the nicotine industry is lacking since “Bernays Torches of Freedom” in 1929, thus making it a relatively unexplored area, especially within the snus industry. This fact was one of the key aspects as to why this hypothesis was chosen.

Item	Explanation
Messaging that is inherently pro-female	- The company’s ability to promote women in their marketing
Authentic female representation	- The company’s ability to present accurate and realistic representations of women in their marketing
Pushing gender-norm boundaries	- The company's ability to convey an image of successful women with a connection to their products.
Female-centred products	- The company’s ability to create products for women

Table 1. *Displaying the four items related to hypothesis 1, Femvertising, as well as explanations of each item.*

2.6.2 H2: The perception of Greenwashing has a significant impact on consumers' intention to purchase white nicotine pouches.

The second hypothesis of this thesis is based on the techniques of Greenwashing. Greenwashing is a common phenomenon in today's marketing and marketing is now regulated to ensure that consumers are informed about messaging that could be potentially false or misleading. Since Greenwashing is so prevalent today, we decided to explore this technique in our second hypothesis. Previous research on Greenwashing has largely been focused on the automobile industry and political sphere amongst others. Limited research has been done on Greenwashing in the nicotine industry which is one of the reasons this hypothesis was chosen. To create questions that are suited for this communication technique we formulated questions related to the sustainability of the companies as a whole, including the following items:

Item	Explanation
Perceived sustainability of the company as a whole	- Consumers' impression of the companies being sustainable.
Perception of the company being a sustainable choice	- The companies producing sustainable products.
Perceived sustainability focus	- The companies' perceived sustainability focus.
Perception of the company contributing to consumers making sustainable choices	- The companies help consumers to make sustainable choices.

Table 2. Displaying the four items related to hypothesis 2, Greenwashing, as well as explanations of each item.

2.6.3 H3: *The perception of Healthwashing has a significant impact on consumers'*

The second hypothesis also includes the phenomenon of Healthwashing. As previously mentioned, there is limited research on the topic of Healthwashing. However, research implies that false nutritional ads and claims have a positive impact on purchase intention (Burton, Andrew & Netemeyer, 2000). According to a study conducted by Non-smoking Generation in collaboration with Novus (2020), 66% of the aged 18-79 believe that the reason for users of white nicotine pouches start using these products is because they are “healthier” than other nicotine and/or tobacco products. The same notion is presented by the Public Health Agency of Sweden (2022), when exploring young people's attitudes toward white nicotine pouches. This fact makes the phenomenon of Healthwashing relevant to explore within the nicotine industry.

Item	Explanation
Messaging to claim products to be healthy or healthier	- Consumers' perception of products being good for personal health or a healthier option
Questionable communication of health risks	- Consumers' perception of the company's communication of health risks
Perceived focus on personal health	- Consumers' perception of the company's overall focus on personal health/ health risks
Perceived ability to live a healthy lifestyle	- Consumers' perception of white nicotine pouches allows consumers to live active and healthy lifestyles while consuming white nicotine pouches.

Table 3. Displaying the four items related to hypothesis 3, Healthwashing, as well as explanations of each item.

2.6.4 H4: *Women display a higher intention to purchase white nicotine pouches than men.*

The fourth and final hypothesis was created based on knowledge from previous literature and studies, measuring the population's habits of purchasing and using white nicotine pouches. As

presented in the previous chapter of the thesis, many studies highlight the drastic increase of consumption of nicotine pouches among young women. Therefore, the hypothesis is that the results of this study will display a significant difference between the female and male purchase intention of white nicotine pouches, where the female purchase intention will be larger than the male.

2.7 Delimitations

The communication techniques that were included were limited to Healthwashing and Greenwashing. Furthermore, the marketing technique of Femvertising was chosen to be included in the study. Other communication techniques such as pinkwashing, whitewashing and bluewashing were deemed to be irrelevant for this study and were therefore excluded as variables. As a result of limitations of time and resources, the decision of choosing the most prominent and relevant communication techniques was made to answer the research question.

An important distinction was made between Femwashing and Femvertising. Femwashing is more focused on the organisation internally and concerns the internal gender equality of an organisation (Hainneville, Guèvremont & Robinot, 2022), Femvertising, on the other hand, is, as the name suggests, focused on the utilisation of the modern woman, modern gender roles, and authentic representations of women in marketing. Because of this distinction, we found advertising to be of more relevance for this study.

In the current market for white nicotine pouches, there are a plethora of different brands marketing these products such as On, VOLT, and LOOP. We chose to focus on the brands ZYN and VELO as these brands according to Snusrapporten (2021) are the most popular white nicotine pouch brands. We, therefore, felt that these brands would, as a result, have the most established Instagram pages which would give us the most material to use.

2.8 Disposition

To introduce the chosen subject, a brief explanation of the historical significance of using specific communication techniques within the nicotine/tobacco industry is presented. The following chapter provides a literature review, presenting previous research of the chosen

theories of Femvertising, Greenwashing, and Healthwashing in relation to the topic of white nicotine pouches. The chosen literature will act as a theoretical framework for the study. Each hypothesis is accounted for in this section, and the research model is presented with further explanation.

Section three presents the chosen method of analysis, as well as to why and how the method will be applied. The web survey is presented along with the items related to each chosen theory.

The following section (4. Results and Analysis) depicts the results of the survey. The chapter provides visual representations of the graphs and tables, as well as a thorough explanation and analysis of the results. The hypotheses are tested and the outcome of each hypothesis is presented. The discussion section presents and explains the results as well as the analytical process and decision-making during the analytical process.

Lastly, chapter 6 concludes the findings of the thesis and presents a reflection of the results, as well as the process in which the study was conducted. Finally, suggestions for future research are presented, both directly related to the topic and survey in question, as well as in relation to the theories as a whole.

3. Method

The following chapter will present the methodological choices and scientific approach of this report. Initially, the research methodology followed by the research philosophy is presented. Furthermore, the research design, sampling method, and data collection of the thesis are presented. Lastly, reflections on the ethical considerations and methodological delimitations are accounted for.

3.1 Research Methodology

This paper aims to explore the effects of perceived Femvertising, Greenwashing, and Healthwashing as well as Gender on consumers' purchase intention within the white nicotine pouch industry. The research is conducted through a quantitative approach and the data consist of a thorough literature review as well as empirical data collection.

3.2 Research Philosophy

The research philosophy of this study is based on positivism. Positivism is the notion that knowledge is born through experience, which in turn comes from what we observe with all of our senses or with other instruments with which we can experience our surroundings (6 & Bellamy, 2012). Positivism also maintains that science is objective, meaning that reality is based on what can be measured or observed, disregarding the researcher's subjective beliefs (6 & Bellamy, 2012). As this research aims to collect and analyse quantitative data from an objective standpoint, the positivistic philosophy is the most appropriate option.

The study uses deductive reasoning. This approach aims to test hypotheses, created from theories and previous literature (6 & Bellamy, 2012). Moreover, the study aims to explore and determine whether or not the predetermined statements can be confirmed. For the researcher to prove the hypothesis, information is taken from the results of the research and a conclusion may

then be made (6 & Bellamy, 2012). Furthermore, 6 & Bellamy (2012) present one significant advantage of the deductive method, referring to the use of previous research as a basis of the study. This advantage is very useful when conducting this thesis, as there is limited time and resources provided, making the deductive approach the most suitable option.

3.3 Research Design

The research design is based on an observational quantitative strategy. This entails that the researchers do not intervene or manipulate any variables but merely observe the relationship between the dependent and independent variables (6 & Bellamy, 2012). This research design is according to 6 & Bellamy (2012) optimal in cases when the researcher is exploring an area that involves an element of interpretation. 6 & Bellamy (2012) explains that an observational method is appropriate when the phenomenon explored occurs in everyday life, and therefore cannot be controlled or manipulated because of the large number of relational factors that come.

