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NAVIGATING INTIMACY: DELVING INTO THE PERSPECTIVES AND PREFERENCES OF PORTUGUESE YOUNGER GENERATIONS TOWARDS THE ADOPTION OF SAFER CHOICES

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Abstract

This Master's Thesis investigates the concerning decline in condom usage among younger generations in Portugal, revealing an alarming rise in sexually transmitted diseases. Through market research techniques such as Perceptual Maps and Conjoint Analysis, this study takes a methodical approach to explore the variables impacting the decision-making regarding condom adoption, providing a comprehensive analysis regarding Portuguese perceptions and preferences on condoms. The main findings offer actionable insights for public health campaigns and condom manufacturers, to better address and meet consumers' needs, aiming to reverse this concerning trend and mitigating the associated public health risks among younger generations in Portugal.

Keywords: Marketing, Marketing Research, Conjoint Analysis, Perceptual Maps, Consumer Perceptions, Condom Market, Consumer Preferences, Condom Usage.

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Table of Contents

Group Part

1. Introduction

While the global economy is still recovering from the repercussions of the COVID-19 pandemic, international public health remains a relevant topic. Worldwide, there is a concerning rise in infections resulting from sexually transmitted diseases (STDs), which poses a serious threat to global public health (Santos et al. 2020). Contrary to the elevated awareness regarding health, according to Direção Geral de Saúde (DGS) – the department of the Portuguese Public Administration responsible for Public Health – the usage of condoms among younger generations has been diminishing.

This thesis seeks to determine the factors influencing condom adoption, usage patterns and feature preferences by analysing the consumer behaviour surrounding condoms. Additionally, after understanding the aforementioned factors, it is vital to understand how to influence consumer behaviour in order to reverse the declining tendency in condom usage and to help reverse the alarming rise in sexually transmitted infections in Portugal – a 35% increase in only two years (Santos et al. 2020). Thus, the research intends to investigate the various psychological and social dimensions that impact consumer decision-making in the purchase and usage of condoms by younger generations in Portugal, with the main research question being: **What are the factors influencing consumer decision-making in the purchase and usage of condoms in Portugal?**

Beyond mere observation, our research aspires to bridge the gap between understanding the cause and generating a meaningful impact in society. The importance of this topic lies not only in its immediate implications for individual and societal well-being but also for condom brands with the adoption of the recommendations that will be generated.

To enrich our research and be as comprehensive as possible, the methods utilized will be both qualitative and quantitative. As qualitative method, preliminary interviews will be held after thoroughly performing an extensive literature review. The latter is focused on condom usage, revising the chosen consumer decision-making model, and stating up-to-date studies on the female condom. From then on, the quantitative methods, namely a Perceptual Map formulation and a Conjoint Analysis, will be described and carefully considered. The results were based on two distinct surveys that aimed at evaluating, respectively, consumers' perceptions and preferences towards condoms. These analyses will enlighten how consumers perceive and position the different Portuguese brands in the market, and the most valued condom attributes will be derived. Hence, it will enable the formulation of recommendations directed at condom brands to promote their offering while emphasizing its importance in preventing unintended pregnancies and sexually transmitted infections.

1.1. Background – Portuguese Market

In the context of this master's thesis, it was decided to focus only on the Portuguese condom market. Firstly, since the authors of the study are Portuguese, obtaining local insights was more straightforward, and although not experts on the condom market, some knowledge is always unintentionally acquired through living and experiencing it. The awareness of the Portuguese news allowed to recognise that condom usage is decreasing in this market.

Additionally, to obtain reliable findings, both surveys conducted for this study required a substantial sample size. Consequently, it would have posed an inviable task to attain a significant sample size encompassing diverse nationalities, thereby, hindering the ability to draw conclusive evidence on the impact of nationality on condom usage. Finally, the experts interviewed are also from Portuguese companies and possess extensive and interesting knowledge of the Portuguese market, having a level of expertise that would have been challenging to get in contact with in other condom markets. Considering this, the present study is focused on understanding condom usage in Portugal.

2. Literature review

2.1. Consumer Decision-Making Journey in Reproductive Health

Undoubtedly, one of marketing's main goals is reaching out to consumers when their decisions are most influenced. Consumer behaviour and the decision-making process are becoming more attractive topics in marketing research (Stankevich 2017). The "Consumer Decision-Making Journey" is a term that broadly describes how people move from primarily considering a product to purchasing it and then bonding with the brand (Edelman 2010). Historically, this process has been visually represented by a "funnel" (*Appendix 1*), that contains several touchpoints in every stage. At each of these, companies aim to interact with consumers to trigger them. Some examples of touchpoints are advertisements, news, social media, word-of-mouth, and product experience.

However, this simple representation fails to capture not only the entire existing touchpoints but also key factors that influence purchase behaviour (Court et al. 2009). Indeed, the funnel-shaped process assumes a rather outdated approach, considering the burst of product choices and digital channels that are being navigated by well-informed customers. Therefore, Court et al. (2009) suggested that this process should be represented as a "circular journey", rather than a "funnel", that entails four distinctive phases: Initial Consideration; Active Evaluation; Closure; and Post-Purchase (*Appendix 2).* Hence, consumers start by considering brands based on perceptions and recent interactions. They continuously adjust their choices and finally, select a brand at the moment of purchase. After the purchase, their experience shapes future expectations for their next decisions.

The balance of power in consumer decision-making has shifted in favour of customers due to digital technology, impacting purchasing behaviour significantly (Edelman et al. 2015). Brands are investing heavily in new technology to regain control over the decision-making process, therefore actively shaping the purchasing journey rather than reacting passively to consumer actions. Thus, companies can create value for both the client and the brand during this process. Edelman and Singer (2015) proposed that skilfully executed customer journeys can drastically shorten and, in some cases, completely remove the consideration and assessment phases (*Appendix 2*). This tactical strategy has the potential to move customers quickly from the stage of consideration to brand loyalty and, as a result, the consumer journey has emerged as the most important source of competitive advantage for businesses (Edelman et al. 2015). Brand loyalty and repeated buying patterns reveal a shift from simple transactions, building the foundations of trust and credibility (Webster Jr 1992). These factors establish the framework for long-term relationships between brands and customers. In light of the growing importance of lasting relationships, organizations must focus on relationship management skills. According to Webster Jr (1992), the ability to build and sustain relationships between consumers and brands is critical in navigating the complexities of current business dynamics.

In contemporary consumer behaviour research, affect is recognized as a key motivator of consumption behaviour (Erevelles 1998). Moreover, it is important to highlight the unique predictive power of emotional variables in understanding consumer choices, challenging the dominance of cognitive factors. Consumers prioritize affect over attribute information when making brand choices, favouring brands with positive associated emotions, and shaping future decision-making. This deviation from rational decision-making emphasizes the importance of emotion in establishing brand choices. Furthermore, Erevelles (1998) explores how affect develops in consumer memory, providing valuable insights into the relationship between emotional experiences and recall in marketing. Also, the integration of humour in advertising enhances and boosts message effectiveness. This research highlights the long-lasting power of emotional impact in catching consumer attention and establishing a lasting impression.

The condom industry is a complex one, full of subtle social processes and inconsistencies in customer attitudes towards purchasing and usage. As a product category, condoms present a particular set of issues in the sense that they are closely tied to social norms and cultural beliefs. As a result, customers approach purchasing and usage with different degrees of caution and sensitivity (Kamath 2020). Therefore, condom producers face strategic decisions in this environment that might potentially redefine their market presence. According to Kamath (2020), one of the most important strategic decisions condom brands must make is whether to expand into new markets and categories or solidify their dominance within their existing target group, or even pursue both paths at the same time.

Moreover, contraception is an important factor of health, as it is a tool that allows individuals to protect against STDs and unintended pregnancies. Therefore, it is essential to understand which factors are behind the choice of contraception. According to an article published by D'Souza et al. (2022), which compiles different literature reviews on the topic, the factors that mostly influence contraception usage and choice can be divided into three categories, varying according to different cultures and circumstances. Firstly, contraception is highly dependent on perceptions of fertility, pregnancy, and contraception. Usually, perceptions about contraception methods and previous experiences have a strong power in influencing this decision-making process. Negative beliefs and perceptions towards contraception are more impactful and swaying than perceived gains. Thus, the fear of side effects and worries about future health are still the main obstacles to the adoption of certain contraceptive methods. Secondly, decisions can be influenced by social networks and wider society. Partners, family, peers, healthcare providers, and society in general are pointed out as the main influencers in the decision-making process. Still, the topic of external influences, embarrassment and stigma concerning sexuality and contraception, seen as taboo topics in many cultures, impedes the diffusion of knowledge and habit creation about contraception. Finally, the characteristics of health systems and services are proven to influence decisions regarding contraceptive methods. The most common barriers faced by potential consumers are the accuracy of information provided by the professionals and their confidentiality. Allied to this last point, the characteristics of the contraceptive methods themselves are also important in the decision process. Factors such as ease and convivence of use, invasiveness, cost, discreteness, and impact on intimacy are the most important (D'Souza et al. 2022).

In conclusion, various factors are pointed to be crucial and influential in the decision regarding contraception use and purchase. Fostering open communication and education on sexual health topics and improving accessibility and quality of healthcare services can assist in mitigating sexual health-related problems. Implementing such initiatives will promote contraceptive usage, ensuring informed and conscious choices about individuals' sexual health.

2.2. The Female Condom: Acceptance & Barriers and Marketing Strategies

Despite the global incidence of HIV among women, the international focus on women's reproductive and sexual health, and the evident consumer demand, the female condom has paradoxically gotten very little serious consideration. It is reasonably expected that female condoms become more widely available (Peters et al. 2010). However, this expectation has not been met, resulting in the female condom's marginalisation.

Female condoms have arisen as an important step forward in sexual health, providing women with a prevention technique to protect themselves from the spread of HIV and unplanned pregnancies (Cecil et al. 1998). This product's demand dynamics differ substantially from male dynamics, in which the female product has seen greater variations in demand than the male one. This presents particular challenges for programmes that are trying to promote the use of the female condom (Terris-Prestholt et al. 2016). Factually, it is crucial to emphasize that the female version is not perceived to be directly competing with the male one, despite operating in the same market (Hollensen 2007). In addition, this market faces a serious challenge in embracing the female condom, given its limited availability in Portugal, and its high risks and complexity in application. Furthermore, implementing this product as an integral part of public health campaigns and comprehending its unique position in the contraceptive market might open up new growth opportunities (Hollensen 2007).

Objectively, traditional promotional strategies have proven ineffective in increasing demand for female condoms, as it is a sensitive product and conventional marketing strategies may not appeal to potential users (Terris-Prestholt et al. 2016). Moreover, some initiatives can help women feel more comfortable and secure in using female condoms by offering clear information about the proper way to use them. Instruction for healthcare professionals is also necessary in order to guarantee that women receive clear information and effective assistance (Warren et al. 2003).

2.3. Overview of Abortion Evolution in Portugal

According to the World Health Organization (2021), "abortion is a simple healthcare intervention that can be effectively managed by a wide range of health workers using medication or a surgical procedure". Additionally, abortion is a prevalent healthcare procedure, and six out of every ten unintended pregnancies result in induced abortions (World Health

Organization 2021). Nevertheless, there are still cases where individuals continue to face barriers to accessing safe, timely, affordable, and respectful abortion services in many countries, underscoring the significance of this issue in both public health and human rights.

Nonetheless, it is important to recognize that not all abortions are carried out in the context of unwanted or unplanned pregnancies. Some are driven by the discovery of foetal anomalies or concerns for women's lives, while others may be imposed on women by their family members or even by government authorities (Watts 2005). However, the latter situation represents a relatively small portion of the total number of abortions (Cleland 2020). Furthermore, the overall abortion rate exhibits an inverse relationship with both the prevalence and efficacy of contraception, as well as with fertility preferences (Bongaarts and Westoff 2000). Therefore, increasing the usage and effectiveness of contraceptive methods can contribute to a decrease in the incidence of abortion.

In Portugal, according to Direção Geral de Saúde (2022), abortions increased by 15% from 2021 to 2022, accounting for a total of 15,870 pregnancy interruptions in one year, which is in line with the trend seen in the other European Union Countries. In addition, it is also known that 96.4% of these abortions were done voluntarily by women within the ten first weeks of pregnancy, while 3.3% were done due to serious illness or congenital malformation (Direção Geral de Saúde 2022). According to the same source, the age group with the highest absolute number of abortions and the highest incidence continues to be the 20-24 years-old group, followed by the 25-29 years-old. Therefore, abortions have been increasing due to unintended pregnancies which can be related to the non-usage of contraceptive methods.

3. Methodology

The present research is grounded on both qualitative and quantitative research methods. These two complement one another and provide solid material to support our research on the factors influencing consumer purchasing of condoms in the Portuguese market. Firstly, the primary approach, the qualitative research, consisted of interviews with professionals related to the area, ranging from experts in the condom industry to professionals in the medical field. Secondly, the quantitative research was performed through two surveys. These were conducted aiming to collect data explicitly based on consumers' perceptions and preferences and were used to formulate Perceptual Maps and perform a Conjoint Analysis.

3.1. Preliminary Interviews

Between September 28th and November 14th, 2023, a structured strategy was used to conduct qualitative interviews to gather information from different professionals to obtain comprehensive insights regarding the subject, in order to formulate pertinent assumptions to be tested later on. The structure of the interview was built around points of research, ensuring a thorough examination of determining topics. The expert interviews lasted an average of 40 minutes to 1 hour and a total of 3 experts were interviewed.

The conducted scripts for these interviews were divided into two separate segments: Contraceptive Brands and Healthcare Professionals. The first one (*Appendix 3*) was made of four sections. The first part, the Professional Experience, aimed to get information on the experts in the field. Following that, the Market Overview part attempted to provide insights about current market trends, challenges faced by condom brands in Portugal, effective marketing strategies, main market competitors, and projections for the condom market's future. Furthermore, the Buyers Overview section intended to define the usual buyer personas, major reasons driving customer purchase decisions, and demographic aspects influencing brand selection. Finally, the Consumers' Perceptions section looked to determine how industry experts perceived consumer attitudes towards various market competitors, the attributes consumers may consider when evaluating different brands, and the distinguishing elements across brands. Regarding the script for the Healthcare Professionals (*Appendix 4*), it was made of two sections. Both parts, Professional Experience and Market Overview, seek to gather similar types of information to the one found in the Contraceptive Brands segment. However, the Market Overview is tailored to the specific information available to health professionals.

The channels utilised to source interview responses include LinkedIn, in-personal meetings and online meetings conducted through Microsoft Teams, and all team members were present to ensure that the full information was understood. These sources enabled varied expert viewpoints and ideas, boosting the qualitative input that was essential to this investigational period. This method facilitates the confirmation of current literature findings while excluding irrelevant items to the study aims, resulting in a comprehensive understanding of key variables within the condom market environment.

3.1.1. Interviews' Insights

Regarding the professional experts, we interviewed the Marketing Director at Control Portugal & Spain, Patrícia Coelho; the Brand & SCM Manager Pharma at Beiersdorf, Ana Rita Couceiro; and a gynaecologist working in Hospital da Luz, Filipa Castro Ribeiro. Their professional experience ranged from 3 to 26 years.

<u>Marketing Director at Control Portugal & Spain, Patrícia Coelho</u>

As far as Patrícia Coelho is concerned, the use of contraception in Portugal creates a challenging scenario when compared to the rest of Europe. Despite all the importance and the need for contraceptives, there is a reluctance to use them, particularly condoms, resulting in a situation in which such essential product is frequently avoided. This hesitancy, mainly from young people, stems from social norms and misconceptions regarding condom association.

However, since AIDS is no longer seen as such as serious disease, these misconceptions are solely with pregnancy prevention rather than a broader spectrum of sexual health concerns. Yet, syphilis should be taken into consideration given it is becoming a growing problem.

The most challenging issue is shifting the idea of condoms from an obligation to an appealing option. Sensitivity, odour, and the scenario of decreasing condom usage in trusting relationships pose additional barriers. Furthermore, the inappropriate use of emergency contraception, which leads to a rise in future fertility issues and higher abortion rates, intensifies the complexities. These barriers and challenges are for both male and female condoms. However, due to high implantation risks and a difficult application method, introducing the female condom remains a difficult issue for the market to overcome, increasing even more the challenges of this condom.

The target market for Control is surprisingly female and covers a wide range of age groups, as the increasing divorce rate has contributed to the enlargement brand's target group. Nevertheless, some years ago Control was seen as an older brand, however, due to their investment in communication and social media, enabled them to target a younger generation. In fact, it is essential to engage with younger generations through effective communication strategies that use humour and relatability to destigmatize the taboo nature of contraceptive usage. Partnerships with other businesses and new marketing strategies have also shown a potential to increase awareness among consumers.

Additionally, in the condom market, Control and Durex emerge as the market leaders, while other private labels have a relatively insignificant market share. Understanding consumer motivations – firstly prioritizing brand, then price, familiarity and, finally, innovation such as thinner or flavoured condoms – becomes crucial for these companies. In fact, when making a decision, safety is the priority of consumers, which is why brand matters so much and only a minor market segment focused primarily on pricing.

Regarding Control's main sales points, supermarkets dominate and represent around 65% of the industry, with pharmacies experiencing challenges due to the necessity for discrete yet visible product displays (*Appendix 5*). Consumers have a quick, 'run-grab-run' mentality, which is influenced by high levels of digital information access and a lack of availability of quality products in health centres, a concern also expressed by Patrícia.

Moreover, initiatives like Control Talk, using platforms like WhatsApp to answer consumer questions, highlight the importance of greater sexual education at home and in schools. The future is projected to include a steady increase in contraceptive usage through improved communication and information transmission, to normalise the issue and redefine sexual education, potentially facilitated by government intervention.

<u>Brand & SCM Manager Pharma at Beiersdorf, Ana Rita Couceiro</u>

Regarding Harmony's Brand Manager insights, the condom market has significant players with considerable market shares, being Control and Durex the two leaders. Thus, it is considered a challenging market to compete. In addition, Harmony differs from these two market leaders since it only operates in the mass market and not in pharmacies. However, supermarkets constitute the primary sales channels for condoms. Also concerning the condom market, changes have already taken place, especially regards the conservative issues associated with this product. About 15 years ago, condom brands were not allowed to advertise in their retailers' channels, such as in-store communications or promotional campaigns. Nowadays this no longer occurs, however, brands still have to know how to do it properly, with humour and simplicity proving to be the most effective tools.

Furthermore, concerning condom choice considerations, according to the interviewee, consumers focus mainly on two aspects: brand reputation and quality. Due to the importance of condom performance and effectiveness, consumers do not risk using brands associated with lower quality, such as private labels, nor brands that they do not know or hear about. Despite not holding the position of market leader, Harmony maintains its positive performance and recognition in Portugal. In fact, the brand is aware that Durex and Control are more attractive due to their larger portfolio and promotional strategy.

Moreover, within the relatively limited Harmony portfolio, with only 6 different products, it was shared that the best-sellers are the thin condoms in the package of 6 units, focused on increasing sensitivity. Thus, although there are also condoms with flavours, consumers still demonstrate a preference for those with reduced thickness. Regarding the packaging, Harmony opted for a simple design, focusing on emphasizing some important characteristics, such as "sensitive" or "natural", and the brand name. Thus, the most relevant information is immediately recognized. Additionally, the female condom is not a product explored by the brand, not being considered in its portfolio, due to its limited demand. Lastly, condom purchases have some seasonality, and in general, the months with the highest demand are January and the beginning of February, which can be related to Valentine's Day, and then from May to August, due to the summer vacations.

Gynaecologist Doctor Filipa Castro Ribeiro

According to gynaecologist Filipa Castro Ribeiro, there has been a decline in condom use not only in Portugal but also in several other countries, namely Brazil. The international medical community views this shift as a reaction to advancements in AIDS monitoring and control and its severe health implications since it is no longer a deathly infection. However, it is alerting the disregard towards other STDs that should be considered. With the population no longer worried about the consequences of having unprotected sexual relationships, as AIDS no longer scares them, they forget that other diseases can be harmful to their health too. In fact, she mentioned that the world is facing an alarming increase in syphilis cases, including in Portugal.

Additionally, Dr. Filipa revealed that she has many patients interested in using the female condom. However, they encounter challenges in finding this condom in Portugal due to the limited availability, which extends beyond the range of brands or product variety to no physical retail outlets. Only a limited number of healthcare facilities offer female condoms to the population, whereas the majority of these centres provide a substantial quantity of male condoms. Furthermore, it was pointed out that while this trend is encouraging, as it reflects women's willingness to protect themselves and experiment with various contraceptive options, there is a lack of information about these condoms. Consequently, women might not be well-informed on the correct usage of these products, potentially leading to reduced levels of reliability and effectiveness when using the female condom.

Lastly, the gynaecologist emphasized the importance of educating younger generations about the significance of contraceptives and the potential risks associated with STDs. Schools and universities should work in partnership with the medical community and contraceptive brands to discover effective methods of capturing the interest of young individuals on this subject and instructing them most effectively.

3.2. Consumer Perceptions

This section of the thesis focus on the consumer perceptions about the condom market. It aims at evaluating what consumers think and feel regarding different brands available in the Portuguese market, considering relevant characteristics and associations for the study of the condom market study. Accordingly, Perceptual Maps were developed and analysed, to help understand the market structure by examining the complex relationships among existing competitors and the specific characteristics associated to different brands in purchase decision. Additionally, Perceptual Maps provide meaningful insights about consumer perceptions that can be leveraged by businesses, as they assist to identify existing market gaps in the condom market, contributing to improve companies' offerings while identifying opportunities. The results of this method are based on relevant data gathered through an anonymous Google Forms survey, about Portuguese perceptions on different male condom brands. The survey was designed specifically to project the perceptual maps*,* applying a significant statistical analysis of the survey responses. In order to do so, a Likert Scale from 0 to 5 was used and respondents were asked to rank each condom brand according to their perception about different characteristics. The characteristics were chosen according to literature review, market research, interviews insights, and personal experience and the selected ones were: Affordability, Quality, Reliability & Safety, Brand Reputation & Trust, Coolness & Youthfulness, Popularity, Innovation & Variety, Sexiness, Ruggedness, and Willingness to Pay.

This survey also included a section in which respondents were asked about their overall knowledge and experience with female condoms. This analysis seemed especially relevant as this product was identified as an opportunity for future development by the industry specialists and doctors in the preliminary interviews. Finally, the survey ended with demographics and personal questions regarding respondents' age, gender, sexuality, income level, relationship status, and frequency of usage and purchase of condoms. In summary, this survey was divided into three sections: consumer perceptions regarding male condoms; overall knowledge about female condoms; and personal and demographic questions and in *Appendix 6* and *Appendix 7,* the full structure of the survey is displayed.

3.2.1. Perceptual Maps Results

Based on the survey with a total of 217 responses collected, only 198 were considered for the comprehensive examination of the results as these are the ones who were Portuguese and demonstrated familiarity with at least one of the brands presented. Hence, for the present section, respondents who were not familiar with specific brands were not considered for the calculations, to not negatively influence the results. Firstly, to generate better comparison insights, the following table was created (*Table 1*). Each column belongs to a specific brand, and the rows depict the average rating for each of them in each of the ten associations that were asked. Recalling the aforementioned survey structure, the results must be comprehended between 1 and 5.

