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The Impact of Gender Clues in Packaging on Consumers' Purchase Intentions and the Mediating Role of Brand Image

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Dissertation written under the supervision of Prof. Paulo Romeiro.

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ABSTRACT

Title: The Impact of Gender Clues in Packaging on Consumers' Purchase Intentions and the Mediating Role of Brand Image

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In the highly competitive world of FMCG, firms fight to differentiate their products and make them stand out in the eyes of the consumer.
Hence, the packaging assumes an important role in grabbing consumers' attention and in influencing them to make decisions.

In order to study the impact of gender clues in packaging on consumers' purchase intentions, this dissertation focuses on analyzing products in the wine's category, namely, rosé wine.

The methodology comprises primary data, obtained through qualitative research in the form of in-depth interviews, and quantitative research in the form of an online questionnaire.

In fact, the findings illustrate that including gender clues in the packaging of rosé wines has a positive effect on consumers' purchase intentions.
Furthermore, results suggest that there is an indirect effect of brand image on the relationship between the variables. This effect has a positive impact and it is statistically significant, validating that there is partial mediation.

Finally, in current times when gender and gender identity is one of the hottest topics, this dissertation opens the door for numerous possibilities regarding research about the role of gender in Consumer Packed Goods.

Keywords: Gender clues, purchase intentions, packaging, brand image, wine

SUMÁRIO

Título: O Impacto das Pistas de Género na Intenção de Compra dos Consumidores e o Papel Mediador da Imagem de Marca

Autor: Maria Santos de Oliveira

No mundo altamente competitivo dos bens de grande consumo, as empresas lutam para diferenciar os seus produtos e fazê-los destacar-se aos olhos dos consumidores.
Assim, a embalagem assume um papel importante na forma como capta a atenção dos consumidores e como os influencia a tomarem decisões.

Por forma a estudar o impacto das pistas de género na embalagem nas intenções de compra dos consumidores, a seguinte dissertação foca-se na análise de produtos na categoria dos vinhos, nomeadamente, o vinho rosé.

A metodologia inclui dados primários, obtidos através de pesquisa qualitativa na forma de entrevistas, e quantitativa na forma de um questionário online.

Os resultados obtidos ilustram que, de facto, a inclusão de pistas de género nas embalagens de vinho rosé tem um efeito positivo nas intenções de compra dos consumidores.
Adicionalmente, os resultados sugerem que existe um efeito indireto da variável imagem de marca na relação entre as variáveis. Este efeito é positivo e estatisticamente significante, provando que existe mediação parcial.

Concluindo, sendo o género e a identidade de género um dos temas mais falados da atualidade, esta dissertação abre portas a inúmeras possibilidades no que toca a pesquisa sobre o papel do género no setor dos bens de grande consumo.

Palavras-chave: Pistas de género, intenções de compra, embalagem, vinho

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GLOSSARY

FMCG – Fast Moving Consumer Goods

US – United States

CHAPTER 1: INTRODUCTION

1.1 Background and problem statement

In the highly competitive world of FMCG, firms fight to differentiate their products and make them stand out in the eyes of the consumer. In fact, as stated by Clay (1908) , "Man shows that he is affected by appearance, by something that causes him pleasure over and above the immediate utility of the object".

Studies show the visual dimension of packaging significantly influences consumers' choices when compared to well-known brands (Reimann et al., 2010), and product claims on packaging are more believable than product claims on advertising (Fajardo & Townsend, 2016).

Moreover, it was analyzed how can gender influence consumers' behavior and perceptions. Past research has shown that including gender clues in marketing communications may positively influence the buying behavior (Hess & Melnyk, 2016), since consumers react differently when presented with *stimuli* that appeal to their gender (Carter, 2014).

However, conflicting views have also been studied, stating that consumers rely on well-known brands since they facilitate the choice and reduce the risk while ensuring to deliver a certain quality level (Keller & Lehmann, 2006).

This study focuses on the wine category, namely on how can packaging design including gender clues can influence consumers' buying behavior.

Thus, it was found that packaging elements as the bottle shape, colors and label design are responsible for influencing consumers' relationship with products, by grabbing consumers' attention and ultimately influencing their purchase intentions (Bloch et al., 2003; Chaney, 2000; Charters et al., 1999; Jennings & Wood, 1994). Furthermore, these elements play an important role in encouraging consumers to make specific decisions, as they are perceived as a reflection of the quality of the content inside the bottle (Jennings & Wood, 1994).

However, wine is considered a feminine beverage amongst consumers, which may influence negatively men's behavior (Mitchell & Greatorex, 1989). Along these lines, it was studied what are the differentiation factors that drive men and women's shopping preferences in the wine category. Results showed that the front label image, pictures, logo and colors are important for females when making a decision, when compared to males (Barber et al., 2006; Thomas & Pickering, 2003).

Regarding the colors, it has been shown that men show a preference for neutral colors, such as black, white, and gray, whereas women have a more diverse color taste, preferring colors such as green (Beneke et al., 2015).

Although packaging plays an important role in altering consumers' perceptions and influencing their behavior, brand image constitutes the ultimate challenge for marketeers and managers, since consumers are more likely to buy based on the brand than on the package and package design (Kumar Agariya et al., 2012).
In fact, in the wine category, brands assume a crucial role in reducing perceived social risk (Mitchell & Greatorex, 1989), with consumers purchasing known brands with which they had previous experiences (Spawton, 1989). In line with this, it has been showed that consumers who are already acquainted with the brand tend to show more positive attitudes towards the brand, when compared to those who do not know it (Bird et al., 1970).

Hence, considering the different perspectives found in previous research, the aim of this study is to understand if visual aspects represented by gender clues can become a competitive advantage to firms by driving consumers' purchase intentions, taking into consideration the mediating effect of brand image.

1.2 Problem Statement

The aim of this dissertation is to analyze the impact of gender clues in packaging, such as bottle shape and label design, on consumers' purchase intentions, mediated by the effect of brand image.
The following research questions were formulated in order to address the issue identified in the problem statement:
RQ1: How do gender clues in packaging influence consumers' purchase intentions?
RQ2: What elements can be associated with gender clues?
RQ3: Does brand image mediate the relationship between gender clues in packaging and purchase intent?

Moreover, from the preliminary literature review, the following hypotheses were formed:
H1: Gender clues have a positive impact on consumers' purchasing intentions.

H2: Visual elements of packaging included in the label design and the bottle shape can be associated with gender clues.
H3: Brand image mediates the relationship between gender clues on packaging and consumers' purchase intentions.

1.3 Relevance

Differentiation by packaging has become increasingly important for firms in order to captivate and retain customers. Additionally, it is a very important channel of marketing communication. Thus, by understanding the impact of gender clues in packaging on consumers' purchase intentions, by identifying key elements, managers can adapt their strategies to appeal to their target customers and to overcome competitors.
Furthermore, the mediator effect of the brand image will also be studied, providing a deeper understanding of the impact of the variable in the relationship between gender clues and consumers' purchase intentions. By doing so, it will be clear how managers can leverage on brand image to design efficient marketing strategies in order to retain consumers' interest and ultimately influence their buying behavior.

In academic terms, this dissertation provides further research on the topic, providing more in-depth knowledge about the role of gender clues in packaging on purchase intentions, mediated by the effect of brand image.

1.4 Research methods

To answer the research questions and validate the hypotheses formulated, it was collected primary data using both qualitative and quantitative research.