Furthermore, the study is quantitative as the results will be analysed using statistics with the help of SPSS, to determine whether the presented hypothesis can be accepted or rejected. Because of the statistical nature of this research one could say that it falls in the category of Variable Oriented Research (VOR) (6 & Bellamy, 2012). VOR seeks to create, collect and categorise data to find and explore the relationship between the independent and dependent variables (6 & Bellamy, 2012). In this case, the independent variables are *Greenwashing*, *Femvertising*, *Healthwashing*, and *Gender*, and the dependent variable is “*Intention to purchase*”. The effect of the chosen independent variables on purchase intention will be explored. VOR aims to be able to make larger generalisations about a grander population (6 & Bellamy, 2012), which is also the aim of this study.

3.4 Sampling Method/ Strategy

Considering the limited time and resources available when conducting this study, the most suitable sampling method was concluded to be a nonprobability sampling method. More specifically, a convenience sampling method. The basic premise of the convenience sampling method is to simply gather data from respondents who are conveniently accessible (Bryman,

2012). The survey was shared on our private social media feeds on Facebook and was open for respondents for 48 hours, to get enough responses.

However, the nonprobability sampling method has received criticism for not being generalisable to a larger population (Bryman, 2012). As a result of this sampling method's subjective nature, Bryman (2012) presents the risk for under- or over-representation of the population. These factors may have a negative impact on the scientific validity of the study. To guarantee the generalisability of this research, Tabachnick, and Fidells (2007) formula for calculating sample size was used. The formula is defined as follows; $N > 50 + 8m$. This formula is commonly used as a guideline for determining the appropriate sample size with scientific value when conducting multiple regression analyses in scientific research. N determines the number of participants, while m defines the number of independent variables. As this case contains 4 independent variables, $N > 50 + 8 \times 4$, the result is $N > 82$. In summary, for our sample size to be of scientific value the number of participants should be over 82.

3.5 Data Collection

The applied data collection method is a quantitative web survey. Conducting a web survey allows the researcher to effectively distribute the survey as well as allowing for flexibility in collection possibilities (Trost & Hultåker, 2016). As well as this, the web survey was created with the tool Google Forms, as it allows for an interactive survey where respondents whose answers are irrelevant to the survey can be filtered and excluded. This allows for a sorting process to limit the data to only the most relevant.

The survey consisted of 5 sections, as well as an introductory section explaining the purpose of the survey, the creators of the survey, which institution and university the researchers represent, as well as addressing the anonymity of the survey takers. Following the survey introduction, a section regarding the demographic characteristics (age, gender and location) of the respondents was included. The questions of location and age in the section of demographics was used with the aim to sort out data from respondents that were outside the chosen target group, including respondents currently residing outside of Sweden, as well as respondents over the age of 35.

Following the demographic section of the survey, the respondents are exposed to ads from ZYN and VELO's Instagram pages. The following sections of the survey were constructed

in accordance with the parts of the model that provides the basis of the thesis; Intention to Purchase, Femvertising, Greenwashing, and Healthwashing.

The entirety of the survey questions is formulated as per the Likert Scale. The Likert scale allows the respondent to choose an answer based on a scale based on the level of agreement with the aforementioned statement (Troost & Hultåker, 2016). A Likert scale can be based on five or seven levels of agreement ranging from “*disagree completely*” to “*agree completely*” (Troost & Hultåker, 2016). In the case of this study, a Likert scale based on five levels of the agreement was used. Furthermore, a numerical value is assigned to each level of agreement, in this case from one-five, which can then be summated to achieve quantifiable results (Troost & Hultåker, 2016).

3.6 Collection of Graphic Material

In order to measure the survey respondents perceptions of marketing material from ZYN and VELO, the survey included examples of posts collected from each of the brands Swedish Instagram page, (@zyn_sverige & @velo.sweden). The photos chosen were seen to be somewhat related to the chosen marketing strategies, Femvertising, Healthwashing, Greenwashing and Gender, without being too conspicuous as to not reveal too much of the aim of the study and therefore affect the results.

Three photos were chosen from each Instagram account. The main reasoning behind this was for each picture to somewhat correlate to one of the main strategies/focus points explored in the study. Moreover, collecting more than three pictures per brand could potentially be an excessive amount, and result in confusion among the respondents. The chosen images were presented before the questions regarding perceptions were asked. This was done to ensure that the impressions were directly related to the marketing material presented, and therefore related to the main focus areas of the study. As previously mentioned, the graphic material was collected from the Swedish Instagram accounts of both companies. Both companies have international accounts, @velo.global, @zyneurope, and @zyn_usa, all targeting the global market. However, these accounts were excluded from this study as it intends to explore Swedish consumers.

3.7 Ethical Considerations

When conducting a survey there are several ethical responsibilities to take into consideration. This includes ensuring the anonymity of the respondents, this factor could be considered especially important when the survey collects data about the respondent's personal opinions. The anonymity of the participants must be protected as well as the equally significant aspect of confidentiality of answers. Another key aspect is to maintain transparency with what the data will be used for. (Bryman, 2012). Thus, in the reporting of the data, the survey takers will be completely unidentifiable, and the data will be numerically represented. The survey opens with an informative section where anonymity and confidentiality is explained, as well as a description of the survey. Furthermore, in the introduction section of the survey there is a clear statement of what the answers will be used for and who the respondents can contact should they have any questions. In addition, Bryman (2012) explains that providing information of this sort offers the participants enough knowledge about the survey to make an informed decision about whether or not they would like to participate. Providing this information ensures that all participants are consensually partaking in the study. As per Bryman's (2012) suggestions, the participants have been provided with the information that the data collected will only be kept for the duration of the bachelor thesis.

3.8 Analysis Method

The chosen method of analysis for this research is a multiple regression analysis (MRA). MRA is most appropriate for studies in which the initial variables are quantitative (Djurfeldt., Larsson & Stjärnhagen, 2018), which is the case in this study. MRA is a set of statistical techniques that are based on correlation (Jeon, 2015). An MRA aims to observe to which extent the variation in the dependent variable is a result of one or more of the independent variables (Jeon, 2015). In addition, performing an MRA allows the researcher to predict the value or outcome of the dependent variable from the values of the independent variables (Jeon, 2015).

Since this study intends to find and observe the effect of the perception of the chosen communication techniques on the intention to purchase, an MRA was declared to be the most suitable option. Furthermore, the predictive nature of the MRA may provide interesting and valuable observations for the future.

To analyse the results, the responses were coded into numerical values per the Likert scale, Disagree completely = 1 - Agree completely = 5. Additionally, gender was coded by assigning the value 1 to female respondents and 0 to male respondents, with the intention to test the hypothesis.

To further examine the variables, a bivariate analysis was done for each individual variable to see the relationship between these and the dependent variable. To further examine this relationship a Partial Correlation test was performed in order to observe the effect of each variable whilst controlling for the effect of another variable (Pallant, 2010).

3.9 Methodological delimitations

This study aims to examine in what ways marketing white nicotine-pouches affect consumers' purchase intention. As previously mentioned, the examples used were collected from the two brands ZYN and VELOs' marketing communications on Instagram. These were published from their Swedish accounts as the survey is limited to respondents living in Sweden. Furthermore, the survey is aimed at the ages 18-35. This age group was selected based on the knowledge that this part of the population is the most frequent consumer and user of snus and tobacco-free nicotine pouches (Snusbolaget, 2020). However, these factors limit the result's applicability to other demographic variables.