Table 1: Dimensions for each brand

	CONTROL	**DUREX**	**HARMONY**	**LELO HEX**	**PRIVATE LABEL**
Affordability	3.70	3.66	3.42	3.08	3.57
Quality	4.32	4.29	3.65	3.26	2.83
Reliability & Safety	4.47	4.45	3.93	2.95	3.08
Brand Reputation & Trust	4.55	4.52	3.65	2.88	2.90
Coolness	4.49	4.14	3.09	2.88	2.37
Popularity	4.71	4.55	1.00	2.28	2.26
Innovation	4.36	4.29	3.21	2.96	2.45
Sexiness	4.17	4.04	2.96	2.63	2.22
Ruggedness	3.55	3.63	2.99	3.04	2.98
Willingness to pay	3.23	3.22	2.69	2.39	2.00
BRAND AVERAGE	**4.16**	**4.08**	**3.06**	**2.84**	**2.67**

Furthermore, it is relevant to point out that all of the 198 respondents who affirmed to be familiar with at least one of the shown brands, knew Durex. Additionally, only 2 out of this same pool were not familiar with the brand Control. However, 79 interviewees did not know Harmony, while only a minority - 25 people - knew Lelo Hex. Finally, Private Label was recognized by 53 respondents. The differences in awareness towards these brands are significant and point to the fact that Control and Durex are the clear market leaders in Portugal. Furthermore, for the purpose of the following analysis, some bias might exist especially in the perception of Lelo Hex and Private Label, given that the sample size of these brands was substantially limited.

Starting with Affordability, although all brands reported similar results, all close to 3, the brand with the lower score was Lelo Hex (3.08) and the highest score was registered by Control (3.70). Looking at market data, these results were expected, given that all brands are priced relatively similarly, with prices per unit ranging from 0.6€ to 0.9€, except for Lelo Hex. The brand charges higher prices, compared with all other brands, with the price per condom surpassing 1,5€ on average. Besides, it is mainly sold in pharmacies or through online channels.

Regarding Quality, contrary to the previous attribute, the results were discrepant. Clearly, Control depicts the highest score (4.32), performing exceptionally from consumers' point of view, besides Durex which is also ranked high and really close to its competitor (4.29). In third was Harmony (3.63) followed by Lelo Hex (3.26) with results close to the median point of the scale. However, Private Label scored particularly low (2.83). From the respondents' point of view, although priced below other brands, these are not perceived as having great quality. As previously mentioned, this association is key in this market as consumers search for high-quality products to prevent unwanted pregnancies and be protected from STDs.

Reliability results exhibit a relatively similar pattern. Likewise, the highest average belonged to Control (4.47) even though Durex performed almost the same (4.45). These two brands' outstanding results in this dimension are of great importance. Harmony's results, once again, were placed at the middle of the table but this time with an average that almost reached the 4-mark. The results only differ from Quality in the last two brands: Private Label scored 3.08, enabling it to be placed above Lelo Hex. These scores were not at all expected and this outcome might be linked with the diminished number of respondents who were familiar with Lelo Hex. If by any chance there was a bad experience associated with the brand, then the influence of the lower rankings weighed heavier. In fact, some outstanding ratings were recorded – 3 respondents ranked Lelo Hex's quality 5 out of 5 while 4 of them gave the brand a 1 out of 5.

Moving on to consumers' perception of Brand Reputation & Trust, the outcomes were similar to the findings in the previous two dimensions. Again, Control scored the highest (4.55), with only 4 responses below 3 points. Similarly, Durex's results (4.52) are also substantially high, with only 3 responses under the middle point of the 1-5 scale. Lelo Hex and Private Label scored under 3, with 2.88 and 2.90 respectively.

Despite the underlying complexity around a proper definition of brand coolness, the outcomes in this dimension are telling. Although similar positions between brands (Control being the highest, followed by Durex, Harmony, Lelo Hex and Private Label), here it is possible to observe wider gaps between brands. In fact, this is the dimension where Control and Durex were most distant, even if the gap was only 0.35 points. Hence, the differentiation point from Control to Durex, from the consumer's point of view, seems to be related with brand coolness.

Regarding popularity, it is possible to conclude that the most known brands are Control and Durex with an average of 4.71 and 4.55, respectively. These findings are in line with our research and preliminary interviews, as these two are the condom's market leaders. Additionally, it is important to notice that Control popularity's rating (4.71) is the highest one among all the other variables under analysis. Conversely, Harmony is the least popular brand, with an average rating of 1. This means that although 119 respondents were familiar with Harmony, in contrast to only 25 recognizing Lelo Hex, they still considered it as being less popular. In fact, the respondents who gave this brand a popularity of 4 or 5 points, have an average age of 37 years, which is significantly higher than the total sample's average age (25 years old). Thus, Harmony has a greater recognition among older generations. Furthermore, Lelo Hex and Private Label have similar popularity ratings, with an average of 2.28 and 2.26, respectively. Considering that Lelo Hex is only available through online markets or pharmacies and Private Label brands are relatively new in the market, represented only by Lidl and Mercadona, these ratings were fairly predictable.

Another variable studied was the Innovation & Variety of each brand. As expected, Control (4.36) and Durex (4.29) have the highest average ratings, while Lelo Hex (2.96) and Private Label (2.45) have the lowest ratings. However, as these two brands were the least known, with only 25 respondents familiar with Lelo Hex and 53 aware of Private Label, the respondents may not have a comprehensive understanding of features offered by these brands. Harmony has a medium average rating (3.21), which is curious because despite being the least popular brand, respondents still perceive it as an innovative brand with a considerable portfolio range.

Regarding Sexiness, Harmony, Lelo Hex and Private Label have a similar rating, with an average between 2 and 3. However, Private Label has the lowest rating, with an average of 2.22, with only 5 responses above 3 points. Control (4.17) and Durex (4.04) were considered the sexiest brands, both with only 6 responses below 3 points. Considering that condoms are closely associated with sexiness and pleasure, due to their usage in sexual relationships, condom brands need to be perceived as appealing and attractive – Sexy. Therefore, these findings are again aligned with the fact that Control and Durex are the market leaders.

Additionally, respondents evaluated the brands based on their perception of ruggedness. Durex received the highest rating, with a score of 3.63, and Control received the second-highest rating, accounting for 3.55. The remaining three brands, Harmony, Lelo Hex and Private Label, were all given similar average ratings of around 3. According to the research, ruggedness brands are associated with masculine products, which means, that for condom brands is important to have high scores on this dimension. In fact, every brand included in the survey received a moderate-high average in terms of ruggedness, which is aligned with existing research findings.

Finally, willingness to pay was the last parameter analysed in the study. Control (3.23) and Durex (3.22) are the two brands that respondents are prone to pay more, while in third was Harmony with an average rating of 2.69, then Lelo Hex 2.39, and lastly Private Label with the lowest average rating, 2.0. This means that respondents are willing to pay less for private-label condoms, with only 4 responses above 3 points. In fact, as discussed above, this is also the trend observed in quality results, with Control assessed with the highest average and Private Label with the lowest one. Thus, respondents are willing to pay a premium if they perceive the product as higher quality. In addition, this is once again related to the fact that individuals seek high-quality products to prevent unwanted pregnancies and protect themselves from STDs. Thus, respondents often associate quality with more expensive products.

In summary, it is possible to point out the highest and lowest-ranked dimensions of each brand. Curiously, Control and Durex share the same: the best-being popularity with 4.71 and 4.55, respectively – being the highest scores among all dimensions; and the lowest was attributed to willingness to pay, accounting for almost the same value, registering 3.23 and 3.22 respectively. Interestingly, even the lowest perceptions were ranked above 3 points, which is an indicator of the fulfilment of consumer's needs by the offering of the market leaders. As per all the others, the highest scores never reached the 4 mark, and the lowest were all negative (under 2.5 points). Harmony's greatest score was on the reliability & safety dimension (3.93), Lelo Hex scored 3.26 in quality and Private Label, not surprisingly, had the best ranking in affordability (3.57). Both Harmony and Lelo Hex had the lowest values in popularity and Private Label's average in willingness to pay was 2.0.

Multidimensional Perceptual Maps

Based on the results extracted from the Excel file that was created for this section, a perceptual map analysis was built using SPSS software. After inputting all the necessary data into SPSS, the attributes dimension was reduced through a factor analysis, using the Principal Component Analysis (PCA) extraction method. The goal of PCA consists in the reduction of the original data set complexity, keeping its most important properties, while reducing the number of factors, creating unique components. Additionally, this factor analysis imposed a rotation method, in this case, the Direct Oblimin was chosen, to relax the assumption that the original variables were not correlated.

For the scope of our study, 2 components were considered, accounting for a cumulative variance of 94.705%. Thus, only 5.295% of the variance remained unexplained, and a third component did not seem to be relevant to add. Additionally, *Table 2* exhibits the considered factors loading into each component. As seen below, Component 1 composition accounts for positive homogeneous contributions from all factors – ranging from 0.066 (Popularity) to 0.144 (Willingness to Pay) –, except for "Affordability" which listed a negative score (-0.030). In contrast, component 2 is mainly shaped by the Affordability factor (0.836), while the loadings from the other components range from -0.180 (Willingness to Pay) to 0.276 (Popularity).

Table 2 – Component Score Coefficient Matrix (Extraction method: Principal Component Analysis)

Component Score Coefficient Matrix		
Factors	**Component 1**	**Component 2**
Affordability	-0.030	0.836
Quality	0.141	-0.154
Reliability & Safety	0.101	0.118
Brand Reputation & Trust	0.107	0.109
Coolness	0.130	-0.065
Popularity	0.066	0.276
Innovation & Variety	0.134	-0.088
Sexiness	0.128	-0.039
Ruggedness	0.098	0.145
Willingness to Pay	0.144	-0.180

Bellow, *Table 3* exhibits the variance and cumulative variance explained by each of the two created components.

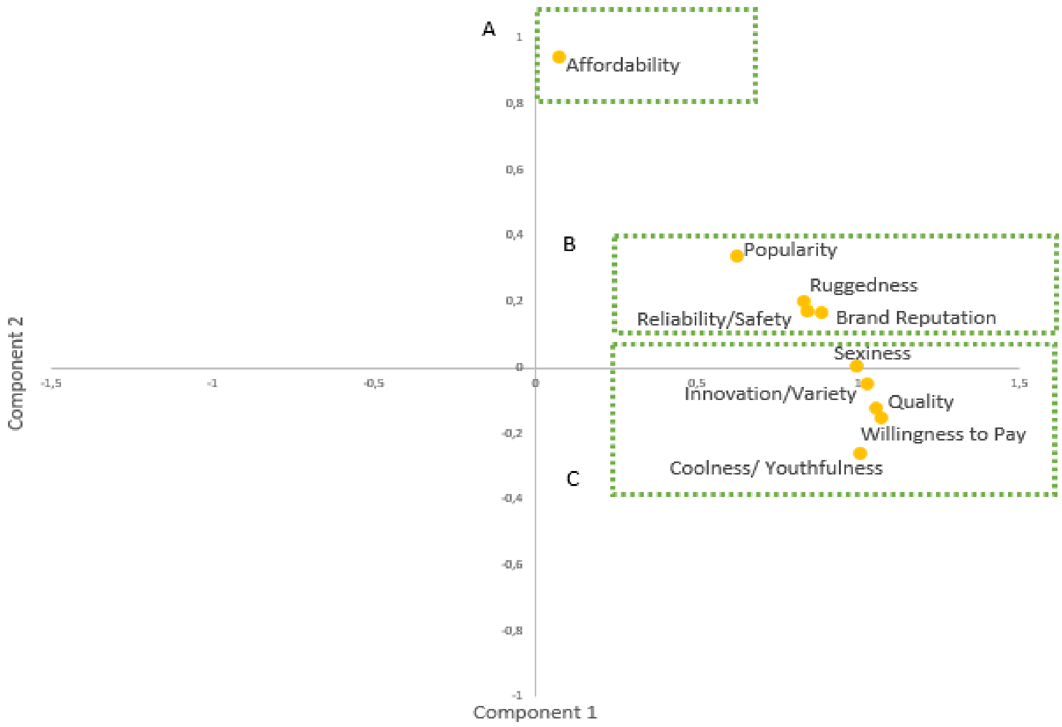
Table 3 – Total Variance explained by each component (Extraction method: Principal Component Analysis)

Total Variance Explained				
Component	**Extraction Sums of Squared Loadings**			**Rotation Sums of Squared Loadings**
	Total	**% of Variance**	**Cumulative %**	
1	8.771	87.715	87.715	8.684
2	0.699	6.990	94.705	4.010

As exhibited in the table, 94.7% of the model is explained by these two dimensions, only leaving a residual percentage (5.3%) unexplained. Zooming into the analysis of the total variance, significant differences were spotted. On one hand, component 1 accounts for 87.7%, while the second (component 2) is only responsible for less than 7% of the model's variance.

Subsequently, three scatter graphics were created, including the two generated components. Component 1 is represented in the X-axis, while the Y-axis contains Component 2. To understand the impact of each attribute included, it is important to analyse the graphic below (*Figure 1*), which illustrates the positioning of each attribute about components 1 and 2.

Figure 1: Perceptual Map attributes' positioning



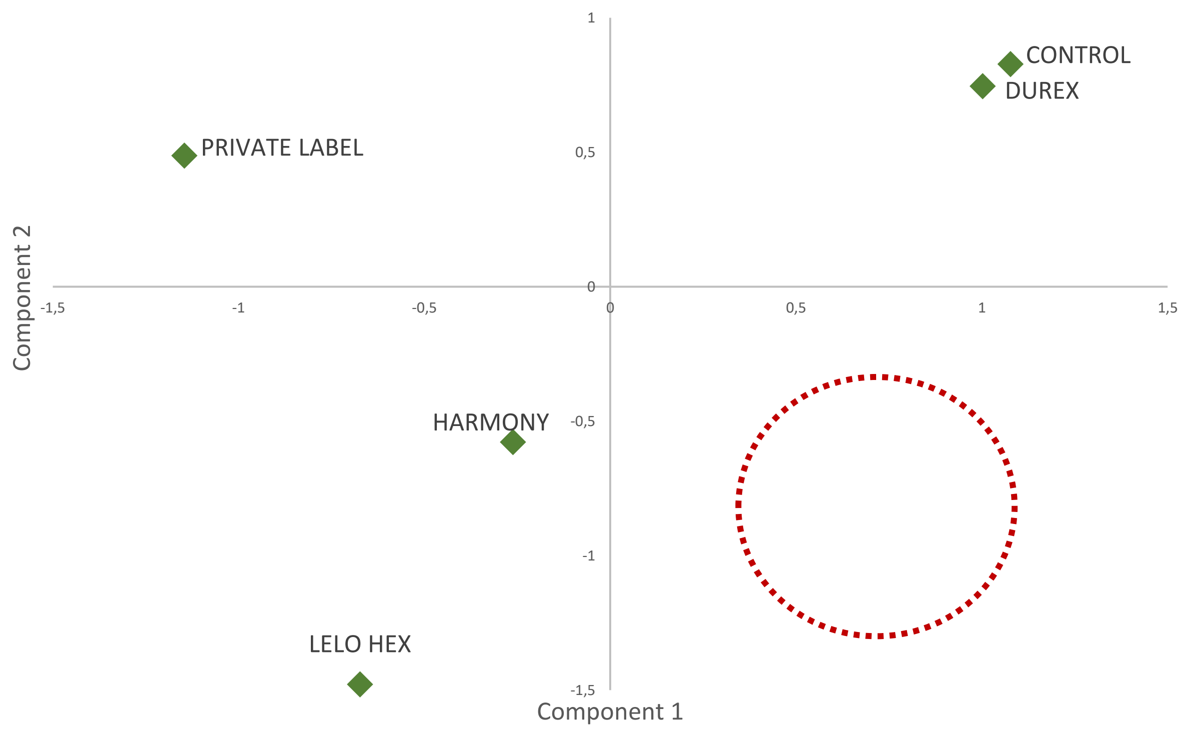
To help clarify the analysis, it is possible to identify each quadrant of the cartesian plane by the numbers I, II, III and IV, starting from the top right quadrant and moving counterclockwise. Additionally, according to DeCoster J. (1998), when factors are close to 1 or -1 it means that they are highly correlated with the axis components, positively or negatively, while when they are close to 0 suggests that the component has a limited impact on the factor.

Firstly, it becomes evident that the 10 attributes are distributed only across two quadrants, I and IV. Affordability, Popularity, Ruggedness, Reliability & Safety and Brand Reputation are in quadrant I, however, while Affordability is very close to the Y-axis, meaning that it has a strong correlation with component 2 and minimal impact from component 1, the other variables have more impacted from component 1 since are closer to 1 on the X-axis. Then, Innovation & Variety, Quality, Willingness to Pay and Coolness are in quadrant IV, positioned very close to 1 on the X-axis, thus, highly correlated with component 1, and between -0,5 and 0 on the Y-axis, meaning negative correlation close to a very limited impact with component 2. Lastly, Sexiness is accommodated in the X-axis, which means that component 2 exerts minimal influence on this variable, while component 1 has a high positive impact on it.

In conclusion, it is possible to observe three-dimension groups that are organized as the following: firstly Affordability, on its own, in dimension group A; then, in dimension group B: Popularity, Ruggedness, Reliability & Safety and Brand Reputation with a strong aggregate between each other; and finally, including Sexiness, Innovation & Variety, Quality, Willingness to Pay and Coolness there is dimension C. Although dimension groups B and C do not exhibit a significant difference in terms of areas of perception characteristics, being both related to the product's performance and reputation, dimension A stands out as the most different due to its association with pricing.

Furthermore, after understanding each dimension, it is relevant to analyse the positioning of the brands under study (Control, Durex, Lelo Hex, Harmony and Private Label) in this same space. Bellow, the abovementioned *Figure 2* is depicted to better illustrate the founded results.

Figure 2: Perceptual Maps brands' positioning



Immediately, noticing the brands' positioning at first glance, three distinct groups were possible to identify. Control and Durex are very close to one another, positioned in quadrant I; Private Label is placed in the II quadrant; while Lelo Hex and Harmony are both in quadrant III, noticeably with some distance. From the respondents' point of view, Control and Durex, exhibiting such a small distance between them, are bands that are easily comparable and, in a sense, rather similar. This fact implies that the two brands are perceived as having relatively matching attributes. Consequently, it is natural that the competition between the two may be more intense, as their offering tends to satisfy the same needs of customers in similar proportions. In order to point out differences between the two positionings it is clear that Control is placed slightly above Durex both in Component 1 and 2. Regarding Private Label, placed in a distinct position in comparison with the others, resting in quadrant II, scores high in component 2 and exceptionally low in component 1. This was the expected outcome, given the results previously found, as consumers tend to perceive private labels to be less safe and not that reliable. However, it is interesting to notice that Private Label has slightly lower scores in Component 1 than Control and Durex. This is interesting given that, despite employing lower prices than the latter, Private-label brands are seen as less affordable. Furthermore, as per the last two brands under analysis, in quadrant III Lelo Hex and Harmony score low in both dimensions, though Lelo Hex exhibits significantly lower values in either axis. Finally, one key observation that must be pointed out is the clear gap in this market. Marked by the red-dotted circle, in quadrant IV, it is evident that none of these bands is positioned even close to this dimension. Hence, there is a clear possible opportunity in this market for brands to explore. Assuming that some customers might be looking for offerings with a combination of attributes resting in quadrant IV, there is a bright path to be discovered, as no other brand is perceived to have an offering containing these specific possible combinations of benefits.

After the analysis of the two previous Perceptual Maps, a more complex one was generated. *Figure 3* depicts a graphical representation of the merging of both previously discussed plots. The dimensions are the same and as such these brands' positionings were analysed about the ten pre-determined associations respondents used to evaluate them. The first step to interpret this perceptual map is to evaluate both the direction and length of the vectors marked in yellow. Each vector connects the origin of the cartesian space to each attribute's positioning. The higher the length of the vector, the higher the weight of that attribute for the generated component.

Moreover, the direction of the vectors about one another is linked to the attributes' correlation. If the attributes have contrary directions, it means these are negatively correlated. In our model, this phenomenon is not observed as there are no contrary vectors' directions portrayed. Furthermore, if there are perpendicular directions, it implies that the attributes under study are uncorrelated. In fact, this occurs in our model, where Affordability and Innovation vectors seam to form a 90º angle – being perpendicular to each other. As previously stated, there are 3 clusters of attributes, marked by the green boxes with the letters A, B and C, as depicted in the figure below. Although the path and length of each vector are distinct, the clusters were also formed based on similar directions. This means that in each cluster it is possible to infer that there is a positive correlation between the included attributes – if one was to be ranked high, the others inside the group would follow the same behaviour. Applying this reasoning to our specific analysis, it is possible to conclude that, for instance in cluster B, a high rank in Brand Reputation will be accompanied by a high rank in Safety, Popularity and Ruggedness, and vice-versa. This same rationale can be used within cluster C, meaning that a low ranking in coolness would imply a low ranking in Sexiness, Innovation & Variety, Quality and Willingness to Pay. The only "cluster" with only one attribute is cluster A. As mentioned above, even if there does not seem to exist any factor with a positive correlation, Affordability and Innovation are uncorrelated. In practice, the 0-correlation between the factors means that the perception of condom's Affordability does not influence customers' perception of the product's Innovation.

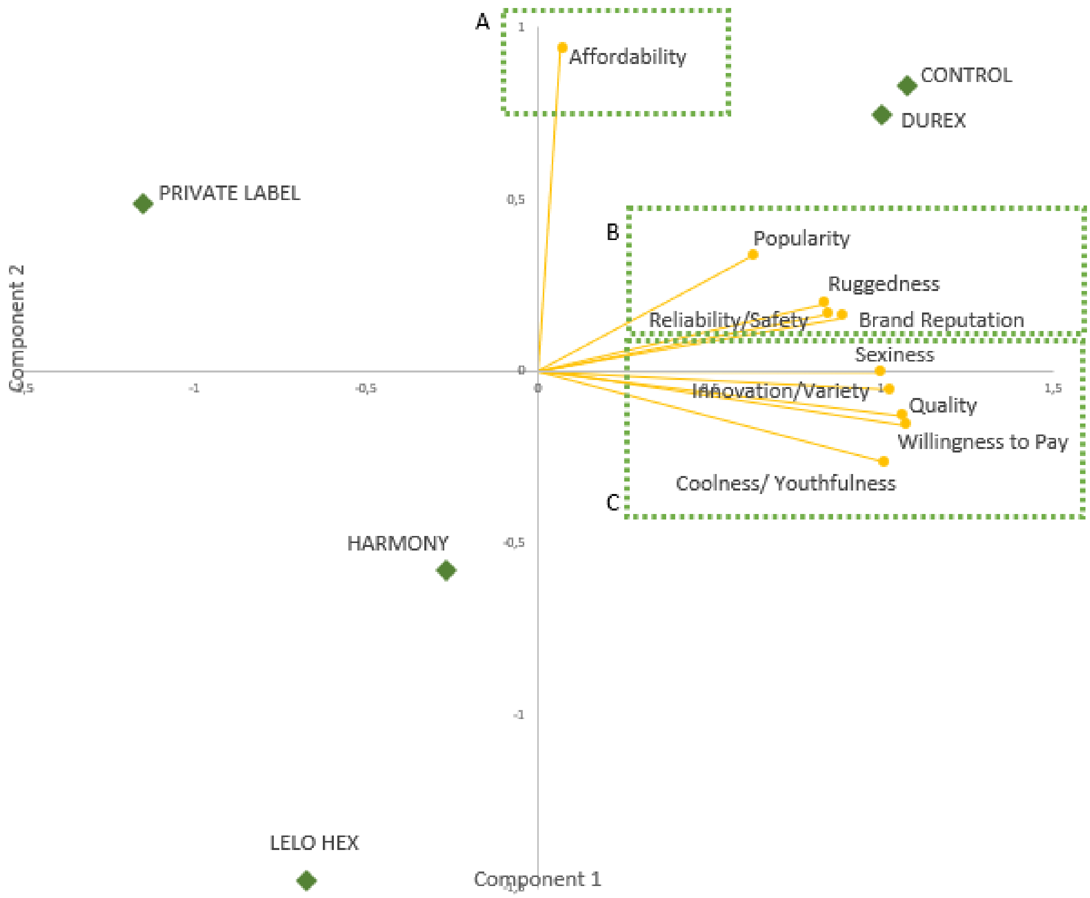
Finally, after considering all the details to interpret the perceptual maps exhibited in *Figure 3*, it is important to start to analyse the attributes and brands' positioning on the same dimension to generate tangible conclusions. Firstly, it is apparent that Control and Durex, as discussed above, share similar perception profiles. Interestingly, these are the two market leaders, and both invested in innovating the condom market by promoting their offerings in fun ways. Subsequently, the consumer's perception regarding attributes such as Popularity, Quality, and even Affordability is similar. Also, through the analysis of the ranking attributed by the sample, it is depicted that Control and Durex's positioning mirrors consumers' perception of excellence in all attributes. In fact, given that the two brands' positioning is aligned with the direction of the vectors present in cluster B, there are in fact positive correlations between the two brands and Popularity, Ruggedness, Reliability & Safety and Brand Reputation.