Prior to the interviews, a pre-study was conducted with the purpose of testing which wine bottles and label designs, among forty brands available at Portuguese supermarkets, were considered the most feminine and the most masculine. The results served as basis to create a fictitious brand, used on the interviews and on the main study in order to avoid consumer bias.

Regarding qualitative research, the data was collected via in-depth interviews, in which the main focus was to understand which packaging elements included in the bottle shape and label design were associated with gender clues. The results of the interviews were carefully analyzed, which then contributed to the design and creation of the *stimuli* presented in the questionnaire.

The quantitative research was gathered through an online questionnaire, developed using Qualtrics, in which the main concern was to test if modified packages (with gender clues' elements) could yield different responses from consumers, taking the brand image effect into account as the mediator.

The analysis was carried out using SPSS statistical software, in which there were performed statistical tests and analysis, namely descriptive statistics, measures of central tendency (mean), measures of variability (standard deviation, maximum value and minimum value), measures of reliability (Cronbach's alpha), ANOVA, linear regressions, and a Mediation model performed through Hayes' PROCESS model 4 (Hayes & Preacher, 2014).

1.5 Dissertation outline

This dissertation has a total of five chapters, beginning with an introductory note on the topic studied, followed by the problem statement, research questions, and hypotheses formulated during the research.

The second chapter comprises a literature review on the variables identified in the problem statement and a short analysis of the results of previous research. The literature review also highlights the reasoning behind each variable.

The following chapter presents the methodology used to collect and analyze primary data and how the statistical analysis will be conducted.

Chapter four contains the analysis of the results obtained from the collected data and tests the validity of those results as well as the validity of the hypotheses formulated during the research.

Finally, the last chapter will conclude the dissertation, comprising the main findings and limitations of the study, as well as implications both for management and for future research.

CHAPTER 2: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

This chapter comprises a review of past theoretical studies, aiming to explain the reasoning behind each variable and provide an answer to the research questions presented and validate the hypotheses formulated along with the study.

The first part of this literature review focuses on the independent variable identified in the problem statement – gender clues on the packaging – and its influence on consumers' purchase intentions by presenting a summary of past research on the topic.

Following, the dependent variable, purchase intentions, is presented. Afterward, the mediator role of brand image on the interaction between the independent and dependent variables will be discussed.

Finally, the conceptual framework, designed to help better understand the problem identified, will close the chapter.

2.1 Gender Clues

In a fast-paced, ever-changing, and highly competitive environment, the need to rapidly captivate consumers' attention is of growing importance. In fact, according to Clay (1908) , "Man shows that he is affected by appearance, by something that causes him pleasure over and above the immediate utility of the object".

According to Newman, (2002, p353), "sex is defined as a person's biological status as either male or female based on anatomical characteristics, whereas gender is used to refer to socially constructed roles and cultural representations. Gender role refers to the socially ascribed characteristics and expectations: attitudes, behaviors, beliefs, and values associated with being male or female in a particular culture."

Men and women assume different behaviors mainly due to their different roles in the socialization process (Blocker & Eckberg, 1997). Gender socialization theory states that males and females learn how to behave from the moment there are born due to different treatment by their families, which results in the development of different values and social expectations when they grow up (Carter, 2014). Therefore, it is expected that men and women yield different responses when presented with *stimuli* that appeal to their gender.

In fact, past research has shown that gender cues, such as colors and shapes, can alter brand perceptions by men and women by activating perceptions of warmth and competence (Hess & Melnyk, 2016). Furthermore, the authors state that including gender cues in marketing communications, such as advertising or packaging, might positively influence purchase behavior.

Furthermore, Beneke et al. (2015) point out that colors are perceived differently between genders, namely, men were more attracted to black, gray, or white than women, and women exhibit a more diverse color taste than men preferring colors such as green.

Hence it is of particular interest for firms to study how including elements associated with gender clues can affect the purchasing behavior of their target audience.

2.1.1 Gender Clues on Packaging

Kumar Agariya et al. (2012) define packaging as "the container for a product – encompassing the physical appearance of the container and including the design, color, shape, labeling, and materials used" (p1).

Furthermore, packaging plays an important role in attracting consumers' attention and keeping the products in the consumers' evoked set (Mcneal & Ji, 2003). According to Reimann et al. (2010), aesthetic packages with more visual appeal significantly influence consumers' choices compared to well-known brands in regular packaging, despite higher prices.

However, past research by Keller & Lehmann (2006) states that brands appear as the most valuable intangible asset of companies since consumers rely on well-known brands because it reduces the choice time and risk and ensures a certain quality level.

Nevertheless, according to Fajardo & Townsend (2016), product claims on packages are a more credible source than advertising, having a direct and positive influence on brand credibility and purchase likelihood.

Furthermore, the use of visual and textual language in packaging associated with gender clues, for instance, by telling the content is "for him" or "for her", provides packaging with the tools to "do" gender and impacts practices of consumptions, as well as takes part in the performativity of gender (McIntyre, 2013). The author also highlights that packages can "do" gender by making statements, by making gender into a liable market segment, and by being interpreted differently by shoppers according to their gender.

In regards to the wine category, research has shown that the packaging elements such as the bottle shape, colors and label design influence consumers' relationship with products, and thus, play a determinant role in this category's promotion and consumption as they help spark an interest and grab consumers' attention (Bloch et al., 2003; Chaney, 2000; Charters et al., 1999; Jennings & Wood, 1994). Additionally, it has been confirmed that elements such as the label design, colors and the bottle shape are perceived to be a reflection of the product quality and can yield different responses from the consumers (Jennings & Wood, 1994). According to the authors, "the consumers' perception of quality were influenced as much by the bottle's appearance as the contents within it", since said packaging can provide clues of the content within (Jennings & Wood, 1994, p9). Sáenz-Navajas et al. (2013) also proves that quality perception in the wine category involves a trade-off between intrinsic (the tasting itself) and extrinsic factors (packaging), namely the origin, denomination of the origin, label design, bottle shape, and the presence of awards.

Thus, the wide diversity of these new elements introduced in the wine industry aim at encouraging consumers to make specific decisions.

According to research, the wine consumption has been increasing over time in the US (Wine Institute, 2020), having increased from 2.58 gallons per resident to 3.09 gallons per resident in the past decade, which makes it crucial to understand what drives consumers' buying behavior when it comes to this category, especially what can be done in terms of marketing to influence consumers and to differentiate the products.

Some products are considered to be gender specific, having a stronger appeal to those consumers since some gender traits are often projected from individuals to products (Barber et al., 2006). Past research (Mitchell & Greatorex, 1989) showed that wine is considered a feminine beverage, having a feminine image amongst men. Moreover, by allocating wine to a feminine category, men may refrain from buying and consuming it, which highlights the importance of studying which elements can be included in the packaging design in order to attract and influence the purchasing behavior of the masculine gender.

In fact, Barber et al. (2006) found that front label image, picture, logo and colors were significant to females, when compared to males. In line with this, Thomas & Pickering (2003) discovered that design elements on the packaging of wines such as the pictures, images, logo and colors are important elements for females when deciding on a wine to buy, when compared to males. Furthermore, the results from the study confirm that the front and back labels are crucial in the process of influencing consumers' purchasing behavior, providing an opportunity

to managers and marketeers to design optimized labels in terms of information and other characteristics.

Hence, the role of packaging assumes a crucial point in product differentiation by design as it stimulates and influences consumers' purchase behavior, especially first-time consumers, creating a sustainable competitive advantage in the marketplace.