As previously mentioned, a convenience sampling method was used as a result of limited time and resources when conducting this research. When applying a convenience sampling method there are certain aspects to be considered. It is important to beware of the implications of ensuring as to which population the data collected is representative of. Therefore, it is rare to be able to generalise the findings from research with this sampling method (Bryman, 2012). The survey was posted on our personal Facebook pages in order to reach a greater number of people, although this, in turn, can lead to homogeneity among the respondents. Another aspect of web surveys to consider is the individual responsibility of the population to answer the survey, and do so in a correct manner (Djurfeldt, Larsson, & Stjärnhagen, 2018). This can create fallout that is hard to control which in turn can harm the validity of the research.

This study is based upon a variable-oriented research design. When performing this type of research, it is crucial to specify and carefully select variables that are of relevance to the aim of the study. The variable-oriented research design has been criticised within the social sciences

field for simplifying phenomena and reducing complex cases in order to answer hypotheses, not accounting for all factors (Bryman, 2012). Using a deductive method can limit the extent of the research as it is conducted based upon hypotheses and therefore only investigates a limited number of variables. Therefore, there is a risk that the research fails to consider other variables that might be of interest when concluding a phenomenon (Bryman, 2012).

To observe the perception of the chosen communication techniques, graphic material was chosen from each of the Instagram accounts of ZYN and VELO. Three images were chosen from each account. As previously mentioned, the material was only taken from the Swedish accounts as this study is aimed at Swedish consumers. Both companies have international Instagram accounts with slightly different marketing that is also useful in this case but was excluded as this communication material is aimed at a far broader, international audience.

4. Result and Analysis

This chapter will present the results from the collected data. As previously mentioned, the chosen method of analysis is multiple regression analysis. Firstly, the demographic variables are presented. Further, the descriptive statistics, as well as the results of the reliability, will be displayed and explained. Lastly, the results from the MRA will be presented, including the Pearson's correlations test, R-square value and ANOVA, as well as the normal probability plot. The analysis will be presented and explained throughout this chapter.

4.1 Demographic variables

		Frequency	Percentage
Gender	Female	94	82,5%
	male	19	16.7%
	Other	1	0.9%
Age	18-22	13	11,4%
	23-26	87	76,3%
	27-30	8	7%
	31-35	0	0%
	35+	6	5,3%
Location	Sweden	112	98,2%
	Outside of Sweden	2	1,8%

Table 4. *Display of the demographic variables, frequency, and procentual distribution*

The demographic section of this survey presents information about the sample's age, gender as well as location, inside or outside of Sweden. Of the 115 responses, 107 were valid and used in this study. Excluded answers were those older than 35, the gender “other” and those living outside of Sweden. Through analysis, it becomes apparent that there is an

overrepresentation of survey respondents identifying as “female”, making up 82.5% of the respondents. 76.3% of the respondents were between the ages of 23-26, making this age group significantly more represented than the other age groups included in the survey. 98.2% of the respondents were located in Sweden, making the number of respondents that we needed to exclude relatively small. Furthermore, the gender group “other” was excluded from the survey as there was only one respondent in this category making it too small to make any inferences about. Furthermore, as the intention is to explore men and women, the option of “other” was not relevant.

4.2 Descriptive statistics

4.2.1 Mean and Standard deviation

In order to create a better understanding of the data set it is useful to observe the descriptive statistics of the data. The mean and standard deviation provides an overview of the responses and the tendencies of these. Hinton, McMurry & Brownlow (2014) explain that descriptive statistics provide accurate and summarised information about the data. In the table below (table 5) the means and standard deviations for each independent variable are presented. From this information, it can be observed that Perceived Femvertising has the highest mean (3.515). In addition, Perceived Femvertising showed a standard deviation of 0.687, suggesting that this variable had the most responses at a higher end of the scale. In the Likert scale that was used, a mean of 3.515 represents an answer between “neither agree nor disagree” and “agree somewhat”. The variable Gender has the lowest mean, the explanation for this could be that there were four options within this question (Female, Male, Other and prefer not to say). Of the 107 valid answers, only respondents identifying as male and female were recorded and used in the study. The values for males and females were coded in SPSS as Female (1) and Male (0). As the majority of respondents are female, this explains the mean value of 0.84.

Of the questions measured on a Likert scale, Perceived Greenwashing has the lowest mean (1.911) and a standard deviation of 0.711. This corresponds to between Disagree completely (1) and Disagree somewhat (2). Perceived Healthwashing has a mean of 2.086 and a standard deviation of 0.664. This corresponds with an average answer lying between Disagree

somewhat and neither agree nor disagree. The standard deviation provides information regarding how the answers deviate from the mean. The standard deviations are between 0.369 - 0.711.

	Femvertising	Greenwashing	Healthwashing	Gender
Mean	3.515	1.911	2.086	0.84
Standard Deviation	0.687	0.711	0.664	0.369

Table 5: Means and standard deviations for each individual variable used in this study.

4.3 Reliability analysis

4.3.1 Internal Consistency

	Cronbach's Alpha (Cronbach's Alpha if item deleted)	Number of items (items included)
Femvertising	0.660 (0.703)	4 (3)
Greenwashing	0.900	4
Healthwashing	0.386	4
Gender	-	1

Table 6. Presentation of all variables Cronbrach's alpha values and mean inter-item correlation values as well as the total number of items associated with each variable.

A reliability test was done on the independent variables to observe the Cronbach's Alpha value within these groups. The independent variables each include values between 1-5 (1 = disagree completely, 2 = disagree somewhat, 3 = neither agree nor disagree, 4 = agree somewhat, 5 = agree completely) and the individual items for each variable were combined and a mean was found in order to make an *index variable* for each independent variable. The table above (see table 6) displays the Cronbach's Alpha values of each variable, originally the value for Perceived Femvertising was below 0.7 which is considered the lowest acceptable value for Cronbach's Alpha (Pallant, 2010). To resolve this problem, Cronbach's alpha value for Perceived

Femvertising was increased by removing one item concerning the representation of women in the advertising of white nicotine pouches. The same procedure was not done for Healthwashing as excluding items from this section would not increase Cronbach's alpha to an acceptable level.

4.3.2 Multicollinearity Test

	Tolerance	VIF
Femvertising	0.718	1.392
Healthwashing	0.870	1.149
Greenwashing	0.722	1.384
Gender	0.911	1.098

Table 7. Tolerance and VIF values of each independent variable.

A Multicollinearity test was performed in order to observe the relationship between the independent variables. Multicollinearity occurs when independent variables have a high correlation with each other, suggesting that they may be measuring the same phenomenon (Pallant, 2010). Pallant (2010) explains that multicollinearity is not suited for an MRA. Multicollinearity can be observed via the Tolerance and VIF values. Pallant (2010) explains that the tolerance values should exceed 0.10 to indicate a lack of Multicollinearity. All variables exceed this value which we can observe in the table above. Furthermore, the VIF values should be lower than 10, which is also the case for the variables used in this study (Pallant, 2010). Therefore, we can conclude that the chosen variables are not highly correlated with one another.

4.4 Multiple regression analysis

4.4.1 Pearson's Correlation

Variable	Purchase Intention	Femvertising	Greenwashing	Healthwashing	Gender
Purchase intention	1.000	0.229	0.199	-0.047	0.229
Femvertising	0.229	1.000	0.464	0.215	0.258
Greenwashing	0.199	0.464	1.000	0.337	0.031
Healthwashing	-0.047	0.215	0.337	1.000	-0.075
Gender	0.229	0.258	0.031	-0.075	1.000

Table 8. Pearson's correlation is presented for each independent variable and the dependent variable. The correlation between the independent and dependent variable is highlighted in grey.

Pearson's correlation is a measure of to which extent variables fluctuate together as well as the strength of the correlation. Furthermore, Pearson's correlation is also a method to control Multicollinearity. If two variables show a correlation value of above 0.8, this suggests that they are highly correlated and can indicate Multicollinearity (Hinton, et.al., 2014). The table above shows the correlation between the independent variables and the dependent variable. There is a correlation between these variables, however, it is very small, ranging from -0.047 to 0.229.