Also, according to Control's interview, the effort to break the taboo by creating a fun image among the young is apparently being successful. Both Durex and Control are active on social media, with regular posts that try to demystify the controversial topic and "relax the idea that condoms are boring" – Patrícia Coelho (2023). However, Durex's 40 thousand Instagram followers cannot be compared with the media exposure that Control has with 445 thousand followers on the same social media platform. Furthermore, these brands have a large range of products besides all the different options of condoms, namely sex toys and lubricants, which build on their constant aim for innovation and variety.

On the contrary, Harmony, Lelo Hex and Private Label occupy completely different positions in distinct quadrants of the plot. Private Label occupies a quadrant (II) that may not be favouring in this specific market. Consumer's perception of product safety is compromised, besides all the other attributes evaluated. In fact, this was the lowest-ranked brand in almost all factors, an indication of minimal brand reputation and trust. In a market that relies heavily on consumer confidence and loyalty, brands should not aim to be positioned similarly due to all the reasons discussed above, namely, the fact that even if there is a rather high perception of affordability, consumers' willingness to pay is limited. This fact can be confirmed by looking at the opposite directions of Private Label and the attributes of group C – indicating negative correlations between the brand and Sexiness, Innovation & Variety, Quality, Willingness to Pay and Coolness. About Lelo Hex, positioned in quadrant III, the highest negative correlation observed is with cluster A – Affordability. This was the expected result, given that the brand is positioned as a more expensive option in the market, offering products at higher prices.

However, despite the efforts to invest in quality, Portuguese consumers did not acknowledge this feature and the perception of quality was ranked lower than other brands with cheaper options. Moreover, few respondents were familiar with the Lelo Hex, and some may have experienced situations that damaged the overall perception of the band as a whole. Lastly, Harmony's position, although in the same quadrant as Lelo Hex, is not as diminished neither in components 1 nor 2. Although there is a clear negative correlation with Affordability, it is substantially smaller, and consumer perceptions of the brand typically fall into the "middle of the rank" among all attributes.

Figure 3: Perceptual Maps attributes and brands' positioning



Additionally, it was important to understand the sample characteristics of the sample in order to better delineate the outline of the respondents. The results for this part are displayed in *Appendix 8* and gave insights regarding sample demographics, condom usage habits, reasons for using or not using condom in the last sexual relationship and the trade-off between condom usage and relationship status.

3.3. Consumer Preferences

This segment of the thesis delves into consumer preferences for condoms aiming to understand the preferred condom features and attributes among the Portuguese users. To do so, the Conjoint Analysis was used, being notably valuable as it enables businesses to assess the value of specific features and make market-driven informed decisions. Similarly to the process for Perceptual Maps, a review of published articles and information gathered from preliminary interviews was conducted in order to assess relevant condom features for consumers, that could be pertinent to examine. After this review, the attributes to be studied were Condom Brand, Packaging, Price, Thickness, Flavour & Scent, Material, Special Features.

In order to gather data to conduct the analysis, an anonymous survey was designed using the platform Conjoint.ly, which provided advanced tools specifically tailored to Conjoint Analysis. Thus, a Brand-Specific Conjoint was conducted, which presents respondents with a set of four options to choose from, representing each option a condom package that includes one level for each of the attributes. In this survey, it was also added a first section to inquire consumers about their optimal condom, surveying about what attributes would they consider to be essential if they were able to design a condom. In this part, the attributes used were maintained, to allow for comparison with the Conjoint Analysis. The data collected related to the "optimal condom" will be utilized in the subsequent chapter 4.2, The Optimal Condom. Finally, the survey ended with the demographics and personal questions section, to provide additional information about respondents. All in all, this survey was divided into three sections: The optimal condom creation; consumer preferences regarding attributes of the male condom (Brand-Specific Conjoint); and personal and demographic questions. See *Appendix 9* for an overview of the survey design. In the following topic, the results of the survey are presented with a significant statistical analysis of the survey responses.

3.3.1. Conjoint Analysis Results

The subsequent examination of the outcomes for the conjoint analysis will rely on the report furnished by the Conjoint.ly software, encompassing the foremost favoured brand, attributes, and levels on average by the participants. Furthermore, simulations will be generated to substantiate our discoveries regarding attribute preferences across all analysed brands while also assessing the fluctuation in preferences as market scenarios are altered.

Sample Characteristics

The sample size consisted of 311 respondents. The results presented herein are derived from this sample. For a comprehensive overview of the sample distributions, including gender, age, sexuality, relationship status, and income, please refer to *Appendix 10* to *Appendix 14*.

The demographic composition of the sample primarily consists of young individuals, with 54% falling within the age range of 21 to 25. In terms of gender distribution, there is an imbalance, with females accounting for 61.1%, males for 35.7%, and undisclosed individuals for 2.6%. This distribution deviates from the general population distribution in Portugal- approximately 52% are females, while approximately 48% are males (INE 2023).

The sample also exhibits diverse sexual orientations, with 88.7% identifying as heterosexual, 3.9% as homosexual, and 5.8% as bisexual.

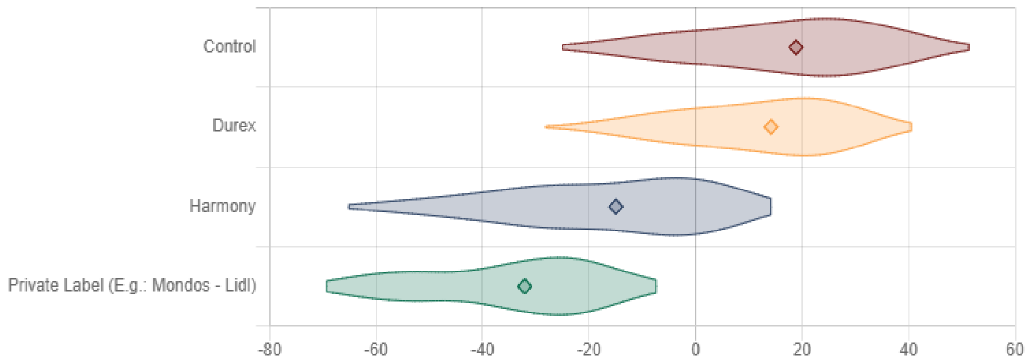
Concerning relationship status, a notable 63.4% of participants openly admit to being actively engaged in a romantic relationship, highlighting the prevalence of companionship among those surveyed. Conversely, a significant 44.1% assert their single status, affirming the existence of a substantial portion of unattached individuals. Nevertheless, a small percentage (2.6%) chose not to disclose their relationship status.

The analysis of income distribution uncovers several intriguing patterns. A significant concentration of individuals (13.5%) falls within the income bracket of 900€ to 1,100€, indicating the presence of a significant middle-income group. Notable percentages are also observed in the income ranges of 1,100€ to 1,400€ (13.2%), 501€ to 700€ (12.9%), and 700€ to 900€ (12.2%), which represent lower income categories. Additionally, 8.0% of the population earns less than 20€, which may be influenced by the youthfulness of the sample. On the other hand, higher income levels are represented, with 8.7% earning more than 2,000€. Overall, the income distribution reflects a diverse economic environment, characterized by a significant middle-income segment and notable disparities in lower and higher income brackets. The sample's average monthly income is approximately 758€, being notably lower than the Portuguese average monthly income in 2021 (1,082.8€) (Pordata 2022).

Brand Preference and Ranked Concepts

The brand preference graph, depicted below, is an insightful tool for estimating the average level strength of customer preferences for different condom brands. This estimate considers multiple versions, encompassing the various combinations of features and prices present in the survey. The central diamond in *Figure 4* represents the average preference for each brand, while the surrounding violin-shaped regions represent the data's estimated distribution.

Figure 4: Brand Preference



According to the graphical representation above, it becomes evident that Control (5.7) and Durex (5.1) consistently have more appealing combinations than Harmony (-4.5) and Private

Label (-7.1), as indicated by the average responses and their corresponding mean values. Among all, Control appears as the unequivocal leader in Brand Preference, potentially signalling some degree of brand loyalty. This observation aligns with the survey report's top-ranked concepts (*Appendix 15*), listed based on the respondents' most favoured options.

The ranking methodology relies on the relative performance of combined levels, enabling a comprehensive understanding of the most prevalent options among customers. Consequently, the highest 20 ranked concepts highlight a prevailing medium level of willingness to pay, predominantly at 6€, with two exceptions at 9€. As mentioned, Control leads this list, appearing prominently, followed by Durex placed in 28 position, and Harmony and Private Label lag behind at 474 and 926, respectively. In the combinations where all four brands appear for the first time, slight changes in attribute combinations arise, with consistency in Packaging (12 Condoms) and Price (6€), except for Private Label at 3€, revealing a lower willingness to pay for it. This discrepancy may emphasize the lower perceived quality with Private Label. Moreover, some differences exist regarding Thickness, Flavours & Scents, Special Features and Material, however, no truly relevant conclusions can be drawn from this.

Finally, the top three preferred combinations for customers emerge, the first with a Price of 6€, 'Thin', 'No Flavour', '12 Condoms' Packaging, 'With Texture: Ribbed | Dotted' Special Features, and 'Natural Latex (Vegan, Organic & Biodegradable)' Material. When compared to the first-top combination, the second and third combinations differ in Special Features, getting 'Retardant' and 'Temperature: Warming | Ice Feel', respectively.

Relative Importance by Attributes

Regarding the importance of each attribute, the table below (*Table 4*) enables us to understand how it varies among the different brands. Firstly, Thickness is the most paramount attribute for all the brands, which means that when choosing a condom, respondents prioritize information about Thickness, whether it is thick, standard/regular, or thin. In fact, this attribute holds particular significance in the case of Private Label, accounting for 37.5%. In addition, regarding the second most important attribute, there are some differences across the different brands. For Durex (19.1%) and Harmony (19.6%), it is Price the second one, while for Control (18.0%), it is the condom's Special Features, and for Private Label (18.8%), it is the Material of the product, so whether it is made of Latex, Latex-free or Natural Latex.

Despite this difference in the second attribute between Control and Durex, these two brands follow a very similar trend concerning the most relevant attributes. As discussed prior, Thickness is the primary attribute for Control (26.9%) and Durex (27.2%). Then, although the second most important attribute for Control is Special Features, Price is the next major factor – accounting for 17.6%, closely approaching the significance of Special Features. The third most crucial attribute for Durex is the Special Features (16.9%). After this small variety between the two brands, the fourth, fifth and sixth most important attributes are the same. In the fourth position, is Packaging, accounting for 15.2% for Control and 14.0% for Durex; in fifth is Material (12.5% for Control and 12.2% for Durex), and finally, the least important attribute is Flavour & Scents of the product, for both Control (9.9%) and Durex (10.0%).

Furthermore, the third most relevant attribute for Harmony is Special Features, accounting for 15.5%, after Thickness and Price. Then, the condom's Material (13.7%) is considered the fourth crucial attribute, while Packaging (10.4%) and Flavour & Scents (10.3%) are the two least important attributes for this brand, with a very similar weight in importance. Regarding Private Labels, it is the one that follows the most different path compared with the other three brands included in the study. Following Thickness and condom Material, the third most relevant attribute is Price (14.0%), similar to the other brands. However, Flavour & Scent emerged as the fourth most crucial attribute, accounting for 13.3%, while for Control, Durex, and Harmony it was considered the least important one. Additionally, Packaging accounts for 8.8%, being the fifth attribute, and lastly, condom Special Features (7.7%) is the least important attribute, whereas it was the third most important one for the other three brands.

To sum up, it is possible to conclude that Thickness is undoubtedly the most important attribute for the four brands included in the study. Therefore, it holds great significance for condom brands to specify this feature clearly. Furthermore, it is possible to say that Price and Special Features are the second and third most crucial attributes, with an average importance level of 17.6% and 14.5%, respectively. Finally, condom Material is the fourth most relevant attribute, accounting for an average of 14.4%, and the two least important ones are Packaging (12.1%) and Flavour & Scent (10.9%). Hence, brands should prioritise highlighting the Thickness feature and then focus on emphasising clarity on both the Price and Special Features, such as the Temperature, Texture, or the Retardant Effect. Although the condom's Material, Packaging and Flavour & Scents were not considered as important as the other three attributes, they still hold importance and should also be acknowledged as relevant features by condom brands.

Table 4: Relative Importance by Attributes

	CONTROL	**DUREX**	**HARMONY**	**PRIVATE LABEL**
Packaging Price	17.6%	19.1%	19.6%	14.0%
Thickness	**26.9%**	**27.2%**	**30.4%**	**37.5%**
Flavour & Scent	9.9%	10.0%	10.3%	13.3%
Packaging Units	15.2%	14.0%	10.4%	8.8%
Special Features	18.0%	16.9%	15.5%	7.7%
Material	12.5%	12.8%	13.7%	18.8%

Relative Importance by Level

The Relative Importance by Level analysis, which will be performed below, was equally based on data collected from Conjoint.ly. Following the same rationale as previously, the level partworths were calculated in a way that allow comparisons between the existing levels. The percentages assigned to each level for each brand are grounded on average preferences collected from the sample under analysis – higher or lower values correspond to higher or lower preferences, respectively. Furthermore, for each attribute, the sum of all the available levels per brand equals to 0. This means that the sum of positive percentages – highest-preferred – equals the module of the negative percentage – lowest-preferred. For the purpose of our study, it was relevant to not only perform this analysis on each brand but also to be able to derive insightful conclusions based on the average of the partworths per level.

Package Price

Starting with the analysis of Package Price, it is relevant to point out that not all levels were realistic to evaluate across brands. Accordingly, it was decided to include packages of 3€ for Private Label, given its cheaper offering. Following this same rationale, packages of 9€ and 12€ were excluded for this particular brand. Examining the total averages calculated, excluding the 3€ level, given its low significance, the most preferred price levels are the 6€ and 9€. As expected, packages of 12€ are the least preferred ones. Furthermore, the preference pattern is similar across Control and Durex– consumers prefer packages of 6€ over 9€, with 6€-level-partworths of 9.89% and 9.21%, respectively. Although Harmony registered a similar value (8.76%), Private Label registered a negative amount, pushing the Total Average of this level below the expected. The 9€-level exhibited more discrepant values, with 0.93% for Control, 2.79% for Durex, and 6.54% registered for Harmony. This is an indication that, of all the three brands discussed above, consumers prefer to spend 9€ on Harmony's package, followed by Durex and finally Control. Although the negative percentages for the 12€ level are present across all brands, the lowest value was attributed to Harmony (-15.30%), meaning that consumers are more reluctant to spend 12€ on a Harmony package than on Control's (-10.82%) and Durex's (-12.00%). Although discrepancies in pricing preferences are observed, as discussed previously, this attribute's importance was not the main one (*Table 5*).

Table 5: Partworth utilities across brands – Package Price

	LEVELS	CONTROL	DUREX	HARMONY	PRIVATE LABEL	TOTAL AVERAGE
PACKAGE PRICE	3 €	-	-	-	9.41%	**9.4%**
	6 €	9.89%	9.21%	8.76%	-9.41%	**4.6%**
	9 €	0.93%	2.79%	6.54%	-	**3.4%**
	12 €	-10.82%	-12.00%	-15.30%	-	**-12.7%**

Thickness

Grounded on previous founding, Thickness is clearly the attribute with the highest relative importance among all the others. Hence, it is important to carefully analyse the results exhibited in *Table 6*. Commencing with the total average results, it is evident that our sample has a clear preference for thin condoms, registering 15.0% in partworth utilities for this level. In fact, this was an expected outcome according to the input that industry experts previously provided. Moreover, corroborating consumers' preference for the thinnest possible offerings, the negative percentage present in the thick level of the attribute (-26.5%) indicates the overall aversion to condoms with higher Thickness. In fact, this was, by far, the lowest level of partworth utilities found in our study. To further enrich the analysis, the partworth utilities across brands were compared for this attribute. As expected, all percentages for the thickest options were negative: Durex registered the highest value with -23.88%, moving to Control (-24.62%) and Harmony (-26.39%), and finalizing with Private Label that exhibits a more-than-30% negative partworth utility. Interestingly, not all brands exhibit thin condoms as the preferred option.

Although with similar partworth percentages, Harmony's standard condoms seem to be preferred to the thin offerings of the brand – with 13.79% partworth utility, differing from all the other companies under examination. Finally, as expected, Control and Durex's results besides being, once again, similar, translate the overall finding of this specific analysis: Thin-level accounts for the preferred option, with 15.26% and 15.00%, respectively. Although positioned in the middle of the ranking, the Standard level's total average (11.4%) can also be considered significant given its small gap (3.6%) with the winning Thin level. Overall, consumers prefer the thinnest option but are not hesitant when it comes to standard condoms.

Table 6: Partworth utilities across brands – Thickness

	LEVELS	CONTROL	DUREX	HARMONY	PRIVATE LABEL	**TOTAL AVERAGE**
THICKNESS	Thin	15.26%	15.00%	12.59%	17.21%	**15.0%**
	Standard	9.36%	8.88%	13.79%	13.71%	**11.4%**
	Thick	-24.62%	-23.88%	-26.39%	-30.92%	**-26.5%**

Flavour & Scent

The attribute Flavour & Scent, as previously observed, was not one of the most important attributes, based on our sample's responses. Nevertheless, *Table 7* contains this attribute's partworths levels divided by brands. In fact, it is interesting to see the following: for the three first brands – Control, Durex, and Harmony – flavoured condoms are not the preferred option, given the negative percentages attributed among them: -3.44%, -4.01% and -4.80%, respectively. However, if the pattern in Private Label was investigated, the conclusion is reversed: consumers' preferred option is flavoured condoms (2.76%). Although this is an interesting insight, with the analysis that was made, it is not easy to understand this behaviour. However, the total average indicates an overall consumer preference for unflavoured condoms. Industry specialists suggest that the scent of latex in condoms is cited as a factor by non-condom users who choose to avoid the product.

However, based on these findings, condom consumers do not place significant importance on this attribute, nor prefer flavoured offerings, as the total average of the No-Flavour-level is positive (2.4%), while the With-Flavour level exhibits a negative partworth utility (-2.4%).

Table 7: Partworth utilities across brands – Flavour & Scent

	LEVELS	CONTROL	DUREX	HARMONY	PRIVATE LABEL	TOTAL AVERAGE
FLAVOUR & SCENT	With Flavour	-3.44%	-4.01%	-4.80%	2.76%	**-2.4%**
	No Flavour	3.44%	4.01%	4.80%	-2.76%	**2.4%**

Packaging Units

Contrary to the previous three analyses, the pattern regarding the Packaging Units attribute was similar across all brands. As such, the total average mirrors the clear consumer preference for packages of 12 condoms instead of 6 units. *Table 8* shows this tendency, which has somewhat distinct weights per brand. Control's partworth utility for the 6-condom package level is the lowest (-9.01%), exhibiting greater importance to the 12-condom package (9.01%). Durex's and Harmony's values are similar, with 6.43% and 6.74%, respectively, for the preferred level of the attribute. Regarding Private Label, the behaviour was the same, with positive partworth utility for the 12-condom level (3.08%) registering, of course, the symmetric value in the 6-condom level. This is an interesting consumer behaviour, given that perhaps the preference towards the larger package is linked with the "run-grab-run" condom-user behaviour: consumers want to spend as little as possible in front of the condoms' shelf, and therefore avoid purchasing smaller quantities to save them embarrassing trips.

Table 8: Partworth utilities across brands – Packaging Units

	LEVELS	CONTROL	DUREX	HARMONY	PRIVATE LABEL	TOTAL AVERAGE
PACKAGING UNITS	6 condoms	-9.01%	-6.43%	-6.74%	-3.08%	**-6.3%**
	12 condoms	9.01%	6.43%	6.74%	3.08%	**6.3%**

Special Features

Grounded on the aforementioned findings, Special Features were one of the attributes with the highest relative importance to consumers. Hence, the analysis of *Table 9* must be carefully examined. Firstly, it is essential to note that Private Label only contemplates some of the presented levels. This is due to the fact that this specific brand's offering does not include the special features found in other brands, such as temperature (warm/ice feel) and retardant technologies. As Control, Durex, and Harmony's product portfolio included these products, they were included in our study. Within the results presented, one particular value stands out due to its salient negative value (-6.91%). This partworth utility refers to Durex's retardant-level attribute and may be the reason why this level's total average is the lowest of the entire attribute. As expected, grounded on the fact that consumers are searching for fun and innovative product features, condoms without special features registered a total average partworth utility below zero. However, the negative value was not as expressive as might be expected, and the results found in the Texture level were also not the outcome that was foresighted (0.6%). Factually, the partworth utilities in the Texture level had the potential to drive the total average to the top, except for the negative -4.44% value represented by Harmony. Overall, the level with the highest percentage was Temperature (1.8%), followed by Texture (0.6%) – both with positive partworth utilities. The negative ones refer to Retardant condoms (-1.4%) and those without Special Features (-0.8%).

Table 9: Partworth utilities across brands – Special Features

	LEVELS	CONTROL	DUREX	HARMONY	PRIVATE LABEL	**TOTAL AVERAGE**
SPECIAL FEATURES	Temperature	-0.62%	3.95%	1.95%	-	**1.8%**
	Texture	2.43%	2.03%	-4.44%	2.18%	**0.6%**
	Retardant	0.40%	-6.91%	2.37%	-	**-1.4%**
	None	-2.21%	0.93%	0.12%	-2.18%	**-0.8%**

Material

Although without significant expression in the relative importance by attribute, the Material attribute partworth utilities' results presented in *Table 10* exhibit interesting results given the different patterns observed across bands. Starting with the Latex level, for the two market leaders, the partworth utility values are negative for this level, with -4.61% and 5.34%, respectively. On the contrary, Harmony (3.11%) and Private Label (9.96%) Latex offerings registered positive values, the latter exhibiting the highest among all levels across the entire brands. It may be concluded that, when it comes to brands with cheaper options, consumers prefer traditional trustworthy material (Latex) rather than alternative ones, namely Latex-free (-2.91%) and Natural Latex (-7.05%). Once again, the total average results were affected by an outlier, and Latex was level with the highest total average partworth utility.

Additionally, the partworth utilities across brands in the Natural Latex level are insightful given their differences. Control's highest value was registered in this level, mirroring consumers' preference for natural condoms of the brand, instead of Latex-free (-0.65%) or Latex (-4.61%) versions. Latex Durex condoms also registered a negative partworth utility (-5.34%), but the preferred option was Latex-free (2.84%), though with a similar percentage for Natural-latex condoms (2.50%). The preference for Harmony's offering was similar to the Private Label brand, registering a positive percentage only in the Latex level (3.11%) and negative partworth utilities in the other two. Although all really close to 0, without greater expression, the level with the highest total average, as discussed above, was the Latex, followed by Natural Latex (0.1%), and the negative overall partworth utility belonged to Latex-free (-0.9%).

Table 10: Partworth utilities across brands – Material

	LEVELS	CONTROL	DUREX	HARMONY	PRIVATE LABEL	TOTAL AVERAGE
MATERIAL	Latex	-4.61%	-5.34%	3.11%	9.96%	**0.8%**
	Latex-free	-0.65%	2.84%	-2.75%	-2.91%	**-0.9%**
	Natural Latex	5.27%	2.50%	-0.36%	-7.05%	**0.1%**

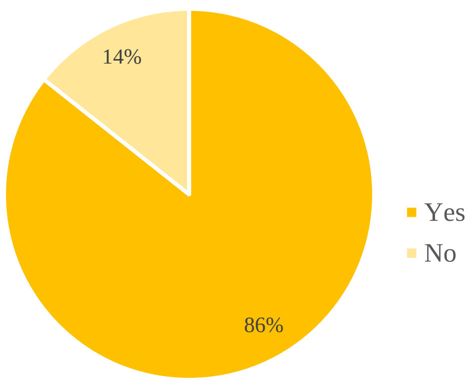
4. Bonus Part

4.1. Female Condom

Ignited by the insights brought by the gynaecologist in the Preliminary Interviews, an analysis of consumers' awareness regarding the female condom was developed, through the results gotten in a section dedicated to this topic included in our initial Google Forms survey. Identical to the selection that was made previously, the focus is only on Portuguese respondents. In total, 202 eligible responses were gathered, those being studied in the present section.