The analysis of past research lead to the formulation of the following hypotheses:

Hypothesis 1: Gender clues have a positive impact on consumers' purchase intentions.
Hypothesis 2: Visual elements of packaging included in the label design and the bottle shape can be associated with gender clues.

2.2 Purchase Intention

Gupta et al. (2014), define purchase intentions as the desire consumers express to purchase a product or a service in the future.
In fact, the Theory of Planned Behavior (Ajzen, 1991) states that the individual's intention to engage in a certain behavior is the major force behind the performance of the given behavior since behaviors are determined by behavioral intentions. It is suggested that behavior these behavioral intentions are predicted with a high degree of accuracy by a combination of attitudes, subjective norms, and perceived behavioral control.
Hence, this theory provides a useful conceptual framework when predicting individuals' behavior, namely using purchase intentions to understand and predict consumers' buying behavior.
Furthermore, Morwitz et al. (2007) state that marketeers and managers use data available on purchase intentions to predict sales. This analysis on purchase intentions data includes making decisions regarding geographic markets and customer segments (Sewall, 1978; Silk & Urban, 1978), forecasting future demand (Juster, 1966; Morrison, 1979), pretest advertising, and evaluate proposed promotions (Bird & Ehrenberg, 1966).
Thus, this construct is a key point when evaluating strategic decisions concerning products, such as the visual elements of packaging.

2.3 Brand Image

Lee et al. (2014) define the brand image as the combination of the customer's impressions about a brand, which is dependent on the cognitive, affective, and evaluative dimensions in the customer's mind.

Past research shows that brand image has a positive impact on consumers' purchase intentions by increasing perceived value and perceived quality (Wang & Tsai, 2014). Moreover, brands in the wines' category assume an important role in reducing the social risk perceived by consumers, with foreign brand names being less easily pronounced and, thus, less remembered (Mitchell & Greatorex, 1989). Spawton (1989) also reinforces this idea by stating that consumers tend to reduce risk by purchasing known brands with which they had previous experiences, especially inexperienced wine drinkers, since these "safe brands" signal quality and consistency.

Kumar Agariya et al. (2012) suggest that packaging plays an important role in communicating the brand's image and identity, highlighting the relevance of the consumer's attraction in package design. However, consumers are more likely to give more importance to the brand itself than to the package and shape of the package.

Furthermore, consumers who are acquainted with the brand are more likely to express a favorable attitude towards the brand than those who have never used it (Bird et al., 1970), which could lead to behavioral changes. Therefore, it is crucial for marketeers to invest in marketing communication through advertising and package design in order to keep the brand in the consumers' evoked set.

Based on the research analyzed, the following hypothesis was formulated:

Hypothesis 3: Brand image mediates the relationship between gender clues on packaging and consumers' purchase intentions.

2.4 Conceptual Framework

The following figure illustrates the conceptual framework, including the relationship between the variables under study and the hypotheses formulated during the analysis of the literature:

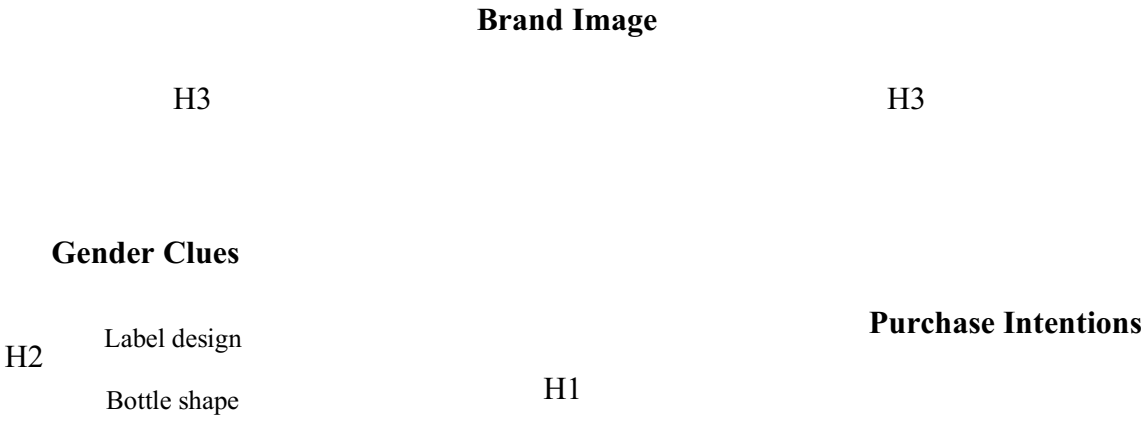


Figure 1 – Conceptual Framework

CHAPTER 3: METHODOLOGY

This chapter will include a detailed description of the methods used both to answer the research questions and to test the validity of the hypotheses formulated in chapter 2. It comprises the research approach, followed by the description of the primary data, the description of the data collection, key measurements and indicators, and the methods for data analysis.

3.1 Research Approach

In order to answer the research questions and validate the hypotheses formulated, primary data was collected through qualitative and quantitative research.

Firstly, a pre-study was conducted using an online questionnaire, aiming at identifying which wine brands could be associated with masculine or feminine clues. The results served as a basis to create a fictitious brand that was later on used in the in-depth interviews.

Regarding qualitative research, the data was collected via in-depth interviews, in which the main focus was to understand which packaging elements (shape, format, color) were associated with gender clues. The results of the interviews were carefully analyzed, which then contributed to the design and creation of the *stimuli* presented in the questionnaire.

The quantitative research was performed through an online questionnaire, in which the main concern was to test if modified packages (with gender clues' elements) could yield different responses from consumers, taking the brand image into account. Furthermore, in order to test the accuracy and comprehension, it was run a pilot version of the survey. There were collected 10 answers, and the feedback was taken into consideration for the final survey.

3.2 Primary Data

In regards to primary data, it was collected using qualitative and quantitative methods.

According to the literature (Creswell, 2009), by employing the mixed methods research approach, the researcher is able to combine the strengths of both qualitative and quantitative methods, namely, exploring the topic of the research with participants at first (qualitative

research), followed by getting an expanded understanding through data collected from a larger number of people (quantitative research).
In fact, despite being time-consuming and labor-intensive, in-depth interviews allow for the collection of rich data and various insights regarding the topic of the study, which can be later used to develop quantitative research (Guion et al., 2011).
On the other hand, the use of an online survey provides a unique way of gathering data from a large cohort in a fast and inexpensive manner. However, surveys may present discrepancies, and their validity depends on the response rate (Jones et al., 2013).

3.2.1 Pre-Study

3.2.1.1 Data Collection

A pre-study was conducted before the interviews and the main survey in order to assess consumers' perceptions in regards to which wine labels and bottle formats can be associated with feminine clues or masculine clues.
Thus, there were presented twenty label designs and twenty bottle formats from brands available at Portuguese supermarkets.
For the purpose of this pre-study, 58 valid answers were collected through an online questionnaire, developed using Qualtrics and distributed via social networks.

3.2.1.2 Data Analysis

The labels and bottle shapes were evaluated using a five-point Likert scale, ranging from "Feminine" to "Masculine". Afterward, an analysis was performed in order to understand which labels and bottle shapes were considered the most feminine and the most masculine.
Finally, the five more feminine and five more masculine of each category were selected to be included in the in-depth interviews.