4.4.2 R Squared & ANOVA

An ANOVA test measures the effect of independent variables on the variance in scores. The ANOVA test (see table 9) allows us to observe if the variance in the observed scores is a result of the experimental manipulation or a result of chance. This allows us to decipher if the model is statistically significant (Hinton et. al. 2014). The ANOVA test is a representation of the statistical significance of the model as a whole. Pallant (2010) explains that for a model to be statistically significant there needs to be a value of $p < 0.05$. Our model shows a p-value of 0.036, indicating that the model as a whole can be regarded as statistically significant. The residuals represent to which extent the data varies from the mean, the model below shows a value of 185.135.

Model: Anova	Sum of Squares	Sig.
Regression	20.604	0.036
Residual	164.531	
Total	185.135	

Table 9. ANOVA table.

R-square is an indicator of to which extent the model is an explanation for the variation in the dependent variable (Pallant, 2010). The R square values are presented in the table below (see table 10). Pallant (2010) explains that in a smaller study, such as this one, a more accurate representation of this can be found by looking at the adjusted R squared value, hence why this number is used in this study. The adjusted R square value reported is 0.079, which shows that 7.9% of the variance in the dependent variable can be explained by our proposed model. From this value, we can discern that a very small portion of the variance can be explained by our proposed model.

Model	R-Square	Adjusted R Square	Sig.
	0.109	0.079	0.036

Table 10. Presentation of the R Square and Adjusted R Square for the model as a whole.

4.4.3 Normal Probability Plot

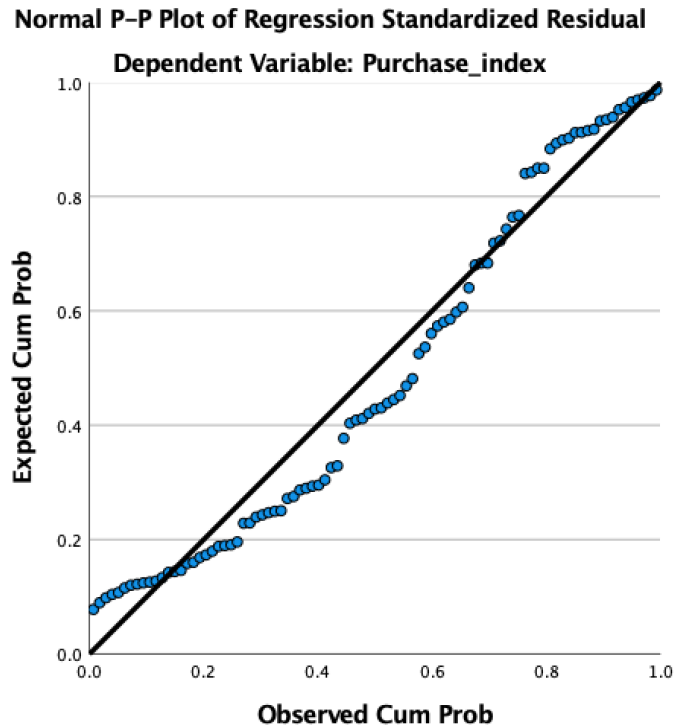


Table 11. Visual representation of the normality of the recorded responses.

A Normal Probability plot is a visual representation of normality and how the recorded scores align with or deviate from normality (Pallant, 2010). Pallant (2010) explains that researchers should hope for a Normal Probability plot that is reasonably aligned with normality.

4.5 Adjustments of hypotheses

As a result of being unable to confirm any of the initial hypotheses (see table 46), we decided to further explore the variables by combining and excluding certain variables and items. Perceived Healthwashing and Greenwashing were combined and an MRA was done with this new variable. Furthermore, an item was removed from Greenwashing as the Cronbach's alpha value was extremely high and in order to observe if this was affecting the results an MRA was performed without the item "I get the impression that ZYN and VELO are sustainable companies".

4.5.1 Adjusted Internal Reliability Analysis: Combining Healthwashing and Greenwashing

	Cronbach's Alpha (Value if item deleted)	Number of items (number of items included)	Mean inter-item correlation
Femvertising	0.669 (0.712)	4 (3)	0.314
Healthwashing/ Greenwashing	0.757	8	0.465
Gender	-	1	-

Table 12. Cronbach's alpha for each adjusted variable as well as Cronbach's alpha if an item is deleted. As well as the total number of items and the number of items included in the study.

4.5.2 Adjusted Internal Reliability Analysis: Excluding Healthwashing

	Cronbach's Alpha (Cronbach's Alpha if item deleted)	Number of items (items included)
Femvertising	0.660 (0.703)	4 (3)
Greenwashing	0.900	4
Gender	-	1

Table 14. Cronbach's alpha for each adjusted variable as well as Cronbach's alpha if an item is deleted. As well as the total number of items and the number of items included in the study.

4.5.3 Adjusted Internal Reliability Analysis: Excluding one item from Greenwashing and Healthwashing as a variable.

	Cronbach's Alpha (Cronbach's Alpha if item deleted)	Number of items (items included)
Femvertising	0.660 (0.703)	4 (3)
Greenwashing	0.900 (0.841)	4 (3)

Gender

-

1

Table 15. Cronbach's alpha for each adjusted variable as well as Cronbach's alpha if an item is deleted. As well as the total number of items and the number of items included in the study.

The models above (tables 13,14 & 15) present the Cronbach's alpha values for the various trials including the combination of variables Perceived Greenwashing and Perceived Healthwashing, the exclusion of Perceived Healthwashing as Cronbach's alpha was too low and removing an item from Greenwashing.

Combining Greenwashing and Healthwashing led to an increase of Cronbach's alpha to 0.757. Removing an item from Greenwashing brought the Cronbach's alpha from the extremely large value of 0.900 to 0.841.

As we can see, Gender is not able to produce a Cronbach's alpha value as this variable consists of only one item, therefore we were unable to measure the internal reliability.

Items	Cronbach's Alpha if item deleted
GW1	0.681
GW2	0.685
GW3	0.703
GW4	0.691
HW1	0.761
HW2	0.739
HW3	0.772
HW4	0.793

Table 16. Cronbach's alpha for each item within the merged variables Perceived Greenwashing and Perceived Healthwashing.

4.5.4 Internal reliability: Greenwashing

Items	Cronbach's Alpha if item deleted
GW1	0.841
GW2	0.859
GW3	0.903
GW4	0.873

Table 17. Internal reliability for each item within Perceived Greenwashing

4.5.5 Adjusted Pearson's correlation: Combining Healthwashing and Greenwashing

Variable	Purchase Intention	Femvertising	Greenwashing/ Healthwashing	Gender
Purchase intention	1.000	0.269	0.142	0.223
Femvertising	0.269	1.000	0.406	0.227
Greenwashing/ Healthwashing	0.142	0.406	1.000	-0.010
Gender	0.223	0.227	-0.010	1.000

Table 18. Presentation of the correlation coefficient between each independent variable, as well as the dependent variable, presented with Pearson's correlation coefficient. The values of importance are highlighted in grey.

4.5.6 Adjusted Pearson's Correlation: Excluding Healthwashing

Variable	Purchase Intention	Femvertising	Greenwashing	Gender
Purchase intention	1.000	0.229	0.199	0.229
Femvertising	0.229	1.000	0.464	0.258

Greenwashing	0.199	0.464	1.000	0.031
Gender	0.229	0.258	0.031	1.000

Table 19. Presentation of the correlation coefficient between each independent variable, as well as the dependent variable, presented with Pearson's correlation coefficient. The values of importance are highlighted in grey.