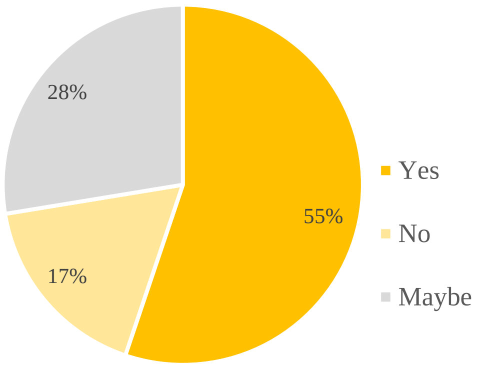
Firstly, respondents were asked if they had ever heard of the female condom before (*Figure 5*). Corroborating with the initial hypothesis, grounded on previous interviews, that the interest in this contraceptive method was increasing, most of the answers (86%) were positive. Therefore, only a small percentage (14%) of respondents said they were unfamiliar with the product. Moreover, it is possible to investigate whether significant differences existed in those who responded "yes" and "no". In fact, there were no significant differences in the average age between these two groups, with averages ranging from 25.6 to 25.8 years old. Similarly, 38% of those who were not familiar with the product were men, while the males who responded positively accounted for 35% of the answers. Following the same pattern, the gap between the average income between these two groups did not differ much, with averages of 772€ and 779€ for negative and positive answers, respectively.

Figure 5: Awareness of female condoms



Nevertheless, only 5 out of 29 people who had never heard about the product said they would not be willing to learn more about the topic, which is an indicator that the majority considers the possibility of being further educated on this subject (*Figure 6*).

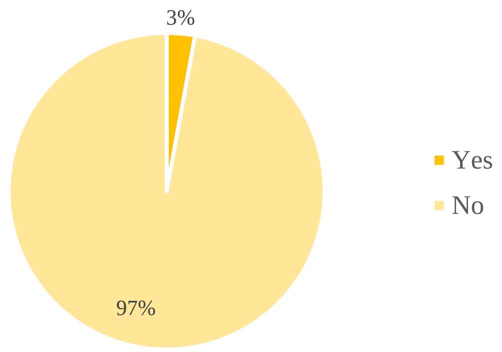
Figure 6: Willingness to learn



Additionally, those who were already familiar with the female condom were asked about their prior usage (*Figure 7*). Only 3% of our sample, five respondents, reported using it before, while the vast majority (97%) had never experimented with this product. These values are aligned with the research's findings about female condom marginalization discussed previously. Regarding the difference in demographics between these two respondent groups, since only five individuals answered "yes", this was not considered a significant sample, and therefore, it is not relevant to study these values.

However, out of the five respondents who had prior experience with the female condom, three of them indicated being neither satisfied nor dissatisfied; one reported satisfaction with the product; and the last individual assumed being highly satisfied with his/her female condom experience. Although the sample size is not substantial enough, based on our findings, it is still possible to discern that those who have previously used the female condom generally hold a positive view of it.

Figure 7: Usage of a female condom (you or your partner)

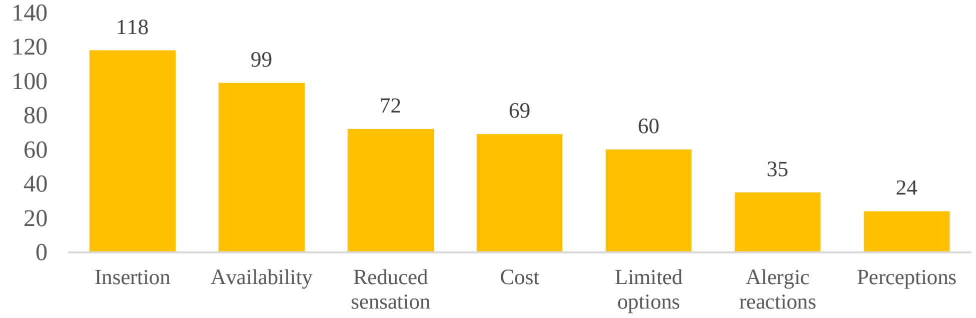


Furthermore, if the respondents were aware of the female condom, regardless of whether they had prior experience with the female condom or not, they were queried about the concerns or drawbacks they associated with this contraceptive method (*Figure 8*). Among the 173 participants (the ones aware of the female condom), 118 reported concerns with the condom's insertion as they were afraid of not knowing how to use it properly. Thus, a significant portion of the sample, approximately 68%, was not fully aware of how to insert the female condom correctly, suggesting a lack of information available about this product. The second most commonly cited disadvantage, identified by 99 individuals, pertains to the availability of female condoms, which may not be as readily available as male condoms. Following this, reduced sensation, higher cost, and limited options were reported by 72, 69 and 60 respondents, respectively. Finally, the least frequently mentioned concerns were allergic reactions, with 35 respondents reporting it, and negative social or cultural perceptions, with 24 mentions.

Regarding demographics, the most frequently mentioned disadvantages do not bear significance since they are representative of the vast majority of the sample. Thus, the demographics align closely with those of the total sample. Therefore, only the demographics related to the two least mentioned disadvantages were considered. Regarding the participants who expressed concerns about allergic reactions, the average age was 25.4 years old, with 71% being female and only 29% being male. This gender distribution may be associated with the fact that, as the female condom is inserted into the female body, it may cause more distress to women than men. As per the ones that mentioned negative social or cultural perceptions as a disadvantage of this contraceptive method, 58% were female while 42% were male, and the average age of the participants was 23.1 years old, lower than the overall sample's average age.

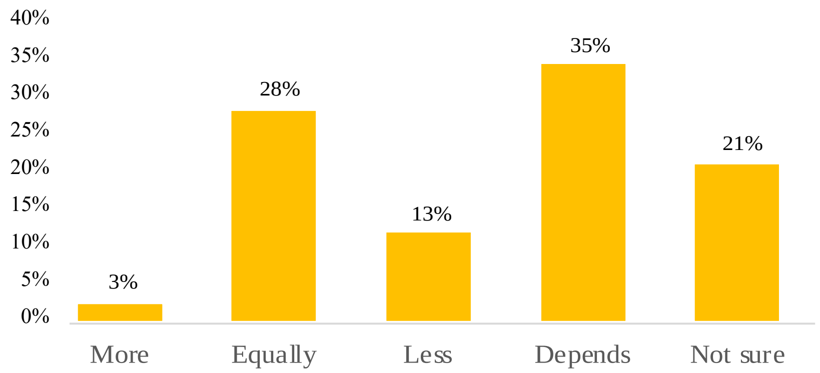
Finally, some participants included specific concerns beyond those listed in the survey, such as "Lack of information about this product in the market", "I was simply not educated on how to insert them and what are the advantages of the product. Simply not talked." plus they even mentioned that "It is not a common product".

Figure 8: Female Condom Concerns



Moreover, it was one's interest to find out more about respondents' perception of the effectiveness of the female condom in comparison with the male one. Likewise, for this analysis, only those who were familiar with female condoms were inquired, meaning that 179 answers were registered (*Figure 9*).

Figure 9: Female vs. Male Condom Effectiveness



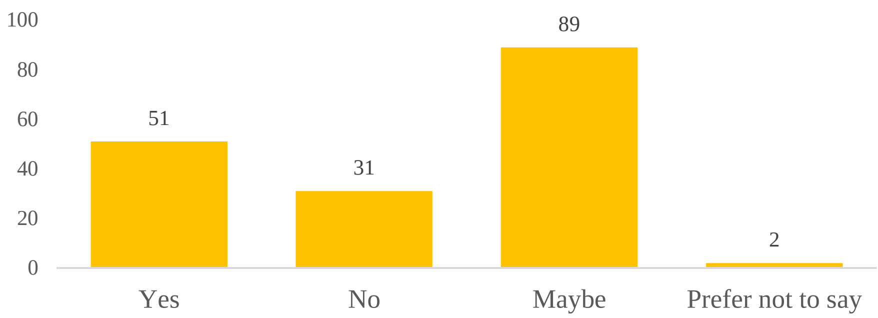
It is interesting to notice that the majority (35%) believe the effectiveness of the female condom compared with the male depends on further factors. These may be linked with some of the previous scenarios analysed, namely difficulties in inserting the condom or misplacements, ultimately leading to questionable effectiveness. Additionally, only a small fraction perceived this as more effective. This was an expected result, given the insignificant percentage of people who reported having previously used the product during sexual intercourse. Likewise, 21% were "not sure" which product is more effective. The lack of information and education about the topic, discussed in previous chapters, is confirmed by this percentage. Furthermore, 49 interviewees believed that the female condom is as effective as the male one. Finally, only 22 respondents – equivalent to 13% of our sample – were convicted that the female product is less effective than the male. Hoffman et al. (2004) state that reliable evidence proofs that the female condom is highly effective in preventing both pregnancy and STD transmission. However, for Wiyeh et al. (2020), the use of both female and male condoms during sexual intercourse is only more effective than solely using male condoms in the prevention of some STDs.

In conclusion, scholars seem not to have yet agreed on which barrier method, between these two, has greater efficiency. Likewise, our sample's perception of the product's effectiveness was not homogeneous, even though only an insignificant fraction perceived it to have greater effectiveness in comparison with the male version.

Lastly, to understand the respondents' openness to experimenting with the female condom, they were asked about their willingness to consider using this contraceptive method in the future (*Figure 10*). The majority of the respondents, accounting for 51%, answered "Maybe", demonstrating their possible willingness to consider experimenting with the female condom, though not with absolute certainty. Then, 29% (51 respondents out of 173) answered "yes", indicating their intent to use the female condom in future sexual relationships. However, 31 respondents (18%) mentioned that they had no intention of using this condom, implying their lack of interest in trying it, and only 1% opted not to disclose their outlook.

Additionally, within the ones that answered “yes” or “maybe”, 66% were female and 34% male, and the respondents’ average income was 809€. Conversely, from the 31 respondents who were not willing to experiment with the female condom, 63% were female and 37% male, with an average income of 589€. Although the gender distribution in these two groups of respondents is comparable, there is a significant difference in average income. This suggests that individuals with higher incomes may be more prone to consider experimenting with the female condom. Also, it is relevant to remember that 40% of the respondents consider the elevated cost of the female condom as a disadvantage, as discussed previously, perceiving it as more expensive than the male condom. Therefore, lower incomes and the perception of this contraceptive method as more expensive may force individuals to be less inclined to experiment with it.

Figure 10: Female condom future usage



Ana Rodrigues Cunha| Individual Part

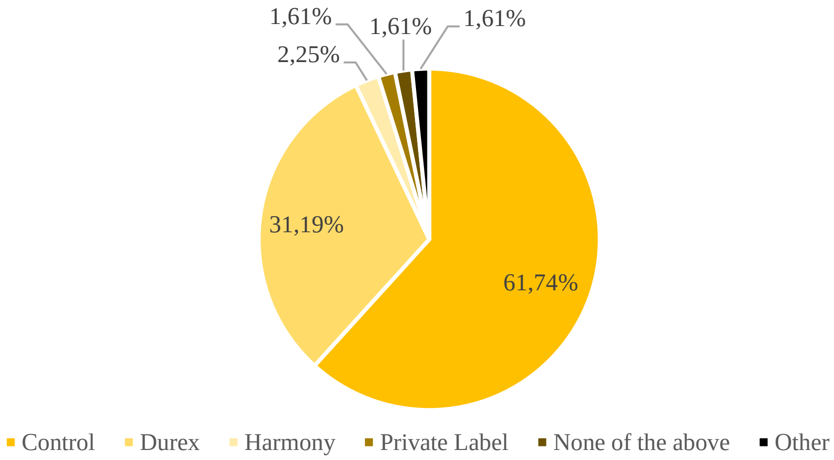
4.2. Optimal Condom

In this section, an analysis of the “Optimal Condom” will be prepared based on the insights gathered from 311 respondents. However, it is crucial to mention that, once again, the primary focus of this analysis was the male condom, a decision derived from two key factors. The first is the low availability of the female condom in Portugal, which consequently leads to a lower knowledge about this condom among respondents. Secondly, as concluded from the results of the female condom discussed above, only 5 respondents, from a total of 202, have used the female condom, and the vast majority of the total sample is uncertain about ever trying this product. Thus, respondents may not be aware of what they would prefer the optimal female condom to be, as they never tried it before. Therefore, the analysis focused on the male condom as the optimal condom it aligns closely with the sample's characteristics and the market.

In order to assess what features are considered more important to the consumer and would be essential to be part of the optimal condom, a survey was conducted, through the Conjoint.ly software. When constructing the questionnaire for the conjoint analysis, as mentioned before in chapter 3.3. Consumer Preferences, a first section was added to inquire respondents about their preferred options for seven different attributes, with each attribute being a component of their optimal condom, imagining that they had the chance to design it. The attributes applied in this part of the research were the same as those used in the Conjoint Analysis, not only because the literature review on the topic unveiled that these attributes are of paramount importance for consumers when selecting a condom, but also to allow for comparison of results with the Conjoint. Thus, the attributes in analysis are Brand; Packaging; Price; Material; Thickness; Flavour & Scent and, finally, Special Features. For each attribute, certain options were selected based on existing offerings in the market of condoms globally and not explicitly only for Portugal, since it was considered important to explore the possibility and openness of customers to include new features in the Portuguese market.

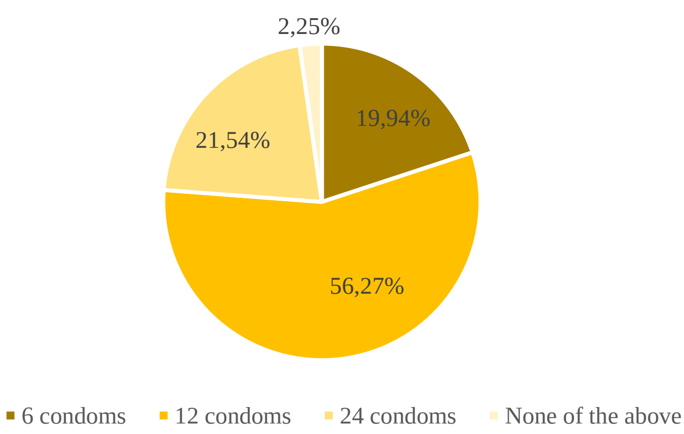
As expected, regarding Brand, the two leading players in the market, and the preferred ones according to Conjoint Analysis results, were the ones who collected more votes for the Optimal Condom, with Control being the uncontested leader with 61.74% of the responses, followed by Durex with 31,19. The other brands, Harmony and Private Label, only represent a minor percentage of the preferences. Additionally, three respondents out of the 311 stated that they did not have a preference for the brand, and two other respondents, mentioned other brands: Skyn, a non-latex brand and Mercadona, which should have been included in the Private Label option. The results can be seen in *Figure 11* below.

Figure 11: Brand preference in condoms



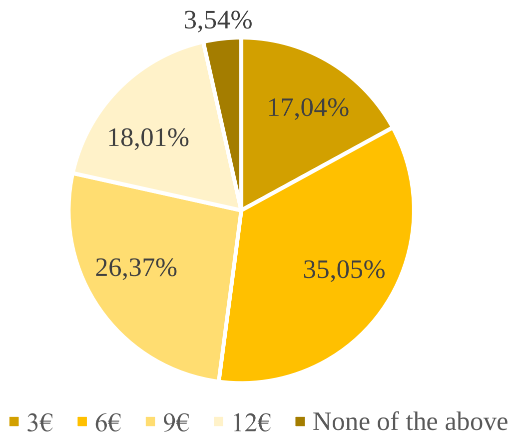
Regarding packaging, the most preferred option by the respondents was 12 condoms per package, as demonstrated in *Figure 12*, with 56.27%, which was consistent with the results found in the Conjoint Analysis. Then, the 24 condom package with 21.54%, followed by the 6 condom package with 19.94%. 2.25% of the respondents mentioned that none of the options were ideal for them.

Figure 12: Condom Packaging Preference



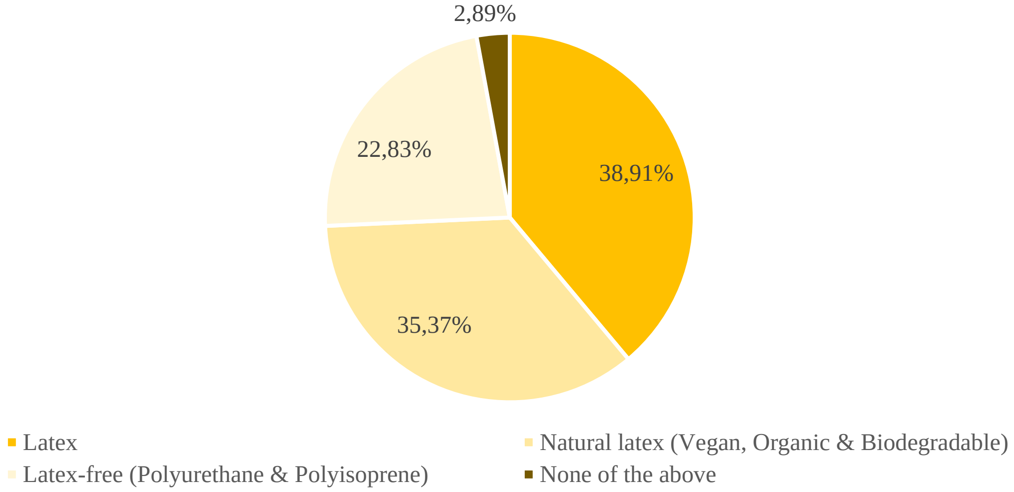
The next attribute respondents were inquired about was Price. In this attribute, the responses were fairly spread and probably influenced by the previous choice of the number of condoms in a package. If an individual chooses a package of 6 condoms as their preferred option, it is expected that they will not choose the 12€ price as it would mean that they would be paying 2€ for each condom, which is unbearable. The same applies backwards, thus, having in mind that the most voted option for the number of condoms was 12 condoms, then it makes sense that the least voted price option was 3€, with 17.04%, as if it was too cheap, then a perception of low quality would strike in consumers' minds. The preferred price option was 6€, with 35.05% of respondents choosing this option, followed by 9€ with 26.37% of respondents. The option of 12€ has18.01% of the responses, and a residual number of respondents stated that none of the options were ideal (3.54%). The results are shown in *Figure 13* below.

Figure 13: Price Preference



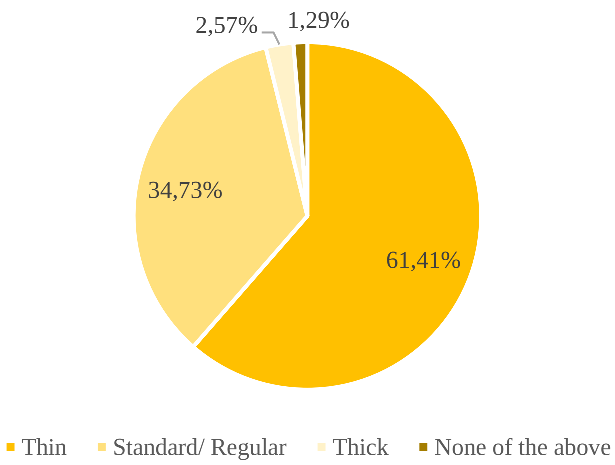
Regarding Material, the results, seen in *Figure 14*, show that latex was the preferred option with 38.91%, being aligned with the preferences' outcomes in the Conjoint Analysis. This may be explained by the fact that the other materials are less recognized and have less awareness by the consumers in the Portuguese market, as they probably do not have the knowledge to distinguish between Latex and Natural Latex. In fact, in Portugal, the two leading condom brands (Control and Durex) use natural latex as the standard material in their condoms. Next was the Natural Latex with 35.37%, followed by the latex-free material, representing 22.83% of the respondents' answers.

Figure 14: Material Preference



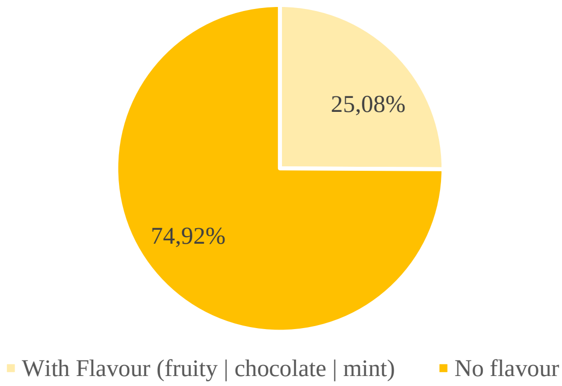
Thickness is one of the attributes, paired with Brand and Flavour, that respondents had less dispersed opinions, and the great majority chose the same option, it being, in this case, the thin condom (61.41%). Thus, the results observed in the Conjoint Analysis are again corroborated. The standard thickness condom gathered 34.73% of the votes, and the least preferred one was the thick condom with 2,57%, as observed in *Figure 15* below.

Figure 15: Thickness Preference



For the Flavour attribute, results can be consulted in *Figure 16,* and there is a clear preference among respondents towards non-flavoured condoms, with 74.92% of choices, which was also verified in the Conjoint Analysis, while flavoured condoms counted to 25.08% of responses.

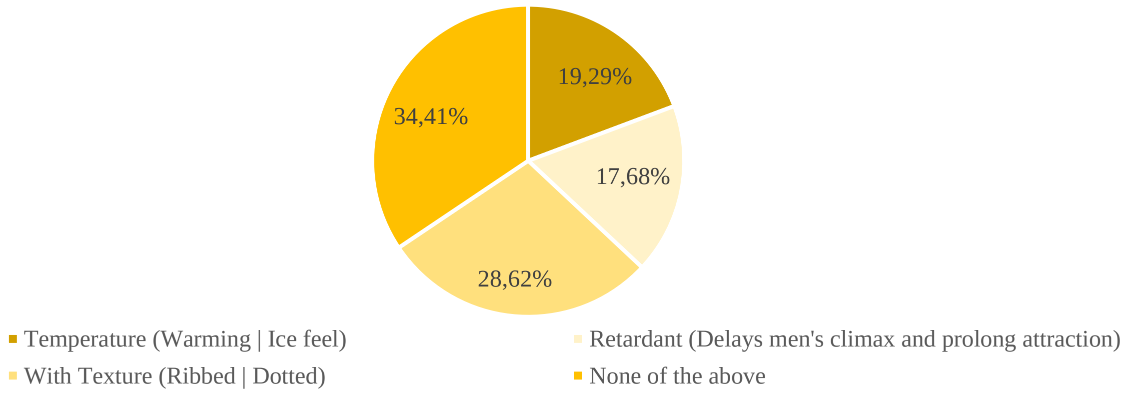
Figure 16: Flavour Preference



Concerning Special Features, respondents seem to prefer conventional features in condoms, as the primary preferred option was "none of the others" (34.41%). Out of the three available features to choose from, the most voted was the condom with texture (28.62%). In addition, with similar percentages it was the temperature effect (19.29%) and the retardant effect (17.68%). These results, shown in *Figure 17*, contradict what was observed in the Conjoint Analysis, being the attribute where most discrepancies were found. In the Conjoint Analysis, temperature was the most preferred special feature, followed by texture and then the option of having no special features, leaving the retardant effect as the least preferred option.