3.2.2 In-Depth Interviews

3.2.2.1 Data Collection

The qualitative research was conducted in the form of 10 in-depth interviews with consumers aged between 20 and 56 years old, with different occupations and genders. Participants were presented with twenty *stimuli* that resulted from the analysis carried out following the pre-survey. The *stimuli* consisted of ten types of labels (five masculine and five feminine), and ten types of bottle formats (five masculine and five feminine).

Furthermore, in order to avoid consumer bias, a fictitious brand and product were created using Adobe Photoshop.

The results served as a basis to further develop the questionnaire (quantitative data collection), and, more specifically, to test the validity of the *stimuli* created, that would be later presented to the consumers in the main survey. The interviews were conducted based on a semi-structured guide, available in Appendix 1.

3.2.2.2 Data Analysis

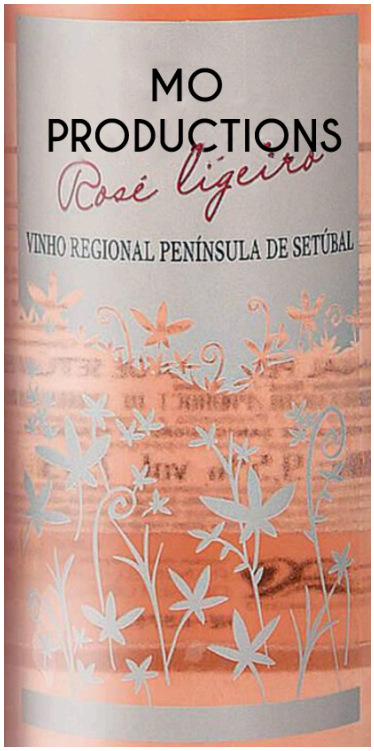
The results of the interviews showed that participants perceived rosé wine consumers as sophisticated young females, from the upper-middle class, without much expertise in the wine category ("new drinkers"), who prefer lighter/softer and sweeter flavors, and who enjoy drinking a glass of wine with friends in the evening.

All the respondents are rosé wine consumers, although they are not frequent consumers, as they buy it mainly to celebrate special occasions or in particular situations, e.g., to accompany a specific meal or to enjoy a drink with friends/family on a summer evening. Furthermore, when asked for brands on top of mind, participants mentioned Mateus Rosé, Fiuza, Vallado, and Quinta da Pacheca. Additionally, most of the participants buy these products at the supermarket.

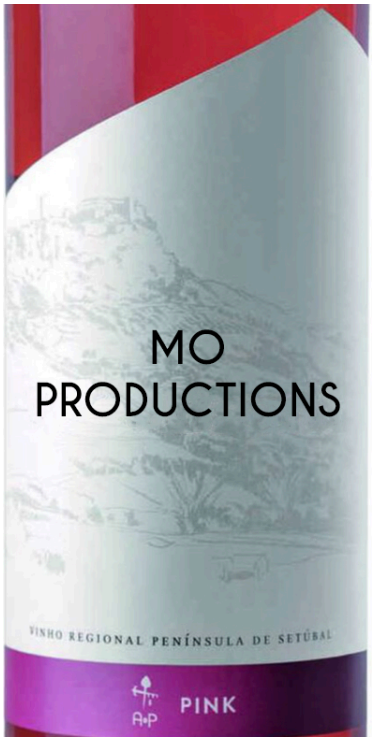
Regarding the search process, most participants are guided by previous experiences, relying heavily on brands they already know, since they know what to expect. Afterward, they evaluate the offer available within those brands and select the one with the best quality-price ratio. Few participants mentioned they like to search on the internet and wine apps for the best deals and pay attention to the wine ratings prior to making the purchase. Moreover, it was mentioned that

the most important attributes when buying rosé wine were: price, packaging (bottle shape and label design), brand and ratings.
On the other hand, when asked what were the main reasons not to buy rosé wine, participants highlighted the price, personal preferences (in terms of other types of wines and flavors), occasion/context, and poor label design (which signals the poorer quality of the wine).

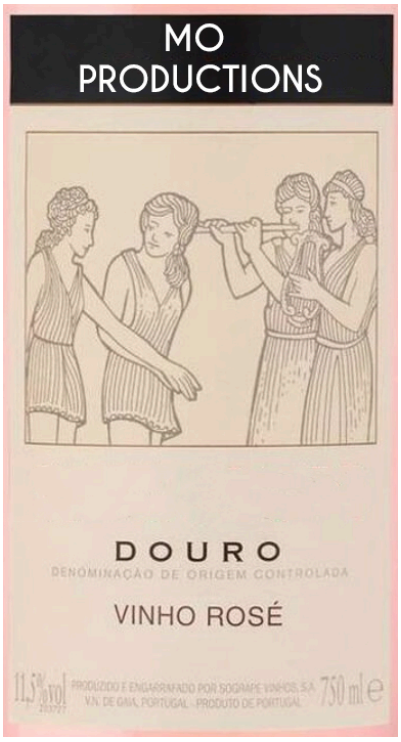
The evaluation of the fictitious brand yielded interesting insights, useful for both the development of the questionnaire for the main study, and for the validation of Hypothesis 2.
The *stimuli* developed for the purpose of the in-depth interviews are illustrated in the following figures:



Label A

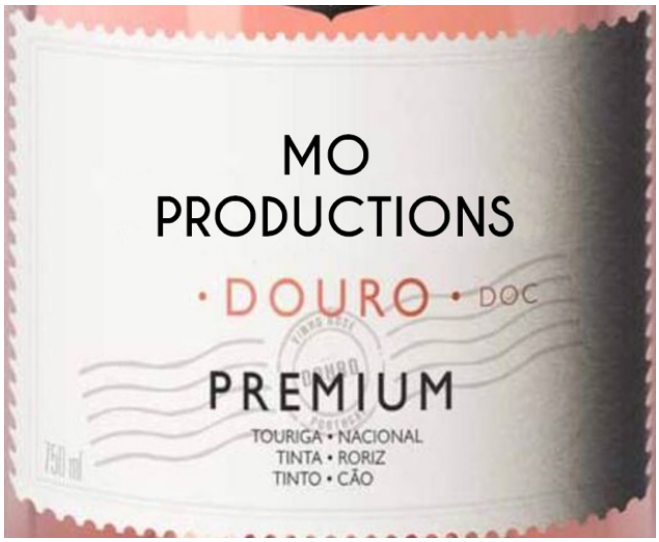


Label B



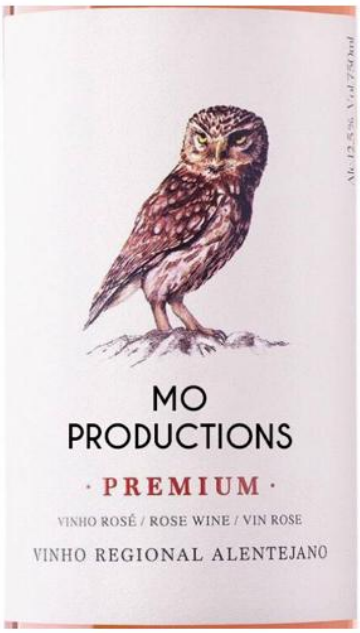
Label C

Label D

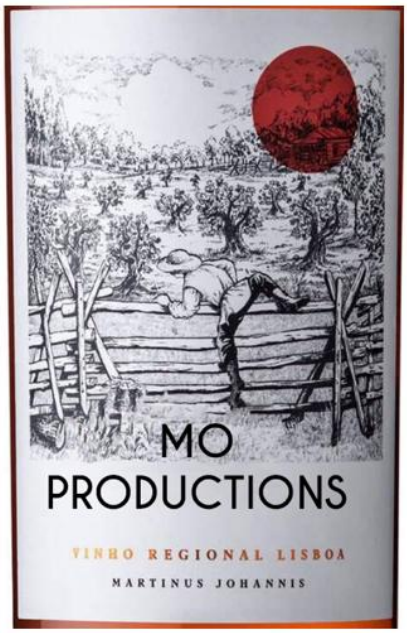


Label E

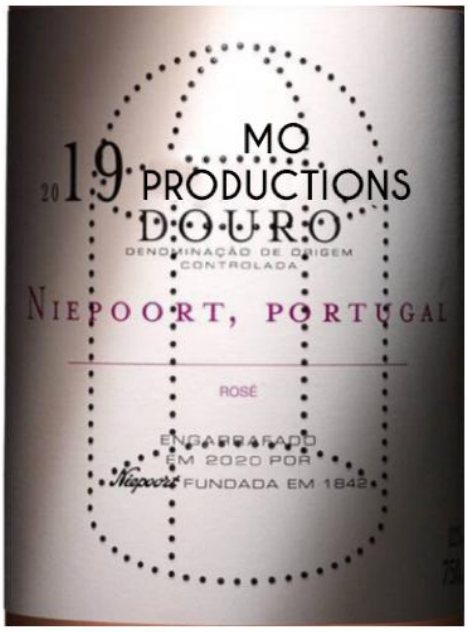
Figure 2 - Feminine Labels (Stimuli)



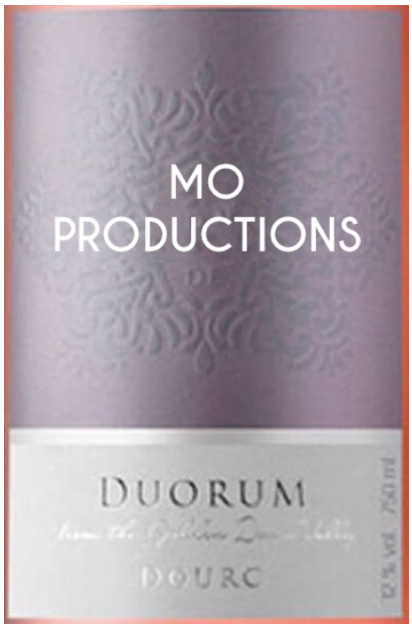
Label F



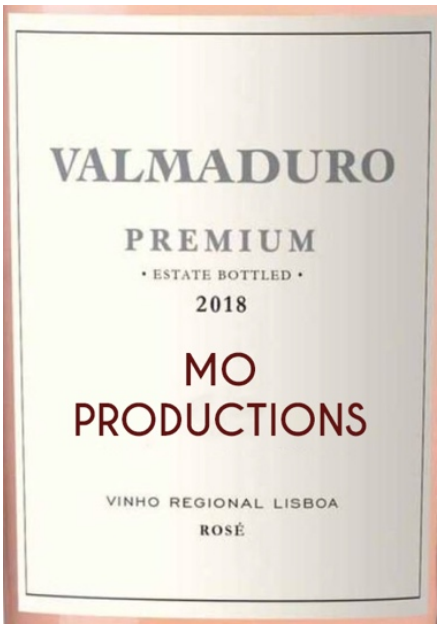
Label G



Label H



Label I



Label J

Figure 3 - Masculine Labels (Stimuli)

Figure 4 - Feminine Bottle Shapes (Stimuli)

Figure 5 – Masculine Bottle Shapes (Stimuli)

3.2.3 Online Survey

3.2.3.1 Data Collection

The collection of primary data via quantitative research was done through an online survey, developed using Qualtrics and distributed via social networks in English and Portuguese. The online survey is available in Appendix 2.

The aim of this dissertation is to gain further knowledge regarding the impact of gender clues on consumers' purchase intentions and if this relationship is mediated by brand image. Therefore, the questionnaire is divided into four blocks, including the following sections: sample characterization, *stimulus*, main questions, and demographics. Regarding the *stimulus* section, participants were presented with three different scenarios, randomly spread through the participants, in order to assess if their purchase intentions were impacted by the gender clues present in the product's packaging. The first scenario represents a rosé wine bottle with masculine clues (label and shape), the second represents a bottle with feminine clues, and the third represents a neutral bottle. The questionnaire was pilot-tested in order to ensure reliability and clarity of the questions.

For the purpose of this study, it was used a random sampling technique, after which a simple sample was selected. The sample included mainly Portuguese female students, aged between 18 and 29 years old, with a monthly gross income of up to 500€. In total, it was collected 383 answers, from which 355 were considered valid. Since there are at least 50 answers per dependent variable breakout, the Central Limit Theorem can be applied, which means that it can be argued that the dependent variable is approximately normally distributed for each group of the independent variable.

3.2.3.2 Measurement/Indicators

Regarding the independent variable, it was developed three *stimuli* based on the insights received from the in-depth interviews (Appendix 1). The purpose of these *stimuli* was to assess how consumers' purchase intentions were impacted by gender clues on the packaging.

Therefore, three packages were developed and presented to the respondents in the questionnaire. The *stimuli* developed are presented in the following figures:

Figure 6 – Masculine Stimulus (Online Questionnaire)

Figure 7 – Masculine Stimulus (Online Questionnaire)

Figure 8 – Masculine Stimulus (Online Questionnaire)

The online survey is composed of five sections, starting with the sample characterization, including questions regarding the frequency of buying, the amount spent, and frequency of usage.

Afterward, the following sections containing the *stimuli* and the main questions (purchase intentions, attitudes, brand image) were randomized to avoid respondent bias. All items in the survey were presented on a seven-point Likert scale, ranging from "Strongly Disagree" to "Strongly Agree".

The attitudes of the consumers towards the *stimuli* presented were measured using constructs from Truong et al. (2017), and (Jo ˇ Sko Brakus et al. (2009), with Cronbach's α coefficients of 0.92 and 0.93, respectively.

In order to analyze consumers' purchase intentions, the respondents were presented with the *stimuli* alongside a five-item construct from Spears & Singh, (2004) with a Cronbach's α coefficient equal to 0.97, measured by a seven-point Likert scale.

The mediator, represented by the construct brand image, was measured using a seven-point Likert scale from (Abosag & Farah, 2014) with a Cronbach's α coefficient equal to 0.90, which included four items ranging from "Strongly Disagree" to "Strongly Agree".

Framework	Construct	Items	Scale	Reference	Cronbach's α
Independent Variable	Gender Clues on Packaging	*Stimuli*	N/A	N/A	N/A
Dependent Variable	Purchase Intentions	5	7-point Likert Scale	Spears & Singh, 2004	0.97
Mediator	Brand Image	4	7-point Likert scale	Abosag & Farah, 2014	0.90

Table 1 – Operational Model

3.2.3.3 Data Analysis

The data collected via an online questionnaire was later analyzed using SPSS statistical software in order to validate the hypotheses formulated and answer the research questions proposed earlier in the study.

Firstly, descriptive statistics were used in order to characterize the sample demographically and in terms of their consumption behavior. These included frequencies and cross-tabulation, as well as measures of central tendency (mean) and measures of variability (standard deviation, maximum value, and minimum value).
Moreover, the Cronbach's alpha coefficient for each construct was obtained in order to validate its internal consistency and reliability. Both constructs – Purchase Intentions and Brand Image - have Cronbach's alpha coefficients above 0.9, which indicates a very good internal consistency.