4.5.7 Adjusted Pearson's Correlation: Excluding one item from Greenwashing and Healthwashing as a variable

Variable	Purchase Intention	Femvertising	Greenwashing	Gender
Purchase intention	1.000	0.229	0.199	0.229
Femvertising	0.229	1.000	0.464	0.258
Greenwashing	0.199	0.464	1.000	0.031
Gender	0.229	0.464	0.031	1.000

Table 20. Presentation of the correlation coefficient between each independent variable, as well as the dependent variable, presented with Pearson's correlation coefficient. The values of importance are highlighted.

From the tables above (see table 18,19 & 20) it can be observed that there is a linear correlation between the dependent variable (Purchase Intention) and the independent variables. However, the correlations, in these cases, are not very strong. Pallant (2010) explains that a value of 0.3 or higher can be regarded as a strong linear correlation. These results suggest that there is some relationship between the variables.

4.6 Adjusted Multiple Regression Analysis

4.6.1 Adjusted ANOVA: Combining Healthwashing and Greenwashing

Model: Anova	Sum of Squares	Sig.
Regression	19.555	0.021
Residual	170.065	
Total	189.611	

Table 21. ANOVA table.

4.6.2 Adjusted ANOVA: Excluding Healthwashing

Model: Anova	Sum of Squares	Sig.
Regression	19.845	0.019
Residual	165.289	
Total	185.135	

Table 22. ANOVA Table

4.6.3 Adjusted ANOVA: Excluding one item from Greenwashing and excluding the variable Healthwashing

Model: Anova	Sum of Squares	Sig.
Regression	18.303	0.028
Residual	166.831	
Total	185.135	

Table 23. ANOVA Table

The ANOVA tables above show the significance as well as the sum of squares for the adjusted models. The P-value is under 0.05 in all cases (see tables, 21, 22 & 23), showing that these models, like the original model, show statistical significance. The sum of squares in these models

are higher than the previous model showing that the data deviates from the mean slightly more than the previous model.

4.6.4 Adjusted Multicollinearity Test: Combining Healthwashing and Greenwashing

	Tolerance	VIF
Femvertising	0.782	1.279
Healthwashing/Greenwashing	0.824	1.213
Gender	0.936	1.069

Table 24. A table presenting the Tolerance and VIF values for each of the variables

4.6.5 Adjusted Multicollinearity Test: Excluding Healthwashing

	Tolerance	VIF
Femvertising	0.731	1.368
Greenwashing	0.783	1.278
Gender	0.924	1.082

Table 25. A table presenting the Tolerance and VIF values for each of the variables

4.6.6 Adjusted Multicollinearity Test: Excluding one item from Greenwashing and excluding the variable Healthwashing

	Tolerance	VIF
Femvertising	0.725	1.378
Greenwashing	0.923	1.083
Gender	0.777	1.288

Table 26. A table presenting the Tolerance and VIF values for each of the variables

Multicollinearity tests were performed to observe the relationship between the independent variables. Multicollinearity occurs when there is a strong correlation between variables (Pallant, 2010). When doing a multiple regression analysis, multicollinearity poses a threat as ideally the independent variables should not be correlated as they should measure different phenomena (Pallant, 2010). In the tables above (see tables 24, 25 & 26) the lack of multicollinearity is displayed using the Tolerance and VIF values. The tolerance value indicates to which extent the spread of the independent variable is not caused by the other independent variables (Pallant, 2010). Pallant (2010) explains that a tolerance value below 0.10 indicated that there *is* a correlation with other independent variables, which in turn suggests that there may be a risk of multicollinearity. Furthermore, VIF (Variance inflation factor), is another measure of multicollinearity. Pallant (2010) suggests that VIF values higher than 10 are an indication of multicollinearity.

In the tables above the tolerance values of all variables exceed 0.10. Suggesting that our independent variables are indeed independent and are not correlated with each other. Furthermore. The VIF values are significantly less than what Pallant (2010) suggests is high (10) and therefore a sign of the absence of multicollinearity. This suggests that we can with some confidence say that the independent variables are independent of each other, which in turn allows us to better observe the relationship between the dependent variable and each independent variable.

4.6.7 Adjusted Coefficients: Combining Healthwashing and Greenwashing

Independent variable	Standardised Coefficients Beta	Sig.
Femvertising	0.204	0.076
Healthwashing/ Greenwashing	0.061	0.584
Gender	0.178	0.091

Table 27. Presentation of the coefficients, including the β - and p - values for each independent variable.

4.6.8 Adjusted Coefficients: Excluding Healthwashing

Independent variable	Standardised Coefficients Beta	Sig.
Femvertising	0.098	0.413
Greenwashing	0.174	0.131
Gender	0.198	0.063

Table 28. Presentation of the coefficients, including the β - and p- values for each independent variable.

4.6.9 Adjusted Coefficients: Excluding one item from Greenwashing and Healthwashing as a variable

Independent variable	Standardised Coefficients Beta	Sig.
Femvertising	0.113	0.349
Greenwashing	0.196	0.225
Gender	0.141	0.068

Table 29. Presentation of the coefficients, including the β - and p- values for each independent variable.

To test the impact of each independent variable on the dependent variable, the p-value was calculated. According to Pallant (2010), the p-value is preferred to assume a value of $p < 0.05$ to show statistical significance. As presented in the charts above (see tables 27, 28 & 29), none of the independent variables proved to have the desired p-value. Therefore, the conclusion can be

drawn that none of the independent variables have a statistically significant impact on the dependent variable.

By looking at the Standardised coefficients β -values, we can see which of the independent variables has the most effect on the dependent variable. Pallant (2010) explains that the construct with the highest β -value holds the most impact on the dependent variable. In our case, the highest β -value in table 27 is Femvertising, at 0.204. In table 28 Gender displays the highest β -value at 0.198 and in table 29 Greenwashing produced the highest β -value 0.196.

4.6.10 Adjusted R-square: Combining Healthwashing and Greenwashing

Model	R-Square	Adjusted R Square	Sig.
	0.103	0.073	0.021

Table 30. R-square, Adjusted R-square, and significance of the adjusted model.

4.6.11 Adjusted R-Square: Excluding Healthwashing

Model	R-Square	Adjusted R Square	Sig.
	0.107	0.076	0.019

Table 31. R-square, Adjusted R-square, and significance of the adjusted model.

4.6.12 Adjusted R-Square: Excluding one item from Greenwashing and Healthwashing as a variable

Model	R-Square	Adjusted R Square	Sig.
	0.099	0.068	0.028

Table 32. R-square, Adjusted R-square, and significance of the adjusted model.

The adjusted R-square, which as previously mentioned can be used in this study as the sample size is very small, suggests that 7.3% of the variation in the independent variable, Intention to Purchase can be explained by the dependent variables used. Unfortunately, combining two variables did not increase the explanatory power of this model.

By excluding Perceived Healthwashing the adjusted R-squared shows a value of 0.076. This suggests that 7.3% of the variation in the independent variable is a result of the independent variables. Excluding one item from Perceived Greenwashing and the variable Healthwashing produces an adjusted R-square value of 0.068, which in turn indicates that 6.8% of the variation in the dependent variable is due to the independent variables.

4.7 Comparison of Means between Genders

The following section includes a description and comparison of means between the genders male and female in regards to Purchase intention.

4.7.1 Gender and Purchase Intention

To further observe the relationship between Gender and Purchase Intention a frequency analysis was performed. The graph below (see table 33) illustrates that there is a significant difference in the average Purchase Intention between men and women. The male respondents show a tendency toward the lower end of the scale, representing a lower Purchase Intention. On the contrary, the same graph (see table 33) further demonstrates a much higher Purchase Intention among women.

In addition, the responses display a much larger spread among the female respondents, as well as a higher frequency of answers at the middle and higher end of the scale.