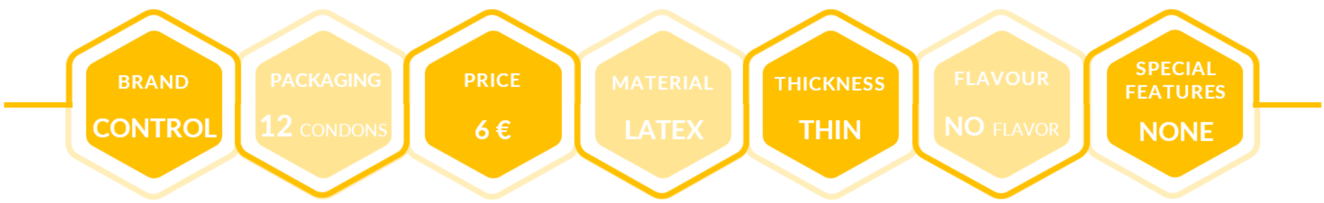
Hence, a distinct incongruity arises when participants are required to select attribute levels individually in order to obtain their ideal condom ("The optimal condom" part), as opposed to choosing from a product with predetermined attributes through a comparative evaluation process (brand-specific conjoint part). The main reason for this phenomenon might be related to the fact that in the brand-specific conjoint, consumers are subjected to unconscious bias, and the importance of other attributes for the choice of the condom might override the special feature choice. Thus, the respondent has to balance all the attributes at the same time, in the same decision, given that each option shown has a concatenation of attributes. In the "Optimal Condom" part, the options for each attribute are shown individually and isolated, so there is no impact on the attributes' importance in the choice.

Figure 17: Special Features Preference



With this, it is possible to conclude that the findings discussed in the Conjoint Analysis are mostly supported. Additionally, Portuguese customers tend to be more traditional, at least when confronted with isolated attribute choices, as they prefer the more "conventional" features (No flavour and no special feature). According to the survey of these 311 participants, the "optimal condom" would have the following characteristics, as seen in *Figure 18*.

Figure 18: The "Optimal Condom" Attributes Choices



In order to predict the success of the "Optimal Condom" if available on the market, simulations were made using the Conjoint.ly platform. Counterfactual scenarios were built with the aim of further scrutinising consumer preferences on condoms among the attributes that are currently available in the market and what would be the consequences for the market if the "Optimal Condom" were to be offered to purchase. Making the scenarios as close as possible to reality, enabled to not only understand which condom would be more popular, but also, allowed to gather additional information regarding demand elasticities. To start, the baseline scenario was defined taking into consideration the offer already available on the Portuguese market.

Additionally, to simplify the simulation, the best-seller condom according to each brand's website was considered to be the representative of the respective brand in the simulation scenario. However, some adaptations were made in order to make the options representative and diverse. This first baseline was built without considering the "Optimal Condom" to conduct an analysis of the market's behaviour before and after the new condom, enabling to assess the impact of the new product in the market.

To represent each brand, 4 condoms were built, one for each brand. Regarding price, the benchmark was set based on the market prices. Regarding material, the same approach of market benchmarking was used. Control and Durex mostly use Natural Latex in their condoms, so this material was attributed to them, while Harmony and Private Label, use Latex. Then, as Control was considered the most innovative, sexy and original brand in the perceptual maps analysis and since it offers the most product diversity regarding condoms, it was attributed to the special feature of Texture, which is, within the special features, the most preferred by the consumers and is one of the brand's known product.

Additionally, for the same reason, it was attributed the Flavoured option only for Control, while the other brands were non-flavoured. Condoms which have textures are usually incapable of being thin, as it could compromise the condoms' safety, increasing the probability of tearing or breaking, therefore, regarding thickness, Control was chosen to have Standard/Regular thickness. For Durex, the Temperature feeling for special features was chosen, as the brand offers this feature in one of their best-selling products and it was combined with the thin attribute. Harmony was also assigned to Thin thickness as the brand has this feature in one of their products, while Private Label was assigned to Standard/Regular as it is what is usually offered by these brands in the market. Concerning the packaging, the 12 condoms option was used for all the brands as the attribute seems to have no major for customers' preferences and all the brands have packages with either 10 or 12 condoms. The summary of the attributes for each brand can be seen in *Table 11*, below.

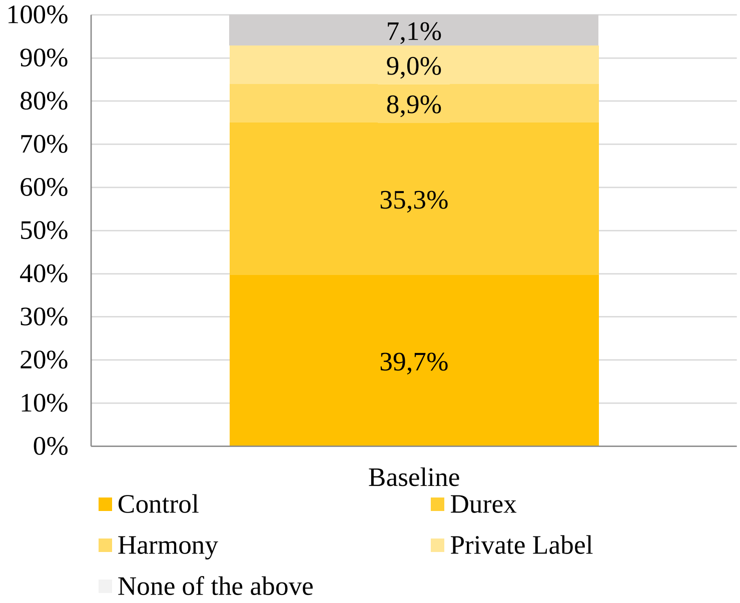
Table 11: Configuration of Baseline Scenario without the "Optimal Condom"

	Control	**Durex**	**Harmony**	**Private Label**
Price	9€	9€	9€	3€
Thickness	Standard	Thin	Thin	Standard
Flavour & Scent	With	No	No	No
Package	12 Condoms	12 Condoms	12 Condoms	12 Condoms
Special Features	With Texture	Temperature	None	None
Material	Natural Latex	Natural Latex	Latex	Latex

Taking this first baseline scenario into consideration, it is possible to observe that the preferences of consumers rely on the Control condom, with 39.7% of preferences, followed by the Durex condom with 35.3%, confirming the preferences towards these two brands observed in the perceptual map analysis. Preference shares can be considered as an estimate of market shares in the real world and are depicted in *Figure 19*. With 9.0% of the preference shares was the Private Label condom which surpassed the Harmony condom by 0.1% (8.9% for Harmony). The lack of recognition of Harmony by Portuguese consumers, as revealed in the Perceptual Maps analysis, may be attributed to the relationship between price and trust.

Consequently, consumers may not have confidence in the brand. Therefore, consumers may associate Harmony with a quality comparable to that of private-label condoms. In such a scenario, when faced with the choice between a 9€ condom from Harmony and a 3€ condom from Private Label, consumers would likely opt for the cheaper option. This preference for affordability is supported by the finding that price plays a significant role in consumers' purchase decisions.

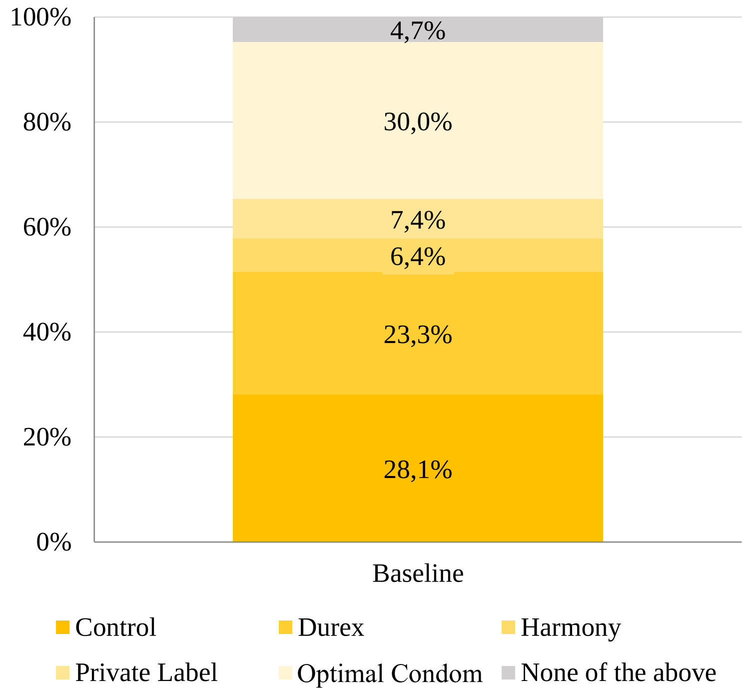
Figure 19: Baseline scenario without "Optimal Condom"



Afterwards, another baseline was created incorporating the "Optimal Condom" as one of the concepts. All the choices regarding attributes were maintained, the only change was the addition of the new product "Optimal Condom" as one of the products available in the scenario. The attribute choices for this condom were based on the most-voted characteristics for condoms, as explained earlier, following the design shown previously in *Figure 18*. The results deriving from the introduction of the "Optimal Condom" in the baseline scenario display the effect that the "Optimal Condom" would have in the market and can be seen in *Figure 20*. In this new scenario, the condom which gathers the higher percentage of preference shares is, in fact, the "Optimal Condom" with 30% of the shares.

For the remaining brands, the pattern and order of preferences persisted unchanged, meaning that Control was now the second favourite, with 28.1% followed by Durex (23.3%), Private Label (7.4%) and then Harmony (6.4%). The simulations are made by the Conjoint.ly platform taking into consideration the responses to the second section of the conjoint survey, which is the brand-specific conjoint with a set of four condom packages to choose from. The findings of the simulation validate the choices of the consumers regarding the “Optimal Condom” in the first section of the questionnaire, as the options within the attributes that respondents chose as configuring the optimal condom, were mirrored in the preference shares of the simulation, with the “Optimal Condom” being the most preferred out of all.

Figure 20: Baseline scenario with the “Optimal Condom”



Additionally, an analysis of the price elasticity of demand was conducted for each brand. The elasticities presented in the following *Table 12* below, reveal the averages of each elasticity from one price level to the other. See *Appendix 16* to *20* for further details regarding sensitivity to product price for each brand.

Table 12: Preference shares and Average Price Elasticity of Demand (PED)

	3€	6€	9€	12€ Label	Average PED
Control	-	36.9%	28.1%	20.7%	-0.9
Durex	-	28.8%	23.3%	15.2%	-1
Harmony	-	7.5%	7.4%	8.5%	-1.7
Private Label	7.4%	5.3%	-	-	-0.5
Optimal Condom	-	30%	20.8%	16.4%	-0.85

The table evidence that the price elasticities of demand are mostly inelastic, meaning that an increase of 1% in price prompts less than a 1% drop in the demand/volume. According to the analysis, Control and Durex should lower their prices to 6€ and Harmony increase them to 12€ as these seem to be the ideal prices for each brand as they are the ones which result in a higher preference share of 36.9%, 28.8% and 8.5%, respectively.

Overall, the inelasticity for most condom brands can be due to the fact that condoms are hardly substitutable, as there is no other contraception method that combines STD prevention and pregnancy avoidance with such ease of use as condoms. Furthermore, brand loyalty can also be an important factor to justify inelastic demand, especially in the brands that are preferred by the respondents, Control and Durex. This means that as consumers rely on and have more trust in these brands, they develop a higher sense of loyalty towards them, becoming less sensitive to price changes. In contrast, the reasoning for such a high elasticity in Harmony can be once again related to the lack of awareness the respondents had of the brand which can make them think that other brands have similar quality and effectiveness, so they easily switch to other brand if the price increases. This can also be paired with consumer Perception of Value in the sense that if consumers perceive a misalignment between the value or benefit the brand gives to them and its price, then they may be more likely to switch to lower-priced alternatives.

Nonetheless, there can be some factors limiting the results, the first being the fact that respondents were not choosing in real life and did not have to make a real decision, which can make them less attentive to price than if the choices made had real-life implications. On the other hand, the conjoint sample is relatively small, reducing the statistical significance, thus the results are not 100% reliable and representative of the whole population in the study.

Group Part

5. Conclusion

5.1. Discussion

5.1.1. Perceptual Analysis

Based on the entire analysis performed previously through the first survey that originated the creation of perceptual maps, the key conclusions were concentrated in the section below. As aforementioned, the differences in awareness towards the presented brands – Control, Durex, Lelo Hex and Private Label – exhibit the fact that Control and Durex are the clear market leaders as almost 100% of the respondents were familiarised with the brands.

Firstly, it is important to compare the obtained results with the expectations that were formed at the beginning of the study. Some of them were aligned with the formulated hypotheses, while others revealed different tendencies. Starting with the analysis of the rankings attributed to each brand, Control's results depicted that the brand scored the highest overall results, being the leader in all perceptions analysed – Affordability, Quality, Reliability, Trust, Coolness, Popularity, Innovation, Sexiness, and Willingness to Pay – except for Ruggedness, where Durex scored the highest based on the respondents' perception. In fact, the highest average score of the entire survey was registered by Control in the Popularity factor.

Regarding Affordability, the results were in line with our expectations, given the similar prices throughout all brands, except Lelo Hex. Hence, confirmed by our results, consumers perceive this brand as the least affordable one. Moreover, interestingly, Private Label was ranked below Control and Durex, which indicates that consumers associate affordability not only with pricing alone, but actually with the trade-off between the price itself and other important factors for this industry such as reliability, safety, and trust.

In terms of Quality, Reliability Brand Reputation & Trust, the results obtained followed the same pattern. All these attributes are key perceptions to evaluate in this specific market, given the strong preference for brands that assure quality and reliability, to prevent unwanted pregnancies and contamination by STDs. Even though the majority of the results were expected on these two factors, one key insight that was gathered is the fact that regarding Reliability, Private Label was scored above Lelo Hex. As a brand with a high-quality strategy, the expectation was that it would score higher than Private Label. Therefore, this result was associated with the fact that few respondents were familiar with Lelo Hex, and therefore some bias might have occurred.

The most revealing gap between the market leaders – Control and Durex – was registered in the consumers' perception of brand Coolness. Therefore, based on this survey, Portuguese consumers tend to believe that the differentiation point between the national market leaders is brand Coolness, despite the underlying complexity around a proper definition of the dimension. These results might be related to the social media marketing investments Control has been made, as stated in the preliminary interviews (section 3.1. of this Thesis). Thus, by using humour in its communications, the brand achieved a younger target.

Also, it is interesting to realize the following: consumers who gave high scores in Affordability to Lelo Hex – the most expensive brand – had an average age (37 years old) significantly higher than the average age of the sample (25 years old). This brand is the most expensive, which means that those respondents gave an inaccurate score. Although just a small percentage of the sample was aware of this brand, this may indicate that the younger generation, the ones that gave accurate Affordability scores, is more familiar with the brand's positioning. In contrast, Harmony registered the lowest score of the study in this parameter. Factually, these were the expected results for Harmony, aligned with the hypothesis formulated by market research and preliminary interviews. Moreover, this brand is perceived as an innovative brand, with an extensive range of products and features, aligned with the rationale of low Affordability. Nevertheless, contrasting with the initial hypothesis based on preliminary interviews, the level of innovation efforts by the brands is not as substantial as initially perceived.

Additionally, the results found in the sexiness factor confirm that it is very important for brands in this market to be perceived as appealing and attractive, therefore depicting high perceptions of being sexy. Hence, the survey findings are once more aligned with the fact that Control and Durex are the market leaders. Moreover, ruggedness is associated with masculinity, which means that for these brands is important for consumers to associate their offerings with this particular dimension. Again, the results were aligned with our expectations. Also, the analysis performed in the willingness to pay dimension confirmed that consumers are not hesitant to spend a premium for goods with higher perceived quality.

After the conclusions made above, all were transposed into three graphical representations – the Perceptual Maps. The analysis enabled the formulation of greater insights that are relevant to be pointed out, considering the brands' positioning in the cartesian space created. Three clusters of brands were identified. As expected, Control and Durex were closely depicted in a similar position, indicating the brands' fierce competition and the positive associations with the factors discussed above. Conferring the research made in the early stages of this study, Control and Durex share their constant efforts to innovate not only in their current offering but also in product development, through diverse channels, focusing on their social media presence.

On the other hand, Private Label's position revealed consumers' perception of lower safety and reliability, as expected, which imposes a serious limitation for future growth in this category. Lelo Hex and Harmony were positioned in the same quadrant, which was surprising given the distinct strategies adopted by both. Moreover, one of the most relevant insights is the fact that a gap was identified, which suggests a possible opportunity to be further exploited if demand for such an offer is revealed to exist. This possibility will be further discussed in the subsequent section – Managerial Implications.

In summary, there are three main key insights generated based on this analysis. Firstly, brand Coolness is the differentiator point between Control and Durex. Secondly, private label brands in general face serious challenges in this market, given consumers' poor perceptions of relevant associations. These are perceived as having low reliability, and being less affordable than the market leader brands – Control and Durex. As explained above, for consumers in this market, affordability is not associated with pricing alone, but rather with the relationship between price and other essential factors such as reliability and safety – fundamental in this industry. And finally, there is a clear gap in the market – high-price-high-quality offerings – that does not seem to be present yet.

5.1.2. Conjoint Analysis

The conjoint analysis, when applied to the realm of condoms, offers a distinct perspective that allows us to comprehend the diverse factors that impact consumers' decision-making in this particular domain. This research technique, known for its effectiveness, enables us to deconstruct the several attributes of a product, including its material, brand, and pricing, and evaluate how they influence consumer choices. By breaking down these elements, researchers gain valuable insights into the prioritization of attributes and the compromises individuals are willing to make when selecting a condom. Thus, allowing to understand the intricate interplay of factors that influence condom choices, is crucial in fostering a culture of informed decision-making, ultimately promoting sexual health, and enhancing the overall individuals' well-being.

The analysis made through this technique started with a brand preference graph which conducts a comprehensive analysis of customer preferences for condom brands. It has revealed the prominence of Control and Durex as the most appealing options compared to Harmony and Private Label. These results emphasize the conclusion from the perceptual analysis as it also indicates consumers may associate these brands with Reliability, Quality, or other positive attributes, supported by a high level of Trust. Control, in particular, stood out as the clear leader in brand preference, suggesting a potential sense of brand loyalty.

Moreover, delving into the ranking methodology, to understand prevalent customer choices, the top 20 ranked concepts indicate a moderate willingness to pay, predominantly at a price point of 6€ for a package of 12 condoms. This price point is the sweet spot of consumers, aligning the perceived value of the product, with a balance between Affordability and Quality. The exceptions at a higher price point of 9€ suggest that some consumers are willing to pay extra for certain condom concepts. Control occupies the top position in the rankings, followed by Durex, while Harmony and Private Label lag significantly behind. Further examination of the combinations reveals the consistent presence of Control in the top combinations, highlighting its Popularity among customers.

On the other hand, Private Label demonstrates a lower Willingness to Pay, potentially indicating a perception of lower Quality - again aligning with the perceptual analysis conclusion on the lower reliability and trust respondents had demonstrated. Some slight variations in attribute combinations are observed, particularly in Packaging, Price, Thickness, Flavors & Scents, Special Features, and Material. The top three preferred combinations all share a price point of 6€ and differ primarily in terms of Special Features. The first combination includes a 'Thin' thickness, 'No Flavour' Flavours & scents, '12 Condoms' packaging, 'With Texture: Ribbed | Dotted' special features, and 'Natural Latex' material- evidence for the increasing concern around sustainability from our respondents. The second and third combinations vary in Special Features, featuring 'Retardant' and 'Temperature: Warming | Ice Feel', respectively.

Further analysis was made to understand the relative importance of each attribute within different condom brands. Across all brands, thickness is the most critical attribute, particularly for Private Label - raising the importance of how condoms deliver and keep the sense of sensitivity and natural feel to consumers. The second most significant attribute varies among the brands. For Durex and Harmony, it is the price, suggesting that consumers are particularly price-sensitive and are susceptible to considering Affordability as a key factor in their purchasing decisions. Control, has Special Features, indicating that its consumers are looking for an enhanced user experience.

Finally, for Private Label, it is the Material, which emphasizes the concern of quality and inherent reliability and safety regarding the material that is being utilized. Despite the differences in the second attribute, Control and Durex share a similar trend, both prioritizing Thickness. This conclusion may imply that consumers across these brands value the perception of durability and reliability in condoms, aligning with Perceptual Map results. Control and Durex also have consistent rankings for the fourth, fifth, and sixth most important attributes, which include Packaging, Material, and Flavour & Scents. Harmony, on the other hand, follows a different path, with Special Features as its third most crucial attribute, reinforcing the importance of unique characteristics that go beyond the basic functionality of condoms, followed by Material, Packaging, and Flavour & Scents in descending order of importance.

On top of that, the relative importance by level was studied to scrutinize the importance of each level within the different attributes. In terms of package Price, the favoured levels are 6€ and 9€, while the 12€ packages are not preferred. However, preferences vary across brands, particularly in the case of Harmony. Thickness is the most critical attribute, with a general preference for thin condoms. This result aligns with previous conclusions, reinforcing the demand for products that deliver increased sensitivity and a more natural feel. Nevertheless, Harmony's standard condoms are preferred over its thin offerings. Flavour & Scent have less influence on consumer preferences, with an overall preference for unflavoured condoms.

Therefore, the minor influence this attribute presents indicates that these sensory elements may not be significant factors in the decision-making process, when compared with the other attributes, for a majority of consumers. This might imply consumers may be looking for a more natural and straightforward experience during intimate moments. Still, market research provided by Control, indicates that consumers are progressively more interested in the scent and flavour of the products. Hence, major attention to consumer perceptions on this attribute might be required so brands can follow consumer trends thoughtfully.

Private Label stands out as having a consumer preference for flavoured condoms. Consumers tend to lean towards 12-condom packages over 6 units, possibly to minimize frequent purchases and avoid potential embarrassment. Special Features are considered important by consumers, with Temperature and Texture being preferred over Durex's Retardant-level attribute. Condoms lacking Special Features have a negative overall partworth utility. Examining materials, Latex is generally preferred, especially in brands with cheaper options. Natural Latex also garners positive preferences, suggesting that a significant portion of consumers value the traditional material for condoms. Natural latex is known for its elasticity, durability, and overall reliability. However, Latex-free faces negative inclinations in certain brands. The negative inclinations towards latex-free options in specific brands indicate that not all consumers are receptive to alternatives to natural latex. The lack of receptiveness may be influenced by the brands themselves.

5.2. Managerial Implications

After the specific analysis of the Perceptual Map study and the Conjoint Analysis, the following section is directed at managerial implications, for condom brands, that can be derived and applied based on the conclusions that were found. This chapter is divided into six sub-sections according to the nature of the recommendations that will be presented.

Purchasing behaviour in the condom industry

Although not the main focus of this master's thesis, relevant findings can be expected after the investigation that was conducted. Firstly, according to the interview conducted with Control's Marketing Director, and the surveys, it is possible to conclude that, indeed, in this industry, consumers tend to adopt a "run-grab-run" purchase behaviour. This specific behaviour is defined by customers' avoidance of spending a lot of time in front of this category's shelves.

As the name suggests, consumers "run" to the store, after previously researching their intended product of choice; then, when in front of the linear, they "grab" the product of their choice, spending the least amount of time as possible looking at the available options; and finally, they "run" again from the shelve to the store's checkout. The tendency described above reveals a certain feeling of embarrassment and discomfort during the product's purchase. This sentiment was further evident in the consumers' preference towards packages of 12 condoms, as opposed to 6 units, implying a reduced frequency of purchase. This fast-paced purchasing behaviour is particularly relevant to companies operating in the market, given that a smart strategy must be drawn accordingly. Transparent information about the product, namely characteristics, features, and benefits, must be available online for consumers to consult beforehand.

Moreover, safety standards must be communicated and emphasised through these channels, being readily available for customers' prior knowledge. If companies adopt plans following this tendency, it assures not only smoother purchasing paths but also less complicated and possibly less embarrassing store trips.