Further analysis included statistical tests (ANOVA) and linear regressions with the purpose of studying the relationships between the variables. All statistical tests carried out during this study considered a significance level of 0.05.

Lastly, a Mediation model (Hayes & Preacher, 2014) was used in order to understand the indirect role of brand image, the mediator, in the relationship between the independent variable, gender clues, and the dependent variable, purchase intentions.

CHAPTER 4: RESULTS AND DISCUSSION

The following chapter will present a detailed analysis of the data collected through the online survey, aiming to reach relevant conclusions regarding the research questions proposed in the first chapter of this study.

4.1 Sample Characterization

In total, there were initiated 383 questionnaires, from which 355 were completed and considered valid. The majority of participants were female (56.9%), aged between 18 and 29 years old (65.4%). Furthermore, although the sample comprised more than six different nationalities, the vast majority of participants were from Portugal (95.5%). Additionally, regarding their occupation, most of the respondents were either students (54.9%) or employed (37.2%), and the majority had a monthly gross income of up to 500€ (56.3%).

Variables	n	Mean	Min	Max	St. Deviation
Gender	355	1.57	1	2	0.496
Age	355	2.90	1	6	1.370
Nationality	355	1.21	1	14	1.423
Occupation	355	2.00	1	6	1.252
Income	355	2.53	1	9	2.122

Table 2 – Demographic Variables

In relation to their buying behavior, 69.4% of the participants buy wine once a month or less, and 18.5% buy wine 2 or 3 times per month, with average spending of 5€ or less (51.4%) and between 5€ and 9.99€ per month (27.0%).

Furthermore, regarding consumption habits, respondents can be divided into three main groups: rare (38.2% of respondents consume wine once a month or less), occasional (33.7% of

respondents consume wine 2 to 3 times a month), and frequent (17.1% of respondents consume wine 1 to 3 times a week) (Appendix 3).
Moreover, it was run a cross-tabulation analysis, in order to gain a deeper understanding of the consumption habits of the individuals included in the sample, according to their gender and age. Thus, results demonstrated that in terms of frequency of purchase, the majority of participants buy wine once a month or less, and this group is mainly composed of female students (62.2%). Regarding the amount spent on wine per month, it could be observed that mainly female students (61.4%) spend less than 5€, whereas in the 5€ - 9.99€ category, there is a predominance of male students (52.5%). Finally, in regards to the respondents' wine consumption per month, results showed that female students consume wine once a month or less (61.2%), female students consume wine 2 – 3 times a month (61.0%), and employed males consume wine 1 – 3 times a week (60.5%). The demographic variables age, nationality and income were not included in the cross-tabulation analysis as the vast majority of participants lay in one of the categories of each variable, namely "18 – 29 years old", "Portuguese", and "Less than 500€".

Before carrying out further analysis, the data was cleaned through the multivariate outlier analysis, using the Mahalanobis Distance. The *p-value* for the new variable was calculated, allowing for the identification of multivariate outliers, by identifying the ones with a *p-value* lower than 0.001. Afterward, nineteen potential outliers were identified and removed from the sample, in order to carry out the analysis.

Furthermore, it was performed a manipulation check test in order to assess if the respondents correctly understood the *stimuli* created, by conducting an ANOVA.
Results showed that, at a 0.05 level, the mean difference between groups is significant, meaning that respondents could differentiate the *stimuli* presented.
Additionally, the mean for the feminine *stimulus* was higher, suggesting that respondents could correctly identify it as having feminine clues, whereas the means for the masculine and neutral *stimuli* were lower, indicating that respondents did not find it feminine.

4.2 Measures Reliability

In order to validate the reliability of the constructs used in this study, the Cronbach's alpha coefficients of each measure were calculated and analyzed.

The combination of the different items in the construct purchase intentions and brand image indicated excellent reliability, with Cronbach's Alphas of 0.946 and 0.904 respectively (Table 3), suggesting that the constructs have high internal consistency.

Furthermore, there was a need to perform reverse coding of one item in the purchase intentions construct, as it was the only item including positive wording, which impacted the coefficient negatively initially. After performing the reverse coding in order to assure consistency in the items, the Cronbach's Alpha coefficient improved from 0.544 to 0.946.

Therefore, the analysis could be conducted without deleting any item initially included in the constructs.

Construct	Cronbach's Alpha	Number of items
Purchase Intentions	0.946	5
Brand Image	0.904	4

Table 3 - Cronbach's Alphas

4.3 Results from the Hypotheses Testing

In order to test and validate the hypotheses proposed earlier in the study, there were performed the following analysis:

4.3.1 Gender Clues on Packaging

H1: Gender clues have a positive impact on consumers' purchase intentions.

The first hypothesis aims at validating the effect of the independent variable (gender clues on the packaging) on the dependent variable (purchase intentions), more specifically, if this effect positively affects the dependent variable.

Firstly, in order to assess differences in perceptions between the different *stimuli* – feminine, masculine and neutral (control) – an ANOVA was run comparing the purchase intentions between the three scenarios. Results showed that there is a statistically significant difference in how respondents perceived the different *stimuli* presented (p<0.05). Furthermore, in order to validate in which groups could lie the difference, post hoc tests were carried run. It was observed that the mean differences between the feminine (M = 3.98, SD = 1.637) and the masculine (M = 4.62, SD = 1.382) *stimuli* were statistically significant. The neutral *stimulus* revealed no statistically significant difference when compared to the other scenarios (p>0.05).

Afterward, the method chosen to study the relationship between the variables was linear regression (Appendix 4). The regression formula can be written as follows:

$$\widehat{Purchase\ Intentions_i} = \hat{\beta}_1 + \hat{\beta}_2 Gender\ Clues_i \quad i=1,\ldots, 336$$

In order to get more accurate results, the dependent variable was transformed into its symmetric value so that both variables had the same signal.

After performing the analysis, it could be observed that the model has an Adjusted R Square of 0.804 and it is statistically significant at the 5% level (p< 0.001).

Furthermore, the variables are positively correlated, suggesting that increases in one variable will lead to increases in the other.

In fact, the coefficient associated with the independent variable is statistically significant which allowed us to reject the null hypothesis that states that Gender Clues have no effect on Purchase Intentions. Moreover, results suggest that including gender clues on the packaging of rosé wine has a positive effect on consumer's purchase intentions, as the coefficient is positive and equal to 0.880, indicating that for each unit increase in gender clues, consumers' purchase intentions will increase by 0.880 units, all else remaining constant.

Results also show no signs of multicollinearity as the values of Tolerance, VIF and Condition Index are not critical.

Gender Clues 0.880* **Purchase Intentions**

** Significant at p<0.001*

Figure 9 - Statistical Model – Estimated Coefficients (H1)

Furthermore, in order to better understand the relationship between variables, it was included in the model an interaction term between gender clues and gender. The regression formula with the new interaction term can be written as:

$$\widehat{Purchase\ Intentions}_i = \hat{\beta}_1 + \hat{\beta}_2 Gender\ Clues_i + \hat{\beta}_3 Gender\ Clues * Gender_i \quad i=1,\ldots, 336$$

Firstly, in order to avoid multicollinearity between the independent variable and the interaction term, the variables were centered, which resulted in a Tolerance value of 0.802 and a VIF of 1.247, suggesting no multicollinearity.