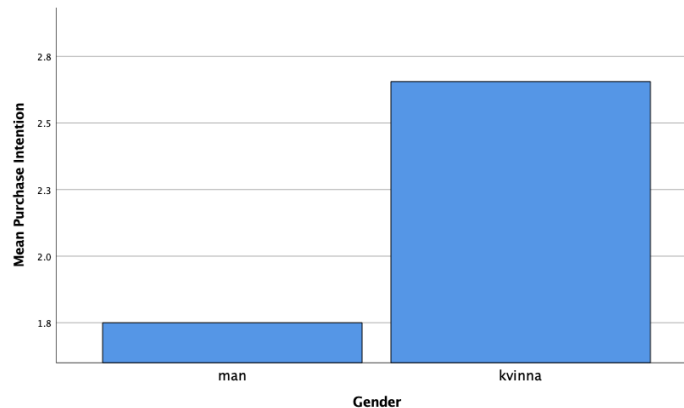


Table 33. Visual representation of the difference in mean purchase intention among male and female respondents.

The results from the comparison of means previously presented imply that gender could have an impact on the way that the chosen washing effects are interpreted, which subsequently affects the

Intention to Purchase. However, it must be noted that the Purchase Intentions of the male participants were heavily concentrated at the lower end of the scale, whilst the Purchase Intention of the female participants had a larger spread and a larger frequency of answers at the middle and higher end of the scale. This contributes to the higher average Purchase Intention that can be observed in the table above (see table 33).

As previously mentioned, when looking at the comparison of means in relation to Purchasing Intention, women have a higher average. This result suggests that women are more likely to purchase and continue to purchase white nicotine pouches. Although, one must take into account that both the averages are still on the lower portion of the used Likert scale. The average for women lies between “neither agree nor disagree” and “disagree somewhat” which in itself does not imply a likely Intention to Purchase. Although, it should be noted that a large number of female participants choose the highest option (agree completely) in relation to Purchase Intention.

When looking at the comparison of means, although women score higher in this regard, the results still don't suggest a likelihood to purchase or continue purchasing. This could be the result of the participants not being consumers of white nicotine pouches and would therefore not submit a likelihood to purchase regardless of Perception of Femvertising, Greenwashing, Healthwashing or Gender. These low averages could also be explained by the questions in this section of the survey being misunderstood or interpreted in a different way to the original intention.

Regarding Perception of Healthwashing, according to Heiss, et al., (2020) consumers who are more educated on the topic are less susceptible to Healthwashing techniques. As the chosen sampling method, convenience sampling makes it very difficult to characterise the respondents

This could be the case in this study. Because snus and tobacco products have been sold in Sweden for centuries (Swedish Match, 2020), today's consumers in Sweden are well aware of the health risks of these products which may make them less likely to “fall for” these kinds of communication techniques.

Furthermore, because of the presence of online tools that help consumers become aware of Greenwashing (such as the Greenwashing Index) and the general awareness of Greenwashing methods, these marketing strategies may not be as effective on the consumers of today. This in

turn could be an explanatory factor as to why these variables, both separately and combined, have a low effect on purchase intention.

4.8 Bivariate Analysis and Partial Correlation Analysis

Hypotheses	Effect	Sig.
H1	FV->PI	0.009
H2	GW/HW->PI	0.142
H3	G->PI	0.027

Table 34. Presentation of significance as found through a Bivariate analysis.

The results of the MRA did not yield any significant results. Because of this, we chose to further examine the variables by conducting a bivariate analysis. By performing bivariate analysis on each independent variable and the dependent variable, the p-value is altered on each individual variable. H1 and H3 proved to reach significant values, H1: $p= 0.009$ and H3 $p= 0.027$. Significance of each variable decreases when the remaining independent variables are added to the model. This may suggest that Greenwashing/Healthwashing, Femvertising, and Gender have a negative effect on the impact of each individual variable when combined. Furthermore, a Partial Correlation Analysis was conducted in order to see if any variables were influencing the other variables in the study, and in turn affecting the statistical significance. When performing partial correlation analysis on the variables gender_female and purchase intention, controlling for the variable Femvertising, a substantial negative effect on correlation was found. When performing the same analysis but on the variables green_health and purchase intention, controlling for Femvertising, it became apparent that the variable Femvertising had a negative effect on correlation in this case as well. This fact indicates that the independent variable Femvertising influenced the relationships between the remaining independent variables and the dependent variable. Femvertising in this case may be interacting with other variables and affecting statistical significance.

Fem	Effect	Correlation	Sig.
H2	GW/HW->PI	0.142→.0.037	0.162→0.726
H3	G->PI	0.223 →0.173	0.27→0.099

Table 35. Presentation of the results of the Partial Correlation Analysis.

This could perhaps be explained by the small amount of data collected. According to Bryman (2012), multiple regression analysis can be misleading when performed on smaller sample sizes. The result of the partial correlation analysis could be a result of the overrepresentation of women in the sample, as Femvertising is a technique targeted at women.

4.9 Final adjustments and Multiple Regression Analysis

As the partial correlation analysis shows, the independent variable Perceived Femvertising had an impact on the other variables. It was, therefore, important to perform MRAs excluding this variable. Therefore, two separate MRAs were conducted, the first one testing Greenwashing and Gender in relation to the dependent variable Intention to Purchase (see table 48), and the other testing the independent variables Greenwashing/Healthwashing and Gender in relation to the dependent variable (see table 49). These results both showed significant values for the relationship between Gender and Intention to Purchase.

4.9.1 Multiple Regression Analysis: Perceived Greenwashing and Gender

4.9.1.1 Multicollinearity

	Tolerance	VIF
Greenwashing	0.998	1.002
Gender	0.998	1.002

Table 36. A table presenting the Tolerance and VIF values for each of the variables

As the Tolerance value is above 0.10 and the VIF value is lower than ten, the results of the multicollinearity performed on the independent variables Greenwashing and Gender indicate that there is no risk for multicollinearity.

4.9.1.2 Pearson's Correlation

Variable	Purchase Intention	Greenwashing	Gender
Purchase intention	1.000	0.219	0.223
Greenwashing	0.219	1.000	0.039
Gender	0.223	0.039	1.000

Table 37. Pearson's correlation presented for each independent variable and the dependent variable. The correlation between the independent and dependent variable is highlighted in grey.

Pearson's Correlations was measured in order to further investigate the correlation between the variables. The table presented above illustrates the investigated value of Pearson's correlation. As none of the variables presented a value over 0.8 (0.219 and 0.223), there is no risk for multicollinearity.

4.9.1.3 R-squared

Model	R-Square	Adjusted R Square	Sig.
	0.094	0.075	0.009

Table 38. Presentation of the R Squared and Adjusted R Square for the model as a whole.

As mentioned in previous chapter (see 4.4.2), the value of R square is used as an indication of to which extent the model is an explanation for the variation in the dependent variable. Through this MRA the results were reported as follows: R squared= 0.094 and adjusted R squared 0.075. As the most accurate representation in smaller samples is provided by calculating the adjusted R square value, the result presents that 7.5% of the variance in the dependent variable can be explained by the model applied. This indicates that a small part of the variance can be explained by the used model.

4.9.1.4 Anova

Model: Anova	Sum of Squares	Sig.
Regression	18.865	0.009
Residual	181.052	

Total 199.916

Table 39. ANOVA table

The table above provides the results from the Anova test. These results show the statistical significance of the model (p= 0.009).

Independent variable	Standardised Coefficients Beta	Sig.
Greenwashing	0.211	0.033
Gender	0.215	0.030

Table 40. Presentation of standardised β coefficients and significance of each variable.

When testing the significance of these two variables in the absence of Femvertising, which proved to affect the other variables, we can see that both Greenwashing and Gender display a statistically significant result. The β -value provides information regarding the individual impact of each variable (Pallant, 2010). In this case, Gender shows a marginally higher β -value (0.215) than Greenwashing (0.211).