Market Gap

One of the most relevant takeaways for condom companies, according to the analysis previously presented in the Perceptual Map Analysis, is the market gap that currently exists in Portugal, from consumers' perception. Although the market leaders share similar profiles, further brands are positioned in different market sections, according to the model that was created for this study. As previously discussed, there was only one quadrant where no brand was positioned – the 4th one (high on component 1 and low on component 2). Given that there is clearly room for a brand to be positioned with products that are perceived as less affordable and more unique, efforts must be made in order to assess whether such an offering would have sufficient demand to be implemented in the market.

Therefore, if there exists a demand for products with these specific characteristics – premium condoms focused on quality, safety, and fun – there is a gap in the industry ready to be leveraged. By capturing those consumers looking for unique offerings, existing companies can either expand their offering to this side of the industry. Alternatively, new companies may enter the market to further explore this niche and offer prestige elitist products, thus the existing ones may be prepared. Therefore, further studies focused on this specific niche must be taken to guarantee consumers' interest in a brand that targets consumers looking for elite condoms.

Research and Development

Innovation remains a key driver in the condom market, with manufacturers encouraged to continually enhance and promote distinct features to meet the preferences of their target audience. For example, promoting the thinness of products through marketing campaigns can be a compelling strategy to attract customers. Research and development efforts should align with creating condoms that are not only thin but also meet stringent quality and safety standards. In terms of lubrication enhancements, it is worth exploring the utilization of long-lasting or speciality lubricants that cater to specific preferences.

For brands such as Control, emphasis on innovation becomes even more critical. Introducing new features or improving existing ones can contribute to retaining and attracting customers in a competitive market. Maintaining and enhancing brand loyalty through consistent quality and messaging is equally crucial for marketers. For example, to establish a strong rapport with customers and foster trust, one approach could be to offer a comprehensive online guide or quiz that assists users in determining the most suitable size for their requirements. Additionally, it is advisable to invest in sustainable packaging materials to align with the preferences of environmentally conscious consumers.

Moreover, the concept of innovation extends beyond just the materials themselves and encompasses the creation of a comprehensive omnichannel experience. It is crucial to formulate a strategy that not only delivers an omnichannel experience but also considers the "run-grab-run" purchasing behaviour. This entails ensuring a seamless shopping experience across all channels, including physical stores, mobile platforms, and online platforms. Collaborative initiatives, exemplified by the synergy between Control and UberEATS, in Portugal, empower customers to seamlessly place and retrieve orders - the click-and-collect option. Besides, exploring subscription services is another avenue worth investigating for potential development. These services provide customers with the flexibility to customize their subscription packages, encompassing their preferred types, sizes, and flavours. This not only strengthens customer loyalty but also generates invaluable customer data, thereby enhancing the overall customer journey. The integration of interactive displays, which showcase comprehensive product attribute information and interactive quizzes for optimal sizing selection, significantly contributes to the overall improvement of the customer experience.

Moreover, the inclusion of loyalty rewards, linked to the subscription models, allows customers to seamlessly earn and redeem rewards across various channels, further emphasizing the commitment to customer-centricity. Plus, this loyalty reward could be earned and redeemed seamlessly across various channels.

Pricing and Communication Strategies

As discussed in the previous analysis of the Perceptual Map, consumers may not be aligned with the company regarding the brand's positioning in the market. This phenomenon was evident with Lelo Hex: although advertising their offering to be of higher quality, therefore implementing higher prices, consumers do not perceive this. Therefore, brands must make sure to clearly communicate their positioning, benefits, and differentiation points of quality through other channels rather than just adjusting their pricing strategy accordingly. Therefore, it is true that pricing strategies need to be aligned with perceived quality, and efforts should be made to align a company's positioning with consumers' points of view. Moreover, in their marketing communications, condom companies should strategically highlight the thinness of their products, meeting the identified strong consumer preference.

One prominent aspect to leverage is the preference for natural latex, a material that instils trust among consumers. Manufacturers can strategically highlight the use of natural latex, for instance, by creating advertisements showcasing the product's thinness through visual demonstrations or comparisons with competitors. Emphasize the reliability and trust associated with natural latex by incorporating testimonials from satisfied users, perhaps even collaborating with healthcare professionals or sexual health experts to endorse the material.

However, manufacturers must recognize exceptions to this preference, which may stem from factors like specific features, brand prestige, or unique selling points. These exceptions provide valuable insights that can guide manufacturers in tailoring their offerings for different market segments. For instance, brands facing negative inclinations towards latex-free options should focus on effective communication and education to dispel misconceptions and highlight the benefits of latex-free materials, catering to individuals with latex allergies or sensitivities. For example, use the influence power and the reach of social media to deliver informative content. This could be done through partnerships with healthcare professionals or sexual health experts to endorse the material. Campaigns like this would not be a novelty, but their reach is remarkable. Durex in 2022 partnered up with Tania Graça, a renowned sexual phycologist, with a great presence on Instagram. The shared posts not only presented the brand's portfolio but also included information on how to improve sexual health. Another technique is to offer free samples or trial packs to encourage users to experience the product firsthand.

Market segmentation becomes pivotal in light of both positive and negative preferences, as different consumer segments exhibit varying inclinations. Manufacturers should strive to understand these nuances to tailor their product offerings to specific target audiences effectively. Brands targeting higher-income consumers may opt for premium pricing strategies, and even develop a niche for a premium line of products. While those aiming at a broader market should balance affordability with perceived value. Strategies which encompass bundling options, promotional offers, or subscription services, enhance perceived value for cost-conscious consumers.

In conclusion, the condom market demands a nuanced and strategic approach from manufacturers and marketers. By understanding and responding to consumer preferences, leveraging market segmentation, and embracing innovation, stakeholders can navigate this dynamic landscape and build a strong and loyal customer base.

Female Condom

Understanding consumer's openness to the female condom is crucial in determining whether companies should invest in this product. Our study suggests that while the majority of the inquiries are familiar with the product – have heard about it before – only a small percentage have had a concrete experience with it. One of the main concerns associated with female condom usage was related to insertion difficulties, misplacements, and reduced sensation, indicating that the information available is still deficient.

Moreover, one key finding was that those who reported to be willing to learn more about the product had significantly higher income than those who did not. For companies operating in the market, this finding is of extreme relevance. In order to invest in the manufacturing, marketing and commercialization of female condoms, companies must target a specific customer profile. Our suggestion is to approach this hypothesis by heavily testing and educating potential customers before introducing the female condom to the general market. Our recommendation is for companies to first introduce the topic through online platforms to analyse consumers' openness and willingness to learn, maintaining a fun attitude while discussing important instructions, especially about insertion steps and general benefits. Another possibility would be to offer a female condom with the purchase of a male condom pack, to introduce consumers to this novelty. The idea would be to offer the possibility for consumers to pick between a package of male condoms with this additional product, or a regular package of male condoms – without the offer.

After analysing the reception among them, efforts should be made to properly educate them. This could encompass social media campaigns targeting young adults, but also partnerships with schools and institutions. By entering this new, still undiscovered, market segment, companies could leverage favourable positioning and capture new types of consumers. All in all, given this unknown path of product development and its feasibility, it is of extreme importance for these companies to test its viability before the official launch. Additionally, educating younger generations is fundamental to generating concrete demand and increasing the willingness to pay among these.

Education and Promotion among the youth

While social media plays a crucial role in the proper promotion of these industry-sensitive subjects, schools are the playground where companies should invest to contribute to society's education. Partnerships with these institutions are indeed instrumental in promoting sexual education, a territory that seems to be neglected still, despite the increasing efforts made by the government. Our analysis, grounded on both qualitative and quantitative research, allowed for the formulation of concrete recommendations for corporations operating in the condom market, all centred around collaborations of this nature. While the following can impose important differentiators for companies, emphasis should be taken on the importance of such initiatives for the general society and future generations' education and awareness.

Firstly, by recognizing the potential of targeting a younger demographic, companies can partner with schools and create comprehensive sexual education workshops with the help of medical professionals. Nevertheless, it is essential to moderate the tone of the activities performed, making sure to spread the importance of sexual protection, while maintaining a relaxed, stigma-free, and cool environment. By allowing students to feel safe and relaxed, these activities not only would allow for brands to promote their offerings, but teens would create positive associations with the brand, demystifying the taboo. Moreover, for a more comprehensive integration in these academic settings, companies should aim to work closely with education boards and policymakers to be integrated into school curricula as much as possible.

Also, condom companies could invest in supporting and funding student-led initiatives – from school trips to parties – providing guidance, resources, and products, essential in the promotion of safer sexual practices. By empowering students' events, they would feel connected with the brand while developing various initiatives to raise brand awareness and recognition.

Finally, for companies to differentiate in this market, a student health ambassador program could be implemented. It would consist of the creation of a program where a designated student from each school would become a brand ambassador responsible for implementing sexual health initiatives within the school and designing extracurricular activities centred on the topic. These students would have access to several corporate activities, sneak peeks of promotional campaigns, and new product launches, and in return, the companies would help fund their academic journey while fostering the creation of a comprehensive corporate network. In summary, when establishing partnerships with schools, it is essential to uphold transparent communication between all parties involved, given the sensitivity of the topic, addressing all concerns that may be raised by the different stakeholders. Tailoring these initiatives is crucial, and adjustments grounded on different cultural and social contexts must be made for these to succeed and generate added value.

5.3. Limitations and Implications for Future Research

Despite the interesting conclusions drawn from this study, there are still some limitations, which will be discussed in the following chapter. Additionally, building upon these limitations, opportunities for future research will be explored.

Sample size

Regarding the sample size, for both surveys – perceptual maps and conjoint analysis – it was not possible to achieve a considerable number of responses. In the first survey, where respondents were asked about their perceptions on the condom brands, a total of 198 answers were considered in the study. For the conjoint survey, the second one, a total of 311 individuals took part in the study, however, the Conjoint.ly platform recommended a total of 450 answers to obtain a considerable sample, which could potentially pose a challenge in terms of achieving statistical significance. In furtherance of enhanced reliability and validity, for future research, it is recommended to consider a larger sample population in the study.

Sample variety

Additionally, also related to the sample population considered in this study, another limitation was pointed out regarding the sample variety. According to our demographics analysis, there is a substantial number of respondents within the younger age groups compared to the older ones. In fact, in both surveys, there was only a small percentage of respondents with 41 years or more, around 9%. Although the purpose of this study was focused on the younger generation, it would be relevant to have a larger sample with more age group variety, allowing us to understand the impact that age has on the topic. Moreover, within the sexual orientation, there was also a discrepancy in the results, with heterosexual respondents accounting for 88% to 93%. Thus, a very small proportion of the respondents identified as homosexual, bisexual, pansexual or preferred not to disclose their sexuality. Once again, the low variety in the sample regarding age and sexuality may be identified as a challenge for the study, limiting its conclusions. Thus, it is not possible to understand if these two demographics affect the condom brands' perception or the respondents' attribute preferences, which can be regarded as an opportunity for further research.

Nationality

Furthermore, although nationality is not considered a limitation because this project intentionally focuses only on the Portuguese population, it might be interesting to analyse whether there are variations in the results across different nationalities. For instance, as mentioned by the literature, in some countries such as China, there is severe legislation for population increase with the use of strict population policies so, the perception of condoms may be different. Thus, exploring whether nationality influences this thesis topic can be an interesting suggestion for subsequent investigations.

Qualitative interviews and bias in self-reported data

For this study, some qualitative interviews were conducted in order to obtain more in-depth insights before analysing the quantitative results achieved through two different surveys. Thus, the accuracy of respondents' and interviewees' statements may introduce various potential biases. Firstly, considering the interviews with the condom brand's experts and gynaecologists, their insights were provided based on the patients they have or on the firm they work for, or even based on the limited information they are allowed to share. Thus, brand professionals cannot share certain information with individuals from outside the company and medicine experts cannot share private information about their patients.

Secondly, regarding the survey results, respondents may have answered the questions based on their memories, such as recalling their specific experiences, positive or negative, or even having different preferences regarding brands or attributes. Although qualitative interviews and surveys may suggest some study's limitations, they play a crucial role in collecting information, in this case about consumers' perceptions and attribute preferences.

Brand, Attributes and Characteristics Choice Bias

In addition, to conduct the perceptual maps and conjoint analysis surveys some choices have been made regarding the included brands, attributes and characteristics. For instance, there are some condom brands that individuals may find online and may prefer over the ones included in the study. However, as they were not sold in physical stores, representing a small proportion of brand awareness, they were not considered. Moreover, within the brands chosen, due to the differences in brand awareness and recognition, some of them may have benefitted, and so respondents may have stated opinions on some brands although they never used it.

Furthermore, some attributes and characteristics were chosen, such as affordability, thickness, ruggedness, flavour & scent, and quality. However, although other attributes and characteristics could have been included in the study, this would have increased even more difficulty for consumers as they were already faced with too many questions and comparisons. Thus, including more characteristics could have potentially led to a higher abandonment rate and reduced rational answers. For future analysis on this topic, it may be interesting to test additional attributes and characteristics, to understand if there are other factors influencing the condoms' brands and product choices.

Conjoint.ly limitations

Regarding conjoint analysis, as stated above, respondents had to answer a considerable number of questions and compare many different product options. In fact, only 32.7% of the individuals who opened the link actually answered the survey, which means that a total of 950 individuals had access to the survey however, only 311 respondents were considered (*Appendix 21*). This discrepancy can be associated not only with the number of questions presented to the respondents but also with the different layouts of the survey, depending on whether it is accessed via a mobile phone or a computer. For instance, on the mobile phone, the different product options are presented vertically, so respondents had to scroll down to see all of them, thus the comparison is harder and more exhausting. This can be also associated with a decrease in the answers' quality, as respondents were obligated to memorize the options presented in order to choose their preferred one.

Conversely, if answered on a computer, the different options were presented horizontally and side by side, which is easier to compare and more reliable as respondents didn't have to memorize to choose. Therefore, since 70.9% of the survey's answers were done on a mobile phone, while only 29.6% were on a computer, a limitation can be pointed out. In that sense, for future research, considering that individuals are always in the presence of their mobile phones, even more than computers, can be interesting to test a different layout. Thus, creating a more user-friendly layout that enable respondents to answer the survey similarly to how they answer on the computer currently, would allow easier comparisons and more reliable answers.

Total average of relative importance by levels

Furthermore, regarding the conjoint analysis results and assumptions, an important limitation was identified. Regarding the relative importance by levels, when calculating the total average for each level of a certain attribute, all brands were considered equally important. In other words, even though the majority of people were not familiar with Harmony or Lelo Hex, the weight given to these brands' attribute preferences was the same as the weight given to Control and Durex. Therefore, future research should calculate the total average considering a weighted average formula to not influence the results and derive more accurate conclusions.

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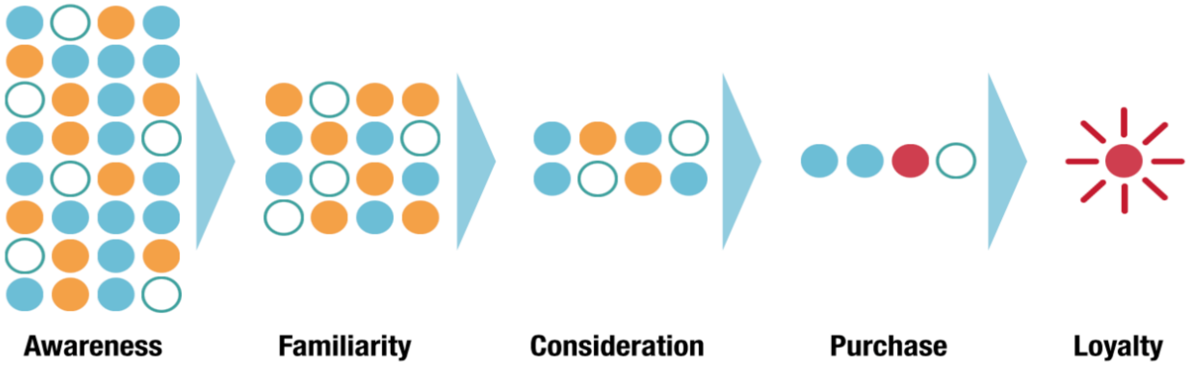
7. Appendix

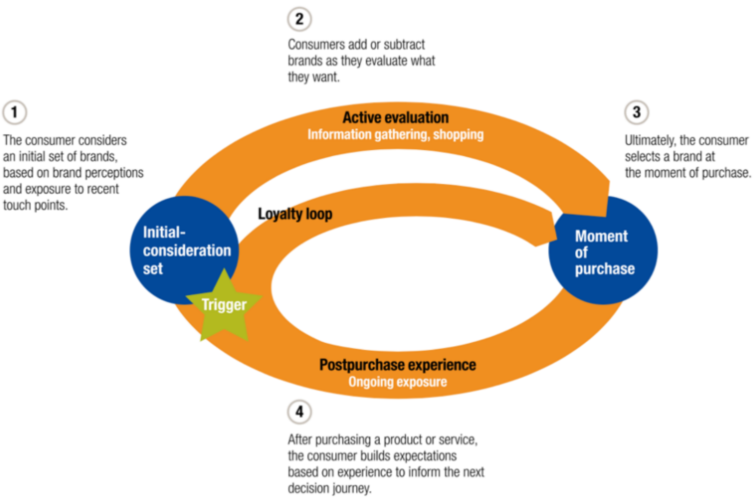
7.1. Consumer Decision-Making Journey

Appendix 1: Consumer Decision-Making Journey "Funnel"



(Source: McKinsey)

Appendix 2: Circular Journey



(Source: McKinsey)

7.2. Preliminary Interviews

Appendix 3: Preliminary Interview Questions – Contraceptive Brands

Professional Experience	- Years of Experience - Current Role
Market Overview	- What are the **main trends** on the market currently? Is the condom still the preferred protection method? - What are the **main marketing challenges** for condom brands in Portugal? - According to a study made by the Health Behaviour in School-aged Children / World Health Organization, there is a **decrease in the use of condoms** in the younger generation? In your opinion what are the reasons for this trend? - What are some of the most **effective marketing strategies** for promoting condom use among young people? Is **social media** a key player in the implemented strategies? - What are the **main competitors in the market**? Is it Durex, Control and Harmony? And who is the leader? - How do you think the condom market **will evolve** in the next few years?
Buyers Overview	- What is the profile of the common **buyer personas**? - What are the **main motivations** for consumers to purchase condoms? (Ex: price convenience when comparing to other options; easy to use; etc…) - Do you think that **demographics influence** the brand chosen when consumers purchase (ex: age, gender, academic level). If so, which ones are more relevant?
Consumers' perceptions	- According to your knowledge what are the **main characteristics** that users consider when choosing a condom's brand? What **attributes** do they value the most about the product? - According to you, what is the **main characteristic that differentiates the condom's brands** and determines the choice of one brand instead of the other? - What are the **main perceptions consumers** have about the **3 main brands** on the market (Durex, Control, Harmony)? - Aaeker's Brand Personality Dimensions: - Sincerity (down to earth, family-oriented, honest, original, cheerful, friendly, sentimental) - Excitement (Daring, trendy, exciting, cool, young, contemporary, up-to-date, imaginative) - Competence (Reliable, intelligent, technical, successful, confident) - Sophistication (glamorous, smooth, charming) - Ruggedness (tough, rugged, "masculine", intense) Given your expertise in the market, where do you place each brand?

Appendix 4: Preliminary Interview Questions – Health Professionals

Professional Experience	- Years of Experience - Current Role
Market Overview	- According to a study made by the Health Behaviour in School-aged Children / World Health Organization, there is a **decrease in the use of condoms** in the younger generation? In your opinion what are the reasons for this trend. - Regarding the **female condom** specifically, is there any associated trend, particularly, increased demand/ interest? If so, what are the main **questions/fears** associated with it? - What are the **main trends** on the market currently? - What are some of the most **effective strategies** for promoting condom use among young people?

Appendix 5: Condom's Total Market September 2023

FARMA	2 759 215
PARAFARMA	3 612 247
MASS MARKET	11 614 833
TOTAL	17 986 295

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7.3. Perceptual Maps

7.3.1. Perceptual Maps Survey Design

Appendix 6: "Navigating Intimacy: A survey on consumers' perceptions" - Global

Navigating Intimacy: A survey on Consumers' Perceptions | Anonymous

We invite you to take part in a **confidential** survey that delves into a subject often shrouded in secrecy, yet of paramount importance: the usage of condoms. Our survey is being conducted as part of our Master's thesis research at Nova School of Business and Economics (Nova SBE). Our aim is to shed light on this taboo but profoundly significant topic with your valuable insights. Your insights will help us better understand perceptions, preferences and practices related to condom usage. Your honest responses will contribute to promoting safe and responsible intimacy. Rest assured, your responses will remain **anonymous**!