However, the coefficient associated with the interaction term is not statistically significant (p>0.05), and thus the null hypothesis that states that the interaction term has no effect on the dependent variable cannot be rejected.

Concluding, the results obtained in this study go in line with what was found previously in the literature, as it is stated that packaging elements help spark interest in consumers and thus increase their purchase intentions, namely label elements such as pictures, colors, and logos.

Thus, based on the analysis carried out, hypothesis 1 is verified.

4.3.2 Brand Image

H3: Brand Image mediates the relationship between gender clues on packaging and consumers' purchase intentions.

The third hypothesis aims at investigating the mediating effect of brand image on the impact of gender clues on packaging over consumers' purchase intentions. Thus, a mediation analysis was performed through Hayes' PROCESS model 4 (Hayes, 2014) (Table 4 and Appendix 5).

Results suggest that all relationships (pathways) in the model are significant (Figure 7), and that this model explains 70.6% of the variance in the dependent variable.

In fact, regarding the indirect effects, it can be observed that the impact of gender clues on brand image is significant ($a_1 = 0.4841$, SE = 0.03, $p < 0.001$, 95% CI = [0.4245, 0.5438]), as well as the impact of brand image on purchase intentions ($b_1 = 0.2624$, SE = 0.05, $p < 0.001$, 95% CI = [0.1571, 0.3676]). In addition, it can be argued that the indirect effect is positive and statistically significant, since the bootstrap confidence intervals do not include zero, validating the existence of mediation.

With regards to the direct effect, the impact of gender clues on consumers' purchase intentions is also positive and statistically significant (c' = 0.6982, SE = 0.039, $p < 0.001$, 95% CI = [0.6207, 0.7756]).

Pathways	**Indirect Effect**	**Coefficient**	**Lower CI**	**Upper CI**
Gender Clues → Brand Image	a_1	0.4841*	0.4245	0.5438
Brand Image → Purchase Intentions	b_1	0.2624*	0.1571	0.3676
Pathways	**Direct Effect**	**Coefficient**	**Lower CI**	**Upper CI**
Gender Clues → Purchase Intentions	c'	0.6982*	0.6207	0.7756

* $p < 0.001$

Table 4 - Mediating effect of Brand Image

Furthermore, the indirect effect (0.1270) was expressed as a ratio of the total effect (0.8252), indicating that roughly 15.39% of the relationship occurs indirectly through brand image.

Concluding, there is partial mediation and H3 is validated.

** Significant at p<0.001*

Figure 10 - Statistical Model – Estimated Coefficients (H3)

4.4 In-Depth Interviews

The qualitative research performed in the form of in-depth interviews allowed to collect data necessary to develop the questionnaire, but also to validate the following hypothesis:

H2: Visual elements of packaging included in the label design and the bottle shape can be associated with gender clues.

During the in-depth interviews, respondents were asked to evaluate ten label designs and ten bottle shapes and identify feminine and masculine elements in each of them. The labels and bottle shapes created for the purpose of these interviews can be found in figures 2, 3, 4 and 5.

Thus, when analyzing the feminine labels, 60% of the respondents considered the labels appealing, especially to women. Male respondents tend to prefer simpler labels with less imagery and more classic. Label A was claimed as the favorite for 30% of the respondents, and it was described as soft and balanced, emanating feelings of peace, calm and tranquility without

being too obvious. However, few respondents thought Label A was too feminine, somewhat childish and not very high-end. Concerning Label C, 20% of the respondents reacted negatively, claiming it was too forced and sexist and somewhat confusing. Label D was picked as the favorite by 30% of the respondents due to its different and attention-grabbing design, and its bright colors. Lastly, Label E was considered the most beautiful by 40% of the respondents, because of its simplicity and high-end appearance. Additionally, 30% of respondents mentioned they were very drawn to Label E and would buy the wine with this label.
When asked to identify feminine elements in the labels, respondents highlighted the brighter colors, typography, imagery (floral elements, animals, women) and statements ("Pink"). It was also mentioned that the floral elements and the animals recall a more sensitive nature typical of females.

Concerning the masculine labels, 100% of the respondents considered them appealing and attractive, more objective (fewer elements), simpler yet still beautiful and very masculine. The labels were also considered a reflection of higher quality wines because of the simplicity of their design and the straighter lines (more classic). However, one respondent mentioned that despite being appealing, some labels felt "colder" and more distant due to their neutral colors.
Label F was considered the most attractive by 70% of the respondents. The design was said to be simple yet detailed and very beautiful, emanating feelings of power and wisdom. Regarding Label G, opinions were divided with some respondents claiming it was very appealing and balanced, while others claimed it was too complex and confusing, with too much "information". Labels I and J were considered simple, classic and objective, although somewhat too basic for 30% of the respondents.
The masculine elements identified by respondents in the labels were: neutral colors, typography, straighter lines, simpler label design and some elements, such as the iron cage, the vineyard and the owl.

When analyzing the feminine bottles, 60% of respondents considered thinner bottles (A, C and E) more elegant and women-alike and very appealing, while 20% mentioned these bottles looked similar to champagne bottles, and not in line with the rosé wine category. Overall all respondents considered the bottles very feminine due to their colors (wine and caps). Bottle B was considered the most appealing by 60% of the respondents, that mentioned this bottle is thin, classic, and very feminine.

Furthermore, respondents claimed that feminine elements included rounder shapes (Bottles A and C) and thinner shapes (Bottles B, D and E) which recall the shape of a female body, and the colors (caps and content).

Regarding the masculine bottles, 80% of the respondents mentioned the bottles are attractive, and warm, with a nice shape and appealing colors. The shape is decisive when it comes to perceptions, since, according to some respondents, the bottles seem heavy, which signals higher quality. Moreover, it was claimed that these bottles resemble the physiognomy of a male (pumped chest and thinner waist), emanating power. Bottle F was considered the most appealing by 60% of the respondents due to its odd format, making the bottle more dynamic and interesting. Concerning Bottle G, 20% of respondents mentioned it was their favorite since it has a rougher look, is very masculine, and has an appealing neck label. Lastly, Bottle H was mentioned to be simple and classic, being the most attractive to 20% of the respondents.
When asked to identify masculine elements in the bottles, respondents highlighted the robust formats, the darker colors, the steeper bottom of the bottles and the neck label.

After collecting and analyzing the data from the in-depth interviews, it was possible to validate Hypothesis 2. Results also confirm what was found in the literature, since it is stated that visual elements such as pictures, images, colors and logos are more significant to women when compared to men.

CHAPTER 5: CONCLUSIONS AND LIMITATIONS

The final chapter of this dissertation will comprise the main findings and conclusions, in which each research question will be answered based on the data and analyses conducted previously. Furthermore, it will also be discussed the managerial and academic implications of the findings. Finally, the limitations of this study and the opportunities for further research will be presented.

5.1 Main Findings & Conclusions

The aim of this study was to analyze the impact of gender clues in packaging on consumers' purchase intentions, mediated by the effect of brand image. For this purpose, the focus was on the wine category, more specifically, on the packaging of rosé wine.
Hence, there were formulated three research questions in order to address the problem statement. Following, each research question will be answered based on the data collected and, on the literature previously analyzed in Chapter 2.

RQ1: How do gender clues in packaging influence consumers' purchase intentions?

To analyze the impact of gender clues on consumers' purchase intentions, it was performed a linear regression.