4.9.2 Multiple Regression Analysis: Perceived Greenwashing/Healthwashing and Gender

4.9.2.1 Multicollinearity

	Tolerance	VIF
Greenwashing/Healthwashing	1.000	1.000
Gender	1.000	1.000

Table 41. A table presenting the Tolerance and VIF values for each of the variables

As mentioned above, when doing an MRA multicollinearity is not preferred (Pallant, 2010). In this case we can determine from the Tolerance and VIF values that there is no risk of multicollinearity as Tolerance is above 0.10 and VIF is below 10.

4.9.2.2 Pearson’s Correlation

Variable	Purchase Intention	Greenwashing/	Gender
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	Healthwashing		
Purchase intention	1.000	0.142	0.223
Greenwashing/health washing	0.142	1.000	-0,010
Gender	0.223	-0.010	1.000

Table 42. Pearson's correlation presented for each independent variable and the dependent variable. The correlation between the independent and dependent variable is highlighted in grey.

The table above (see table 42) displays Pearson's correlation for each of the variables used in the MRA. As previously mentioned Pearson's correlation is a measure of correlation between variables (Hinton, et. al., 2019). If the correlation displays a value above 0.8 it can be said that the variables are highly correlated, which is not the case for the variables above. This in turn suggests that there is an absence of multicollinearity.

4.9.2.3 R-squared

Model	R-Square	Adjusted R Square	Sig.
	0.071	0.051	0.031

Table 43. Presentation of the R Squared and Adjusted R Square for the model as a whole.

As previously mentioned, the Adjusted r-squared value is appropriate in studies with small sample sizes. For this model the adjusted r-square is 0.051 meaning that 5.1% of the change in the dependent variable is a result of the dependent variables.

4.9.2.4 Anova

Model: Anova	Sum of Squares	Sig.
Regression	14.115	0.031
Residual	185.802	
Total	199.916	

Table 44. ANOVA table

The table above (see table 44) shows that the model itself is statistically significant ($p=0.031$). The sum of squares displays the variance in the results, which in this case is 199.916.

Independent variable	Standardised Coefficients Beta	Sig.
Greenwashing/Healthwashing	0.144	0.149
Gender	0.225	0.025

Table 45. Presentation of standardised β coefficients and significance of each variable.

When observing the β -value and significance of the MRA conducted with these two variables we can observe that Perceived Greenwashing/Healthwashing does not produce a significant result and we can therefore not make any assumptions in relation to this variable's effect on Purchase Intention. Gender however does produce significant results in the absence of Femvertising ($p=0.025$).

5. Discussion

In the following section the aforementioned results will be discussed and explained in relation to what could have caused the outcome of the study. Furthermore, the thesis will be concluded and suggestions for further research will be presented.

The initial idea of this thesis was to further investigate how the perception of the communication techniques impact consumers' intention to purchase white nicotine pouches. This topic has been of interest in recent years as consumers and Swedish media channels have become aware of the “golden loophole” that these companies have found, allowing them to market their products outside of strict regulations. However, what we found to be lacking was research focused on the specific techniques used by these companies and more specifically which techniques are most effective.

When observing the social media pages of each of these companies, ZYN and VELO, we found that there was a presence of Greenwashing and Femvertising. Upon further investigation, we found that there was a perception among consumers of these products that they have fewer negative health effects (Snusbolaget, 2021), hence the introduction of the variable, Perception of Healthwashing. Furthermore, there is very little to no research conducted on the topic of marketing efforts' impact on consumers' purchase intentions of white nicotine pouches, thus making the outcome of the study unpredictable.

Just as the topic of unorthodox marketing techniques was complex in Bernay's era, we can see that it is just as complex now. During the process of analysing the data we needed to combine and remove variables as a result of the relationship between each independent variable. When investigating the phenomenon further by performing a partial correlation analysis, the results show that the independent variable Femvertising had a strong impact on the remaining independent variables' impact on the dependent variable. Therefore, this variable was removed along with the variable Healthwashing. When removing these two variables significant results were obtained. Greenwashing and Gender proved to be statistically significant in the absence of Femvertising. This proves that the independent variable Femvertising acts as an underlying or

intermediate factor. It is difficult to discern why Femvertising has this effect on the remaining variables. The complexity of this relationship illustrates the potential this subject has to be explored further.

As mentioned above, the MRAs of the variables Greenwashing and Gender as well as Greenwashing/Healthwashing and Gender in relation to Purchase Intentions exhibit significant results. Gender produced the highest β -value, which indicates that this variable could be used as a predictor of purchase intention. Although, it should be noted that among the survey respondents, 82.5% were female. This overrepresentation of women may threaten the generalizability of the study, as well as impacting the variable Gender.

Although removing Femvertising and Healthwashing produced significant results, when looking at the adjusted R-value for both of the conducted MRAs, the models only explain 5.1% and 7.5% (respectively) of the variance in the dependent variable. As this explains a small portion of the variance, this may suggest that the chosen variables (Greenwashing, Greenwashing/Healthwashing, and Gender) are not predictors of purchase intention of white nicotine pouches. This could potentially be explained by other factors such as the use of more traditional marketing techniques, peer pressure to use white nicotine pouches, traditions, social norms or cultural acceptance of the use of these products.

It was decided at an early stage that an interesting aspect of the chosen topic would be to draw comparisons between Barnay's Torches of Freedom campaign. As this campaign used different marketing techniques, such as Femvertising and Healthwashing, to increase the use of cigarettes in females, we wished to observe if similar marketing strategies are of significance when marketing white nicotine pouches. However, as a result of factors such as small sample size and a convenience sampling method, the initial MRA did not prove any significant results which would allow us to draw a strong parallel between the Torches of Freedom campaign and the marketing strategies of ZYN and VELO. Although there may be potential for such a parallel to be drawn from a more comprehensive study.

When analysing the results of the survey, Cronbach's alpha for Perception of Healthwashing proved to lack significance. This could not be resolved by excluding any of the variables. Because of this, Perceived Healthwashing was not included as an individual variable in the final MRAs. In one of the MRAs, Healthwashing and Greenwashing were combined in order to reach an acceptable value of 0.757, whilst in the second MRA the variable was not

included. Furthermore, one item from the variable Perceived Greenwashing was removed in order to reduce Cronbach's' alpha as it was very high (0.901).

When distributing the survey, a convenience sampling method was used. As previously mentioned, convenience sampling is commonly used in situations where there is a limited amount of time and resources (Troost & Hultåker, 2016), hence why this method was chosen for this study. Although, a disadvantage of convenience sampling is that the respondents are not representative of a larger population (Troost & Hultåker, 2016). In this study, we can therefore not say that the results of this study are in fact an indicator of purchase intention. However, we cannot with confidence ascertain that the initial hypotheses do *not* have an effect on purchase intention. These marketing tools may have an effect on purchase intention if observed in different conditions.

One must also consider the possibility that because we chose to use a convenience sampling method, we may have only reached respondents who do not currently use white nicotine pouches and therefore do not have a positive Intention to Purchase regardless of the communication techniques examined in this study.

Furthermore, one must take into account that only three posts from each Instagram account were included in the survey (six in total). The graphic material chosen provides the basis of which respondents based their responses on, and were chosen with the intent to represent the communication techniques in question. However, had the respondents been exposed to a different set of advertisements, or perhaps a larger number of posts, the study may have achieved different results.

The survey received 115 responses and of these, 107 were valid and used in the survey. This is a relatively small number of respondents. A small sample size can have a considerable effect on the significance of the results. When working with a small sample size, individual cases have a larger impact on statistical significance, whereas in larger sample sizes the effect of individual cases is far smaller (Faber & Fonseca, 2014). Had the survey reached a larger population, we may have achieved different results.

Furthermore, the results of the survey may have differed by rewording the survey questions. One must take into account that the survey questions are interpreted on an individual level. The questionnaire could have been interpreted differently from the original intention, therefore producing different results and affecting the validity of the survey.