Sections	Description	Question	Consideration Features	Answer
Section 1	Determine whether the participant corresponds to our target	1. Are you Portuguese?	-	1. Yes 2. No (End of Survey)
Section 2	Consumers' awareness of condom brands	2. Do you know at least one of these brands? 3. Please choose the ones you have heard of.	-	1. Yes 2. No Control; Durex; Harmony; Lelo Hex; Private Label
Section 3	Assess consumers' perceptions of each brand	4. Affordability	- Price per Condom - Packaging Size - Regular Discounts - Promotions	Please rate each brand on a scale from 1 to 5 where: 1 = Highly Dissatisfied and 5 = Highly Satisfied
		5. Quality	- Product's Quality - Performance - Comfort - Materials	Please rate each brand on a scale from 1 to 5 where: 1 = Very Poor and 5 = Excellent
		6. Reliability & Safety	- Durability and Effectiveness in preventing sexually transmitted infections (STDs) and unintended pregnancies	Please rate each brand on a scale from 1 to 5 where: 1 = Highly Dissatisfied and 5 = Highly Satisfied
		7. Brand Reputation & Trust	- Testing and Certifications - Health quality controller (LCQPS) - Endorsements from Healthcare Professionals	Please rate each brand on a scale from 1 to 5 where: 1 = Highly Dissatisfied and 5 = Highly Satisfied
		8. Coolness	- Coolness - Young Energy - Modern Vibe	Please rate each brand on a scale from 1 to 5 where: 1 = Very Uncool and 5 = Very Cool
		9. Popularity	- Large Customer Base - Large Brand Awareness	Please rate each brand on a scale from 1 to 5 where: 1 = Highly Unpopular and 5 = Highly Popular
		10. Innovation & Variety	- Product Development - Product Portfolio	Please rate each brand on a scale from 1 to 5 where: 1 = Very Poor and 5 = Excellent

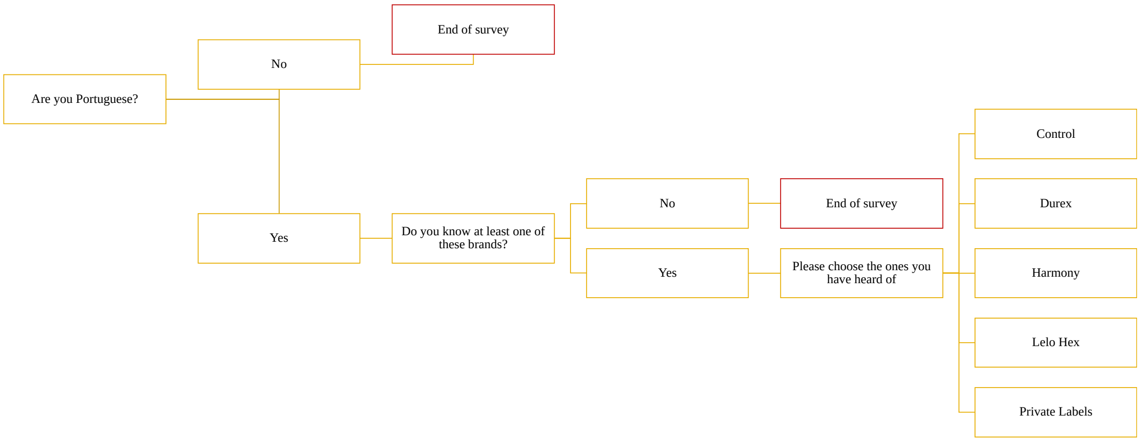
		11. Sexiness	- Visually Appealing: - Designs; - Aesthetics; - Packaging. - Provocative and Daring Marketing Campaigns or Slogans	Please rate each brand on a scale from 1 to 5 where: 1 = Very Unsexy and 5 = Very Sexy
		12. Ruggedness	- Toughness - Intensity - Strength - Masculinity	Please rate each brand on a scale from 1 to 5 where: 1 = Very Delicate and 5 = Very Rugged
		13. Willingness to Pay	- Maximum Price considering a package of 12 condoms	Please rate each brand on a scale from 1 to 5 where: 1 = Less than 3€ and 5 = More than 12€
Section 4	Assess consumers' perception of the Female Condom	14. Have you heard of female condoms before?	-	1. Yes 2. No 3. Maybe
		(If No to 14) 15. Would you be willing to learn more about the topic?		1. Yes 2. No 3. Maybe
		16. Have you or your partner ever used a female condom?		1. Yes, I have used it 2. Yes, my partner used it 3. No
		(If Yes to 16) 17. How satisfied are you with the overall experience of using female condoms?		Rate on a scale from 1 to 5 where: 1 = Very Dissatisfied and 5 = Very Satisfied
		18. What concerns or disadvantages do you associate with female condoms? (Max. 5)		Please select at most 5 options. - **Insertion challenges**: Some users may find it difficult to correctly insert the female condom, especially at first. **- Reduced Sensation:** Some users may perceive a reduction in sexual sensation when using a female condom. **- Availability:** Female condoms may not be as readily available as male condoms in some areas. - **Cost:** Female condoms can be more expensive than male condoms, affecting affordability. - **Limited Options:** There are limited choices in terms of brands or types of female condoms. - **Allergic Reactions:** Even though female condoms are usually latex-free, some

				users may still experience allergies to the materials used. - **Perception:** There may be negative social or cultural perceptions associated with female condoms.
		19. In your opinion, how do female condoms compare to male condoms in terms of effectiveness (protecting against pregnancy and STDs)?		- Female condoms are EQUALLY effective as male condoms - Female condoms are LESS effective than male condoms - Female condoms are MORE effective than male condoms - Effectiveness depends on correct use either for male or female condoms - I'm not sure
		20. Would you consider using or experimenting with female condoms in the future?		1. Yes 2. No 3. Maybe 4. Prefer not to say
Section 5	Demographic Features	21. Age Group	-	- 18-21 years - 22-25 years - 26-30 years - 31-35 years - 36-40 years - 41-50 years - 51-60 years - 61-70 years - More than 70 years
		22. What is your gender?		1. Female 2. Male 3. Prefer not to say
		23. Sexuality		1. Heterosexual 2. Homosexual 3. Bisexual 4. Prefer not to say
		24. Personal Monthly Income (including your monthly allowance and/or wage)		- Less than 20€ - Between 20€ and 60€ - Between 60€ and 100€ - Between 100€ and 300€ - Between 300€ and 500€ - Between 500€ and 700€ - Between 700€ and 900€ - Between 900€ and 1100€ - Between 1100€ and 1400€ - Between 1400€ and 1700€ - Between 1700€ and 2000€ - Between 2000€ and 2500€ - More than 2500€
		25. Are you in a relationship?		1. Yes 2. No
		(If yes to 25) 26. For how long have you been together?		- Less than 3 months - Between 3 months and 6 months - Between 6 months and 1 year - Between 1 year and 2 years

				- Between 2 years and 3 years - Between 3 years and 4 years - Between 4 years and 5 years - Between 5 years and 7 years - Between 7 years and 10 years More than 10 years
		27. How many times have you bought a package of condoms in the last year?		- 0 - 1-3 - 4-7 - 8-11 - 12-14 - 15+
		28. Did you use a condom in your last sexual relationship?		1. Yes 2. No
		(If No to 28) 29. Why not?		- Trust in the partner - We are trying to get pregnant - Each has tested for STIs recently - Condom use is uncomfortable - No condom at disposal - Condoms are too expensive - Forgetting - Used other type of protection
		(If Yes to 28) 30. Why?		- Tested positive for an STD - To prevent STDs and pregnancy - No trust in a partner - My partner tested positive for an STD
		(If No to 28) 31. Did you use any other type of protection? If so, which one?		“Enter your answer”
		(If Yes to 28) 32. Which brand have you used?		1. Control 2. Durex 3. Harmoney 4. Lelo Hex

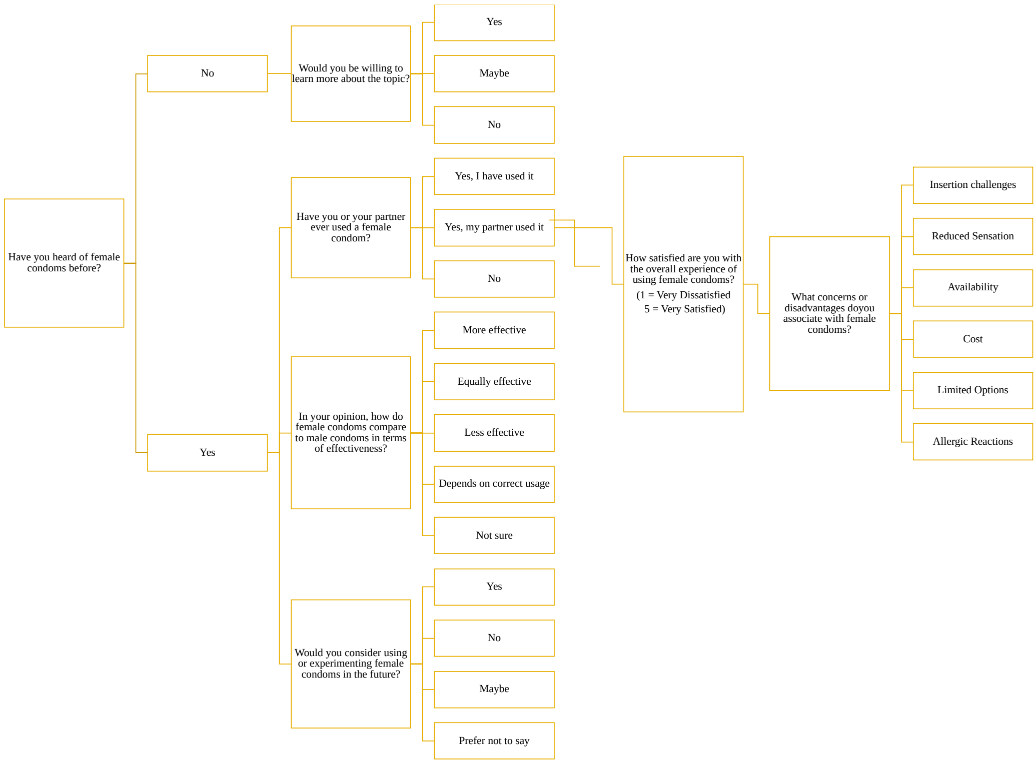
Appendix 7: "Navigating Intimacy: A survey on consumers' perceptions" - Scheme

<u>Sections 1 and 2</u>



<u>Section 3</u>

Section 4



Section 5

Demographics

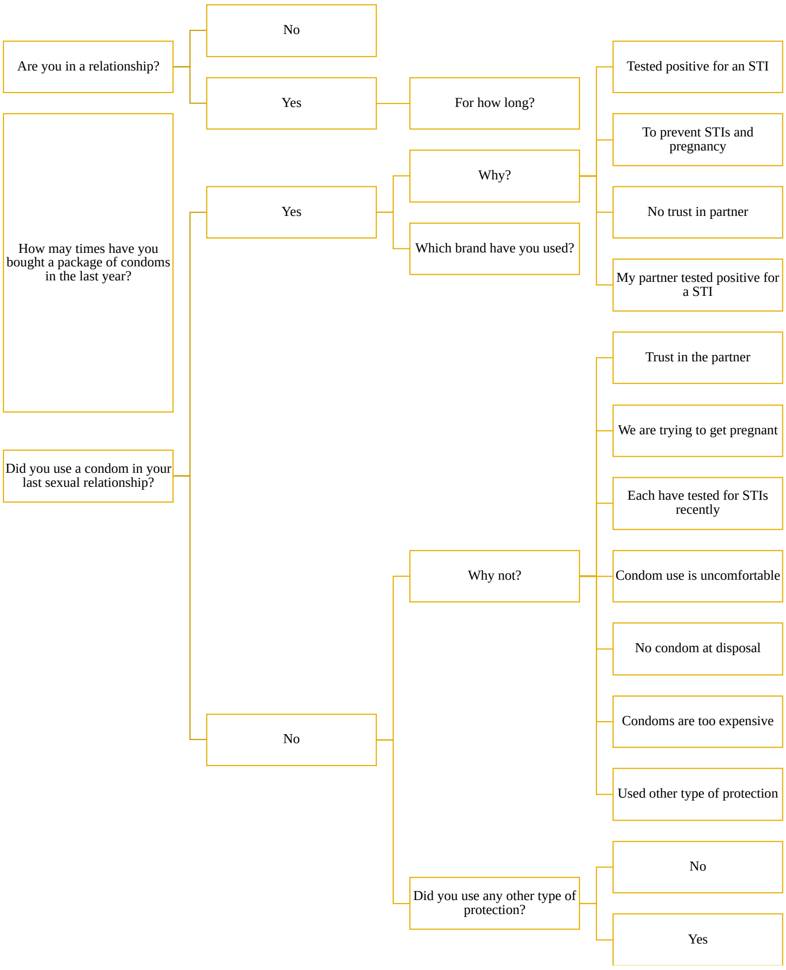
Age group

Gender

Sexuality

Personal monthly income

Specific questions



7.3.2. Perceptual Maps Results

Appendix 8: Perceptual Maps Sample Characteristics

Figure 8.1: Frequency Distribution Age

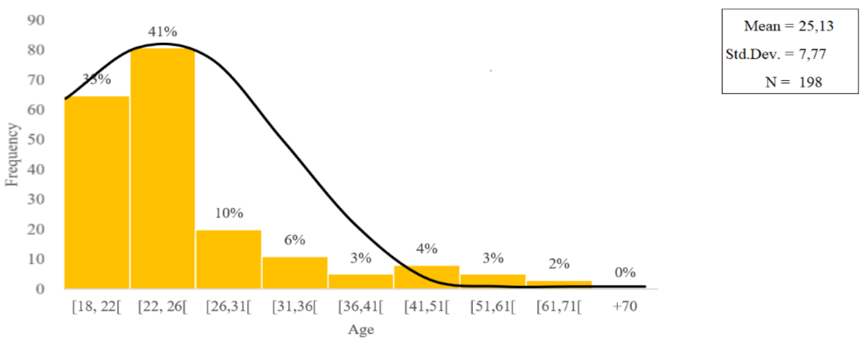
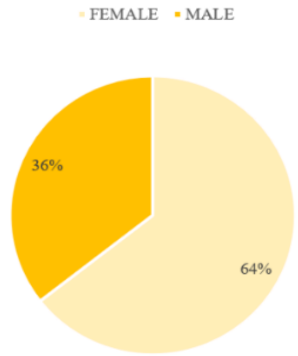


Figure 8.2: Frequency Distribution Gender



Mean= 0,63
Std.Dev.= 0,48
N= 197

Figure 8.3: Sexuality

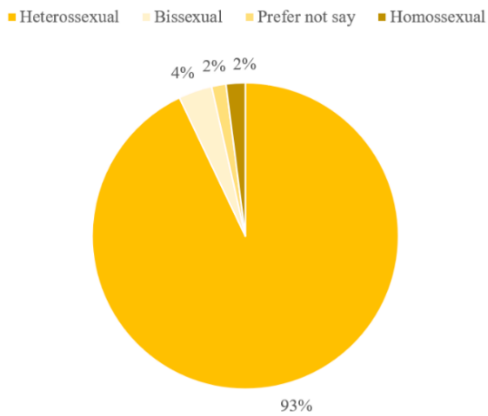


Figure 8.4: Income of respondents who did not use a condom in their last sexual relationship

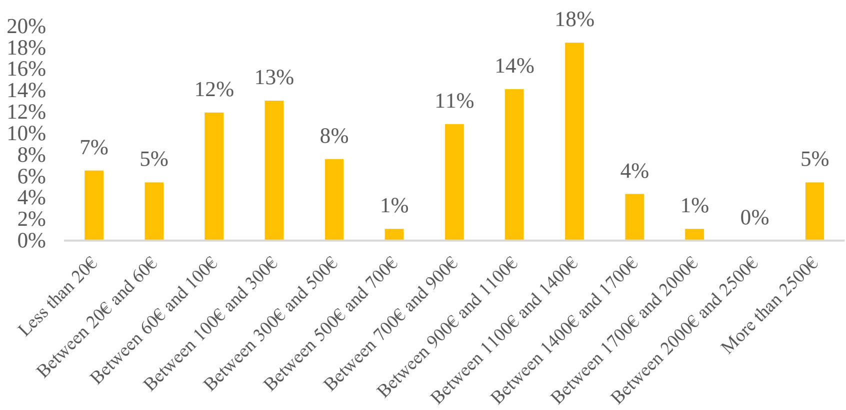


Figure 8.5: Income of respondents who did use a condom in their last sexual relationship

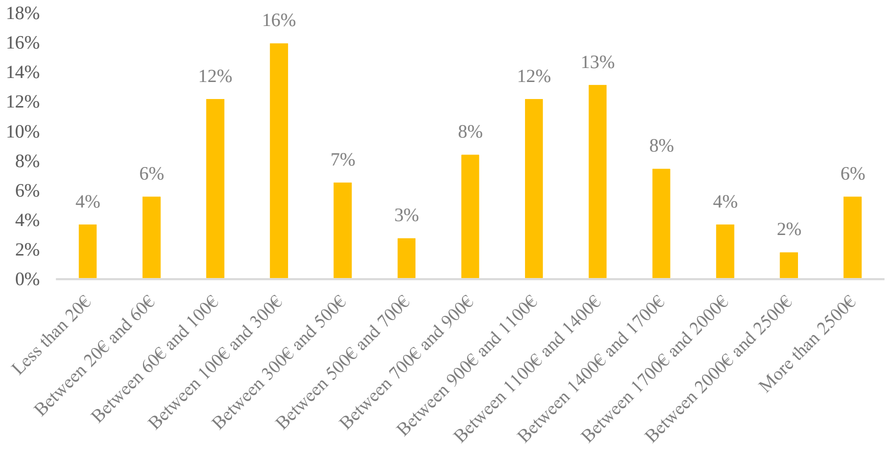


Figure 8.6: Usage of a condom in the last sexual relationship

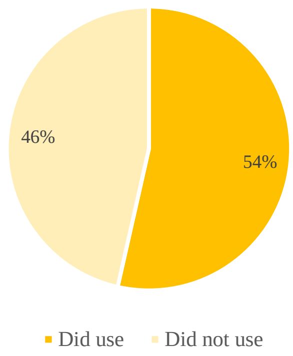


Figure 8.7: Absence of usage of condoms in the last sexual relationship

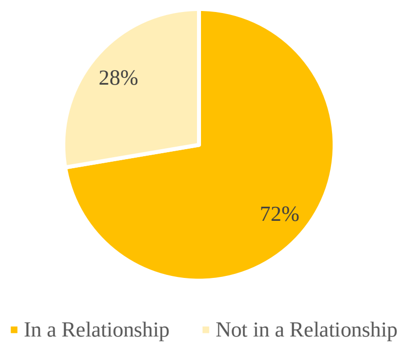


Figure 8.8: Respondents who are in a relationship and did not use a condom in their last sexual relationship

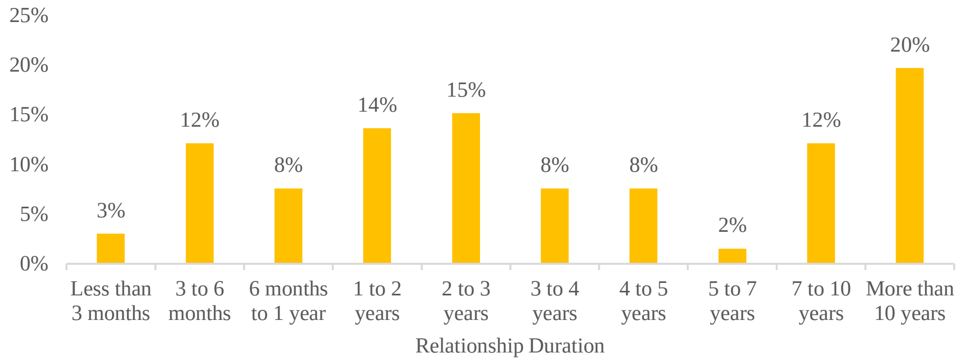


Figure 8.9: Usage of condoms in the last sexual relationship

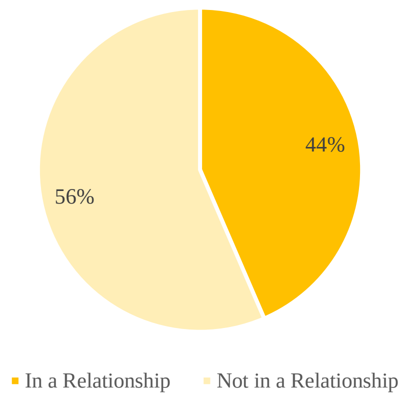


Figure 8.10: Usage of condom in the last sexual relationship when not in a relationship

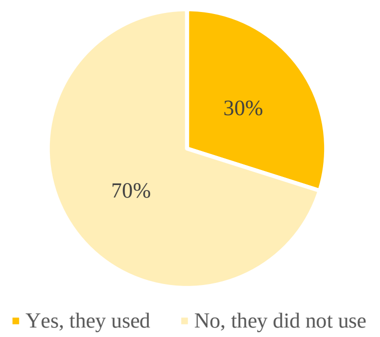


Figure 8.11: Usage of a condom in the last sexual relationship when 18-35 years old

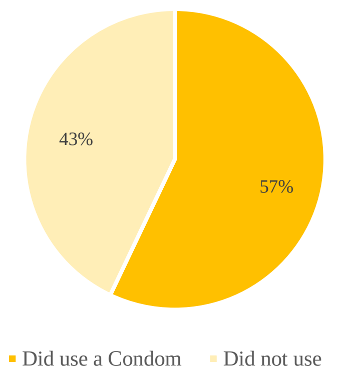


Figure 8.12: Reasons to use a condom in the last sexual relationship

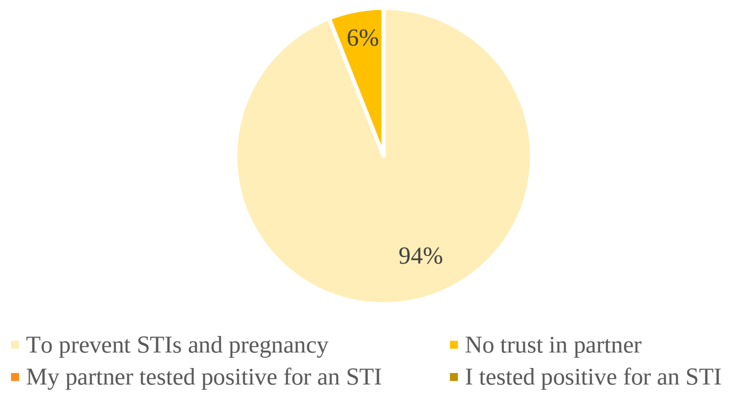


Figure 8.13: Reasons to not use a condom in the last sexual relationship

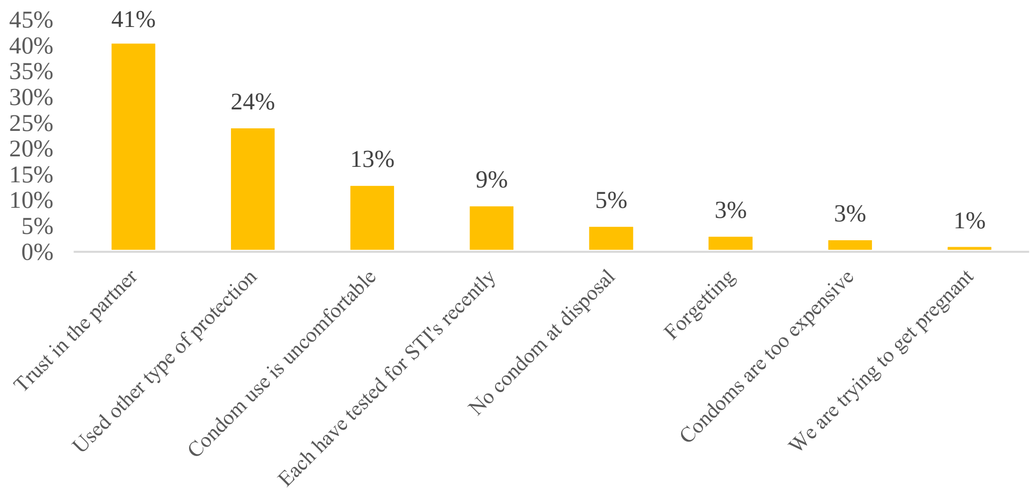


Figure 8.14: Usage of any other type of protection

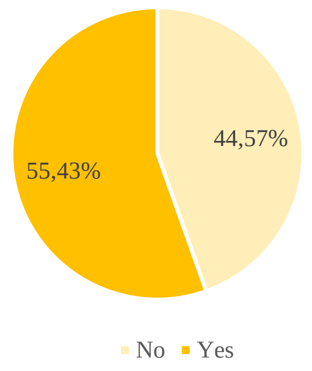


Figure 8.15: Other types of protection

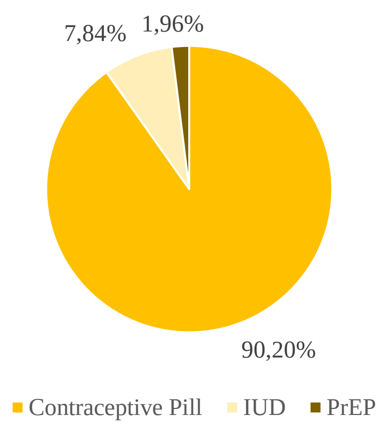


Figure 8.16: Brand used in their last sexual relationship

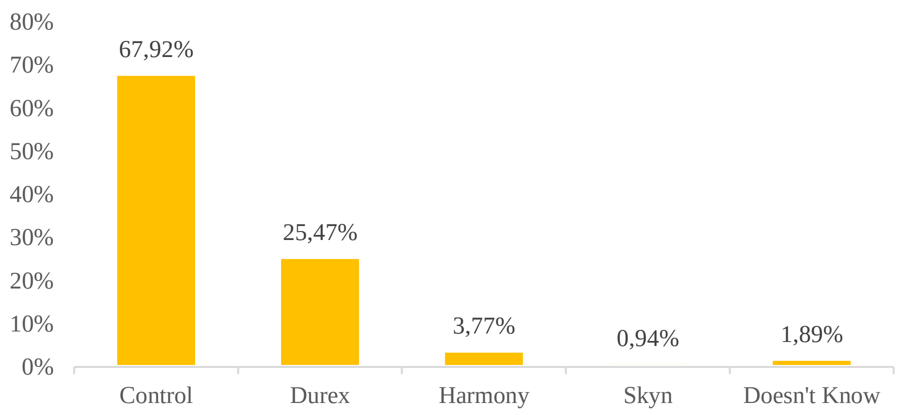
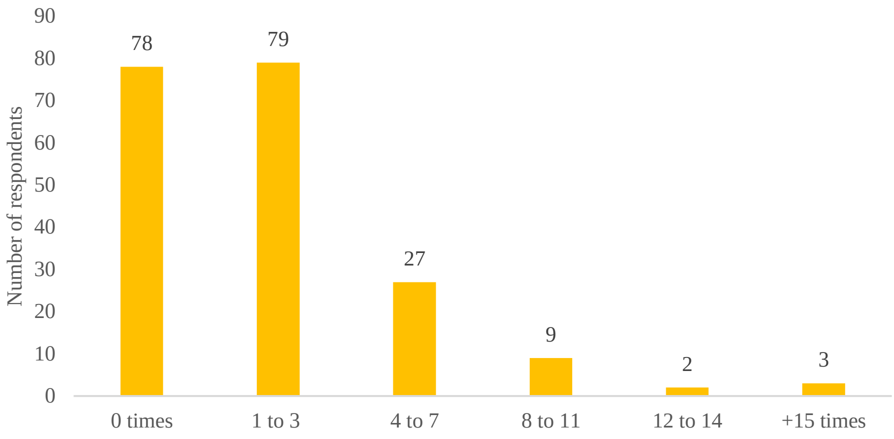


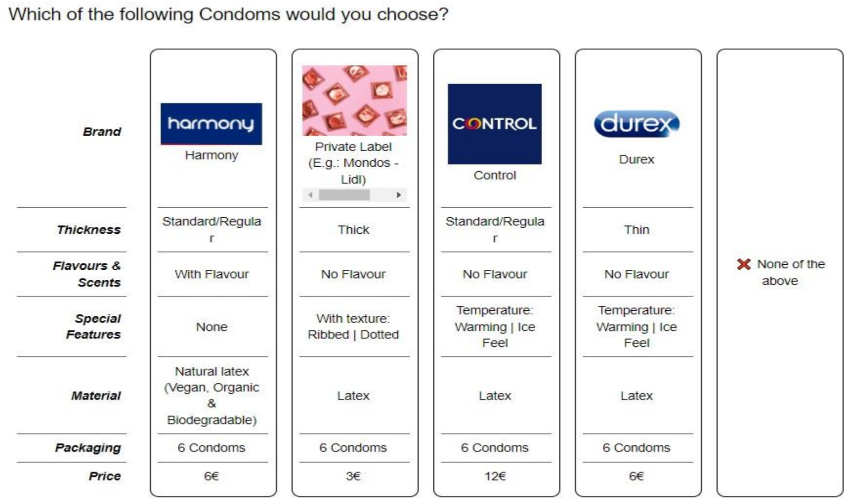
Figure 8.17: Number of times respondents bought condoms in the last year



7.4. Conjoint Analysis

7.4.1. Conjoint Survey Design

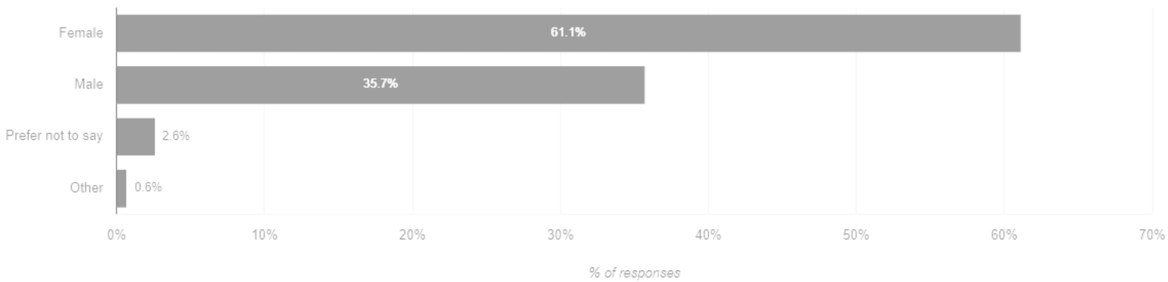
Appendix 9: Conjointly Survey

<table>
<tr><td colspan="2">Welcome to this study on condoms. We are a group of students from NOVA SBE and this study will be used for our thesis research. It will require less than 5 minutes of your time. We appreciate your participation. Rest assured, your answers will remain ANONYMOUS</td></tr>
<tr><td>Nationality</td><td>a. Portuguese
b. Other</td></tr>
<tr><td colspan="2">
</td></tr>
<tr><td>Age</td><td>"Enter your answer"</td></tr>
<tr><td>Gender</td><td>a. Female
b. Male
c. Prefer not to say</td></tr>
<tr><td>Sexuality</td><td>a. Heterosexual
b. Homosexual
c. Bisexual
d. Prefer not to say</td></tr>
</table>

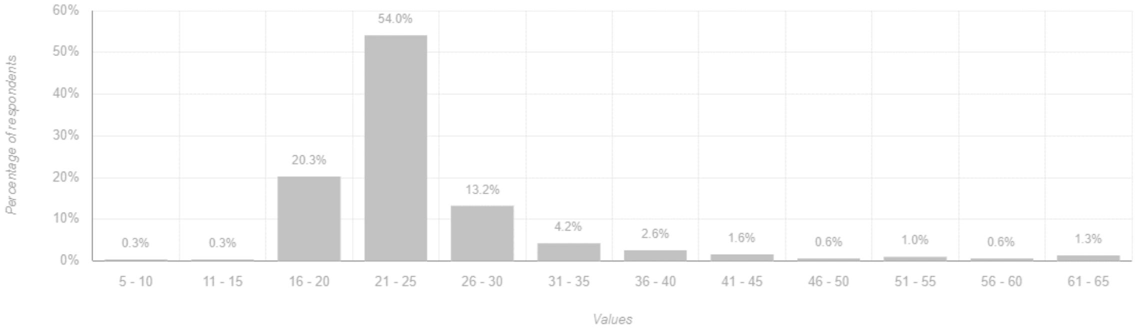
Are you in a relationship?	a. Yes b. No c. Prefer not to say
Personal Monthly Income (including your monthly allowance and/or wage)	- Less than 20€ - Between 21€ and 60€ - Between 61€ and 100€ - Between 101€ and 300€ - Between 301€ and 500€ - Between 501€ and 700€ - Between 701€ and 900€ - Between 901€ and 1100€ - Between 1401€ and 1700€ - Between 1701€ and 2000€ - Between 2001€ and 2500€ - More than 2500€
What would be the product for you? For each attribute, please select your preferred option.	
Brand	a. Control b. Durex c. Harmony d. Private Label
Packaging	a. 6 condoms b. 12 condoms c. 24 condoms
Price	a. 3€ b. 6€ c. 9€ d. 12€
Material	a. Latex b. Natural latex (Vegan, Organic & Biodegradable) c. Latex-free (Polyurethane & Polyisoprene)
Thickness	a. Thin b. Standard/ Regular c. Thick
Flavour & Scent	a. With Flavour (fruity | chocolate | mint) b. No Flavour
Special Features	a. Temperature (Warming | Ice feel) b. Retardant (Delays men's climax and prolongs attraction) c. With Texture (Ribbed | Dotted)

7.4.2. Conjoint Survey Results

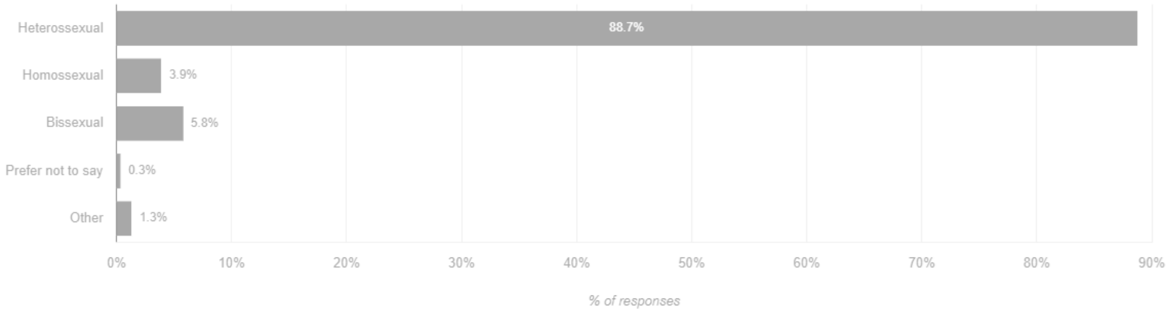
Appendix 10: Respondents Gender Distribution



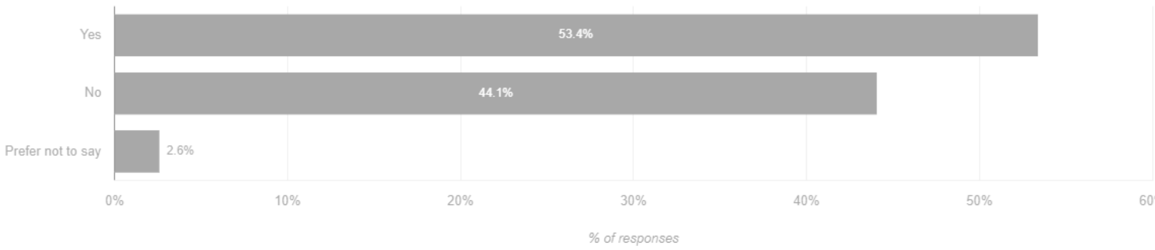
Appendix 11: Respondents Age Distribution



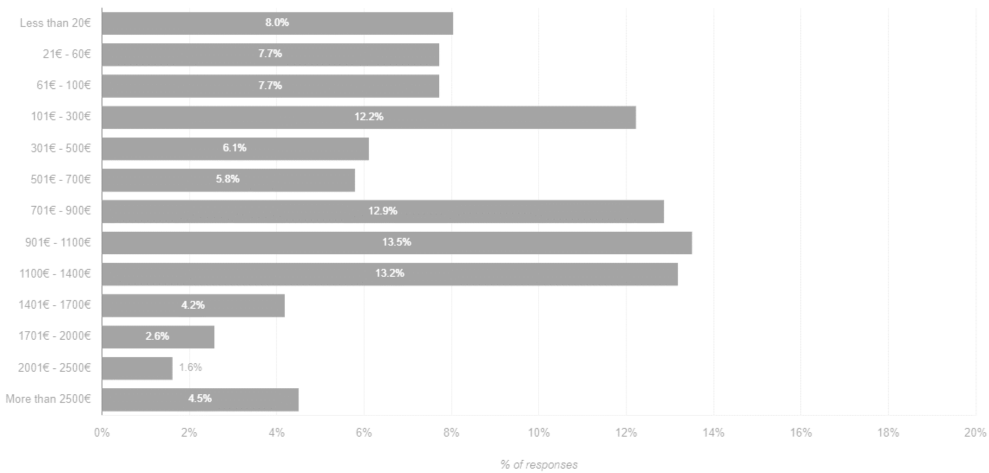
Appendix 12: Respondents Sexuality Distribution



Appendix 13: Respondents Relationship Status



Appendix 14: Respondents Income



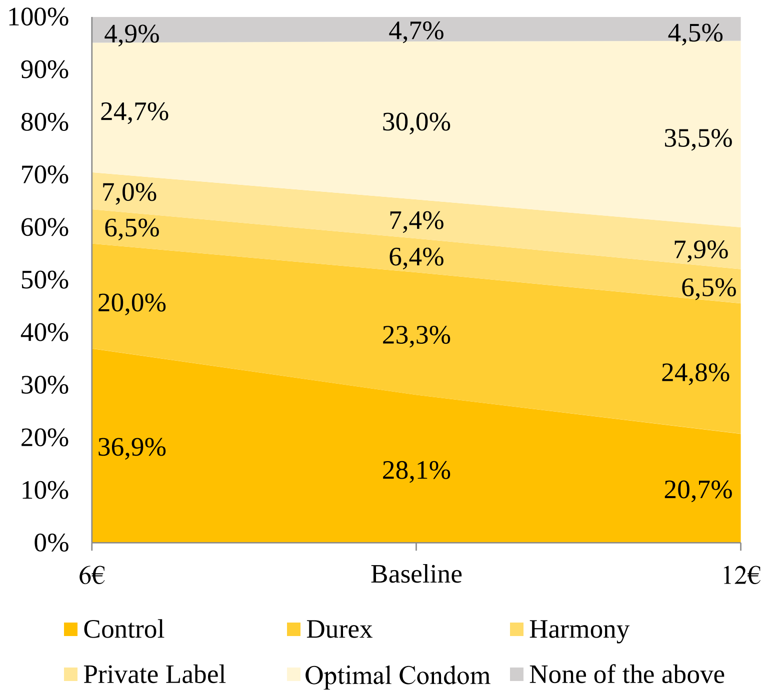
Appendix 15: Ranked List of Concepts

Brand	Price	Thickness	Flavours & Scents	Packaging	Special Features	Material	Rank	Value to customers
Control	6€	Thin	No Flavour	12 Condoms	With texture: Ribbed | Dotted	Natural latex (Vegan, Organic & Biodegradable)	1	51.32437986
Control	6€	Thin	No Flavour	12 Condoms	Retardant	Natural latex (Vegan, Organic & Biodegradable)	2	49.78096099
Control	6€	Thin	No Flavour	12 Condoms	Temperature: Warming | Ice Feel	Natural latex (Vegan, Organic & Biodegradable)	3	49.00493128
Control	6€	Thin	No Flavour	12 Condoms	None	Natural latex (Vegan, Organic & Biodegradable)	4	47.78535617
Control	6€	Standard/Regular	No Flavour	12 Condoms	With texture: Ribbed | Dotted	Natural latex (Vegan, Organic & Biodegradable)	5	46.82832986
Control	6€	Thin	No Flavour	12 Condoms	With texture: Ribbed | Dotted	Latex-free (Polyurethane & Polyisoprene)	6	46.81273041
Control	6€	Thin	With Flavour	12 Condoms	With texture: Ribbed | Dotted	Natural latex (Vegan, Organic & Biodegradable)	7	46.08615101
Control	6€	Standard/Regular	No Flavour	12 Condoms	Retardant	Natural latex (Vegan, Organic & Biodegradable)	8	45.28491099
Control	6€	Thin	No Flavour	12 Condoms	Retardant	Latex-free (Polyurethane & Polyisoprene)	9	45.26931154
Control	6€	Thin	With Flavour	12 Condoms	Retardant	Natural latex (Vegan, Organic & Biodegradable)	10	44.54273214
Control	6€	Standard/Regular	No Flavour	12 Condoms	Temperature: Warming | Ice Feel	Natural latex (Vegan, Organic & Biodegradable)	11	44.50888128
Control	6€	Thin	No Flavour	12 Condoms	Temperature: Warming | Ice Feel	Latex-free (Polyurethane & Polyisoprene)	12	44.49328183
Control	9€	Thin	No Flavour	12 Condoms	With texture: Ribbed | Dotted	Natural latex (Vegan, Organic & Biodegradable)	13	44.49163648
Control	6€	Thin	No Flavour	12 Condoms	With texture: Ribbed | Dotted	Latex	14	43.79180093
Control	6€	Thin	With Flavour	12 Condoms	Temperature: Warming | Ice Feel	Natural latex (Vegan, Organic & Biodegradable)	15	43.76670244
Control	6€	Standard/Regular	No Flavour	12 Condoms	None	Natural latex (Vegan, Organic & Biodegradable)	16	43.28930617
Control	6€	Thin	No Flavour	12 Condoms	None	Latex-free (Polyurethane & Polyisoprene)	17	43.27370672
Control	9€	Thin	No Flavour	12 Condoms	Retardant	Natural latex (Vegan, Organic & Biodegradable)	18	42.9482176
Control	6€	Thin	With Flavour	12 Condoms	None	Natural latex (Vegan, Organic & Biodegradable)	19	42.54712732
Control	6€	Standard/Regular	No Flavour	12 Condoms	With texture: Ribbed | Dotted	Latex-free (Polyurethane & Polyisoprene)	20	42.31668041
Durex	6€	Thin	No Flavour	12 Condoms	Temperature: Warming | Ice Feel	Latex-free (Polyurethane & Polyisoprene)	28	40.52546002
Harmony	6€	Standard/Regular	No Flavour	12 Condoms	None	Latex	474	14.16538548
Private Label (E.g.: Mondos - Lidl)	3€	Thin	With Flavour	12 Condoms	With texture: Ribbed | Dotted	Latex	926	-7.39244191
Durex	6€	Thick	With Flavour	6 Condoms	With texture: Ribbed | Dotted	Latex	927	-7.45405223
Harmony	6€	Thin	No Flavour	6 Condoms	With texture: Ribbed | Dotted	Latex-free (Polyurethane & Polyisoprene)	928	-7.50894419
Durex	12€	Thick	With Flavour	12 Condoms	With texture: Ribbed | Dotted	Latex-free (Polyurethane & Polyisoprene)	929	-7.57101954
Control	12€	Thick	With Flavour	12 Condoms	With texture: Ribbed | Dotted	Latex	930	-7.63569517
Harmony	12€	Thin	No Flavour	12 Condoms	Retardant	Latex	931	-7.63849821

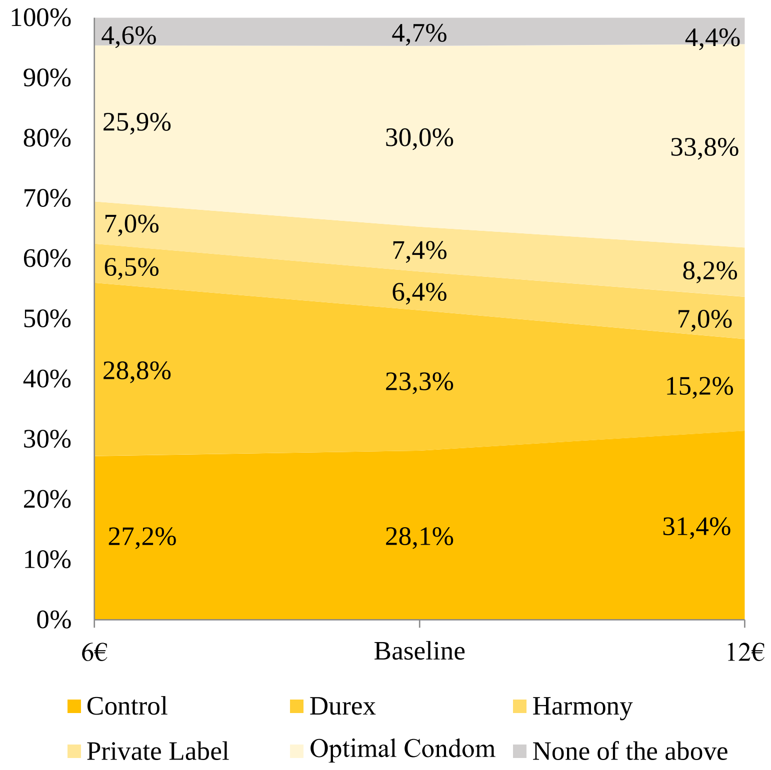
7.5. Bonus Part

7.5.1. The "Optimal Condom"

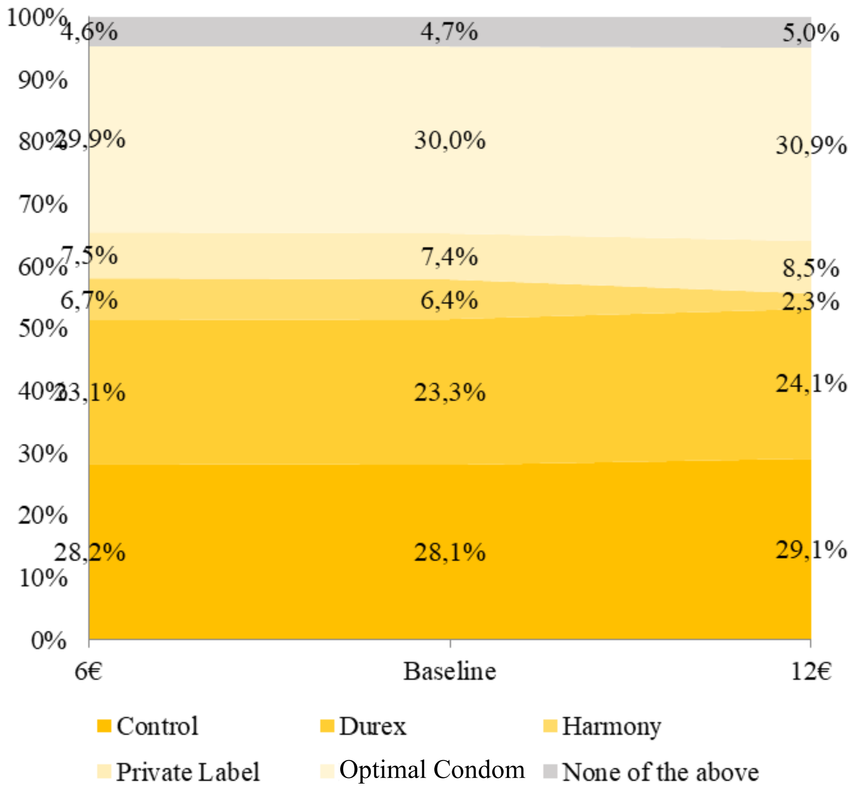
Appendix 16: Sensitivity to Product Price – Control



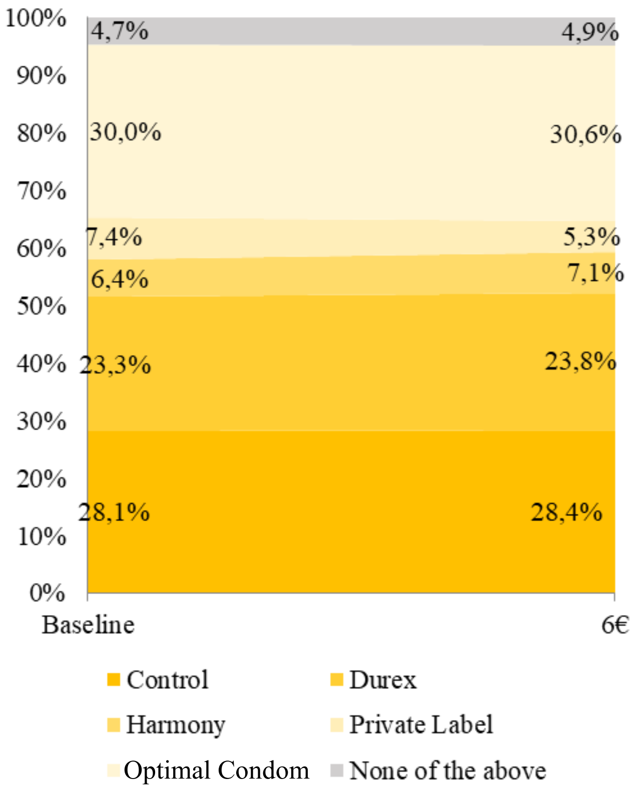
Appendix 17: Sensitivity to Product Price – Durex



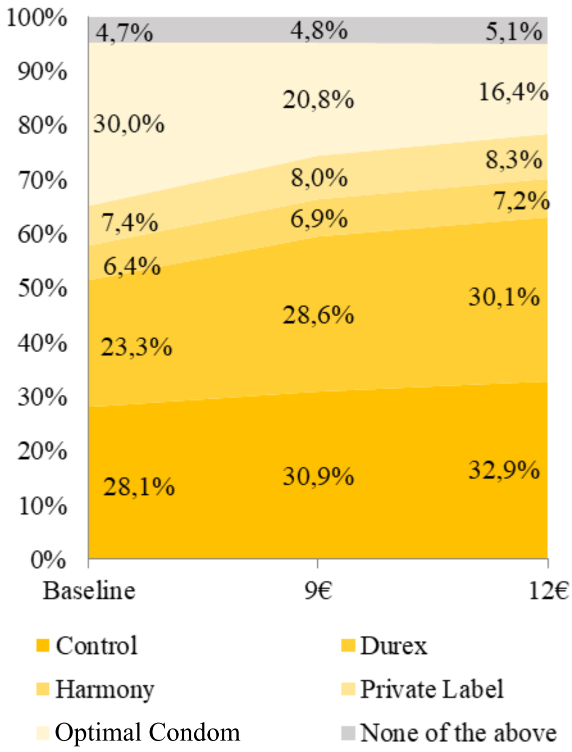
Appendix 18: Sensitivity to Product Price - Harmony



Appendix 19: Sensitivity to Product Price – Private Label



Appendix 20: Sensitivity to Product Price – Optimal Condom



7.6. Limitations and Implications for Future Research

Appendix 21: Participant Sources of the Conjoint Analysis

Participant sources

Source	Requested responses	Number of entries	Number of complete responses
Your own respondents	N/A	950	311
Total	0		