One of the most significant findings of this study is that this subject is immensely complex and needs to be explored further. There is potential for these marketing techniques to be observed over a longer period of time with a larger sample size that may produce interesting and important results that can be applied to the field of Strategic Communication and Digital Media.

5.1 Hypothesis Testing

Hypotheses	Effect	Beta	Sig.	Result
H1	FV→PI	0.126	0.298	Rejected
H2	GW → PI	0.176	0.145	Rejected
H3	HW → PI	-0.120	0.276	Rejected
H4	G→PI	0.183	0.090	Rejected

Table 46. Hypothesis testing for each independent variable, including the β value and significance.

Gender shows a p-value that exceeds what is considered to be statistically significant ($p=0.091$), as well as a negative β value ($\beta=0.-185$). This indicates a negative impact on the dependent variable. However, when investigating the Gender variable individually, a P-value of $p<0.027$ (see table 34) was reached, implying significance. This means that the individual effect of Perception of Femvertising on the dependent variable is not a result of chance and Femvertising could be said to have an impact on purchase intention.

5.2 Adjusted Hypothesis Testing: Combining Healthwashing and Greenwashing

Hypotheses	Effect	Beta	Sig.	Result
H1	FV->PI	0.204	0.076	Rejected
H2	GW/HW->PI	0.061	0.584	Rejected
H3	G->PI	0.178	0.091	Rejected

Table 47. Table displaying the outcome of each hypothesis with the help of β - and p-values.

To summarise the effect of the independent variable on the dependent variable, a chart including the variables standardised β coefficients and significance is presented above (see table 47). Based on this information, a conclusion was reached regarding the outcome of each hypothesis. As the desired value of significance is $p < 0.05$ (Pallant, 2010), one can observe that the p-values of each independent variable (H1: $p = 0.076$, H2: $p = 0.584$, H3: $p = 0.091$) do not reach an acceptable value that signifies statistical significance. This leads to the rejection of all the conducted hypotheses.

5.3 Final Hypothesis testing

Hypotheses	Effect	Beta	Sig.	Pearsons's correlation	Result
H2	GW-> PI	0.211	0.033	0.219	Confirmed
H3	G->PI	0.215	0.030	0.223	Confirmed

Table 48. Table displaying the outcome of each hypothesis with the help of β - and p-values.

We can confirm from table 48 that gender and perceived Greenwashing show significant results when perceived Femvertising and Healthwashing are removed. Both variables show a positive correlation (above 0) indicating that when the independent variable increases so does the dependent.

Hypotheses	Effect	Beta	Sig.	Pearsons's correlation	Result
H2	GW/HW-> PI	0.144	0.149	0.219	Rejected
H3	G-> PI	0.225	0.025	0.223	Confirmed

Table 49. Table displaying the outcome of each hypothesis with the help of β - and p-values.

As displayed in the table above (see table 49), H2 was rejected as a result of the value of significance exceeding the accepted p-value ($p < 0.05$). On the other hand, H3 was confirmed as the results show statistical significance ($p = 0.025$). Both variables show a positive correlation (above 0) indicating that when the independent variable increases so does the dependent. This

hypothesis is also confirmed in the variation of means presented in table 33, where females display a higher purchase intention.

6. Conclusion

In conclusion, the purpose of this study was to examine and explore the effects and subsequent effectiveness of the communication techniques, Femvertising, Greenwashing, Healthwashing, and Gender in the marketing of white nicotine pouches. The main focus was how the perception of these communication techniques affect the purchase intention of consumers. The following four hypotheses were created and tested:

H1: *The perception of Femvertising has a significant impact on consumers' intention to purchase white nicotine pouches.*

H2: *The perception of Greenwashing has a significant impact on consumers' intention to purchase white nicotine pouches.*

H3: *The perception of Healthwashing has a significant impact on consumers' intention to purchase white nicotine pouches.*

H4: *Women's intention to purchase white nicotine pouches is higher than men.*

After analysing the results of the survey, we came to the conclusion that none of the initial hypotheses could be accepted. Through further research it was concluded that the variable Perception of Femvertising had a negative impact on the significance of the remaining variables. Therefore, Perceived Femvertising was removed. This resulted in statistically significant results to be found when exploring Gender and Greenwashing as well as Gender and Greenwashing/Healthwashing.

6.1 Suggestions for Future Research

As this area is rather unexplored there is much potential for interesting results to be found. As this study was done on a small sample size, there may be interesting results to be found when examining similar/the same variables with a larger sample size. This would allow for the results

to potentially reach statistical significance as well as creating more generalizable results. Such results would provide interesting insights for the field of Strategic Communication and Digital Media. Results from such a survey would give useful insights in how to use these communication techniques in order to reach a target audience or a profit goal.

Furthermore, as a result of lack of time and resources a convenience sampling method was used. Because of this there is an element of homogeneity among the respondents, with the majority of respondents being women (82.5%) between the ages of 23-26 (76.3%), which has an effect on the results. In future research it may be interesting to include a larger sample size as well as a more diverse group of respondents. This can be achieved by using a different sampling method over a longer period of time.

It may also be of interest to introduce more and different independent variables, as the results of this research prove that the topic is not as narrow as first anticipated. Variables such as peer pressure, traditions and so on could potentially lead to interesting findings on the chosen topic.

In order to reach a deeper understanding of what factors influence consumer's purchase intention of white nicotine pouches, it could be useful to add qualitative elements to future studies. For instance, interviews could provide useful information that cannot be found through literature review.

Furthermore, changing the design of the study may also produce interesting results. A suggestion could be conducting an experiment using a control group and an experiment group and measuring the subsequent purchase intention after being exposed to various marketing techniques used by white nicotine pouch companies.

Furthermore, during the Partial Correlation analysis, we were able to see that Femvertising has an effect on both Gender and Healthwashing/Greenwashing. The notion that Femvertising affects Gender may be a result of the gender distribution of the participants, although the effect of Femvertising on Greenwashing/Healthwashing remains unknown. This may be an interesting relationship to explore further.

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8. Appendices

Appendix 1: Questionnaire- The Marketing of White Nicotine Pouches

Scales	Number of items	Items
Demographics	3	D1: What is your gender? D2: How old are you? D3: Do you live in Sweden?
Greenwashing	4	GW1: I get the impression that ZYN and VELO are environmentally friendly companies. GW2: I get the impression that ZYN and VELO's products are an environmentally friendly choice. GW3: I get the impression that ZYN and VELO help me to make environmentally friendly choices. GW4: I get the impression that the companies ZYN and VELO care about the environment and sustainability.
Femvertising	4	F1: I get the impression that ZYN and VELO provide an authentic representation of women in their marketing. F2: I get the impression that ZYN and VELO make products for women. F3: I get the impression that ZYN and VELO promote women in their marketing. F4: I get the impression that successful women use ZYN and VELO products.

Healthwashing

4

HW: I get the impression that ZYN and VELO take the health risks of white nicotine pouches seriously.

HW2: I get the impression that ZYN and VELO's products are good choices for my health.

HW3: I get the impression that ZYN and VELO's products help me live an active and healthy lifestyle.

HW4: I get the impression that ZYN and VELO communicate the health risks that using white nicotine pouches can cause in a clear way.

Purchase Intention

4

PI1: In the future I intend to start purchasing white nicotine pouches

PI2: I intend to continue to purchase white nicotine pouches.

PI3: In the future i intend to purchase white nicotine pouches in my daily life.

PI4: In the future I intend to continue to purchase white nicotine pouches in my daily life.

Appendix 2: Marketing from ZYN



Appendix 3: Marketing from VELO



Ej under 18 år. Denna produkt innehåller nikotin som är ett mycket beroendeframkallande ämne.



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