The results indicated that the variables are positively correlated, which supports the hypothesis that the independent variable has a positive effect on the dependent, as increases in one lead to increases in the other. Furthermore, the model's Adjusted R Square was 0.804 and its values of Tolerance, VIF and Condition Index were not critical, suggesting no multicollinearity.

In fact, the coefficient associated with the independent variable was statistically significant and equal to 0.880, indicating that for each unit increase in gender clues, consumers' purchase intentions will increase by 0.880 units, all else remaining constant.

Thus, the hypothesis formulated to answer this research question was validated, stating that gender clues not only influence consumers' purchase intentions, but they also have a positive effect on the variable.

RQ2: What elements can be associated with gender clues?

In order to answer the second research question, there were conducted ten in-depth interviews, where it was presented twenty different *stimuli* to consumers, that resulted from the analysis carried out following the pre-survey. The stimuli included ten label designs – five feminine and five masculine – and ten bottle shapes – five feminine and five masculine.

Results showed that women prefer labels with more imagery, more artistic and delicate, and with brighter colors. The font is also important as it gives the package a softer and balanced look.

On the other hand, men prefer more neutral and classic label designs, with fewer elements and straighter lines. Neutral colors and some elements such as the owl, the iron cage and the vineyard were also considered masculine, possessing feelings of power and wisdom.

When analyzing the bottle shapes, participants highlighted as being feminine the following characteristics: thinner or rounder shapes (which evokes the appearance of women's bodies), and the bright colors of both the content of the bottle and its cap.

Regarding the masculine bottle shapes, it was mentioned that robust formats, the darker colors, the steeper bottom of the bottles and the neck label were the aspects that highlighted the masculine appearance of the bottles. Furthermore, bottles with a thinner bottom were said to be similar to a men's body (larger chest and thinner waist).

RQ3: Does brand image mediate the relationship between gender clues in packaging and purchase intent?

The third research question was analyzed using a mediation model, through Hayes' PROCESS model 4 (Hayes, 2014).

The findings revealed a statistically significant indirect effect of brand image, since the bootstrap confidence intervals do not include zero, validating the existence of mediation. Furthermore, the indirect effect accounts for roughly 15.39% of the relationship between the other variables, meaning that 15.39% of the relationship between the independent and dependent variables occurs indirectly through brand image.

Thus, it is possible to answer positively to this research question, since the hypothesis that stated that brand image mediates the relationship between gender clues on packaging and consumers' purchase intentions was validated.

Concluding, this means that companies who wish to invest in communicating gender through package, should also leverage on their brand's image in order to maximize the effects of both variables.

5.2 Managerial and Academic Implications

In terms of academic implications, this study aims at contributing to the existing literature, by analyzing the effects of gender clues in packaging and brand image in the wine category.
Although the role of gender has been deeply studied in several categories, this study adds the role of brand image as a mediator of the relationship between the dependent and the independent variables, in the rosé wine category.
Overall, the findings are consistent with prior literature, with consumers responding positively to the inclusion of elements that appeal to their gender (gender clues). Moreover, there is also a positive reaction to brand image, despite being a fictitious brand, and, therefore, unfamiliar.
Finally, in current times when gender and gender identity is one of the hottest topics, this study opens the door for numerous possibilities regarding research about the role of gender in Consumer Packed Goods.

Regarding the managerial implications, the results and conclusions of this study serve as basis for managers and marketeers to design efficient marketing communications strategies, through packaging, aiming at reaching a larger group of consumers.
For instance, although it has been shown the importance of brand image when compared to packaging in the wine category (Mitchell et al., 1989; Spawton, 1989), when combined, both elements can boost consumers' purchase intentions.
Moreover, as consumers react positively to gender clues, it is crucial to understand what is the target group and study the elements to which it will react better. This assumes particular interest in the wine category as it has a feminine image amongst men (Mitchell et al., 1989), and so, in order to attract other types of consumers the solution may reside in the packaging elements.

5.3 Limitations & Further Research

The study developed encountered some limitations that should be taken into account. These limitations also constitute helpful topics for further research on this issue.

To begin with, although the sample included 336 individuals, it could be beneficial for future research to conduct a study with a larger sample in order to obtain more accurate and significant results. Furthermore, the sample was slightly biased as the vast majority of respondents were Portuguese (95.5%), students (54.9%), with ages comprised between 19 and 29 years old (65.4%). In relation to the respondents' consumption habits, the large majority buys wine once a month or less (69.4%), and consumes wine up to three times a month (71.9%).
Thus, for future research it would be important to have a broader sample regarding both demographics and consumption habits.

Secondly, respondents were presented with a visual image of a product, and did not get to interact physically with the product itself. Moreover, respondents could not see the back label of the bottle, which has been proven to be crucial in the process of influencing consumers' purchasing behavior (Thomas et al., 2003). Hence, it would be interesting to include a field experiment in future research with physical packages in order to get more accurate responses.

Thirdly, respondents were asked to analyze a fictitious brand in order to avoid bias. However, when studying the impact of brand image, consumers should be already acquainted with the brand so they would give more helpful feedback. Future research could focus on established brands in the marketplace and its competitors in order to get a deeper understanding on the real effects of brand image.

Lastly, the study focused on rosé wine solely, which creates an opportunity for future research with other types of wine (red, white, sparkling, etc.) or other beverages. In fact, the wine category has a great potential to be explored in terms of gender and gender clues, since it is considered a feminine beverage, which may have a negative effect on men's purchase behavior (Mitchell et al., 1989).

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APPENDICES

Appendix 1 - In-Depth Interview Guide

1. Introduction

My name is Maria and I am a master student in Management at Católica Lisbon. This interview is being conducted for the purpose of a Master Degree final dissertation. It will essentially help me understand qualitatively what consumers think about a certain category of products and what influences their purchase behavior. You were selected as you may provide useful information and positive insights for further conclusions. Keep in mind that there are no right or wrong answers. Thank you very much in advance for your time and cooperation.

Gender: Age: Occupation: Location:

2. Consumer habits and preferences regarding Rosé Wine

2.1. How would you describe a rosé wine consumer?

2.2. Do you consume rosé wine? If yes, please tell me some brands.

2.3. What are the main reasons for you not to buy rosé wine?

3. Buying Behavior and Decision-Making Process

Please consider the last time you bought rosé wine.

3.1. What was the situation that led you to buy rosé wine?

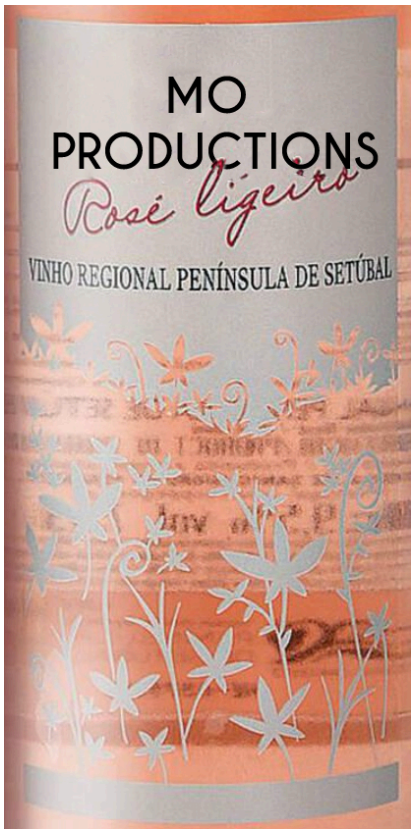
3.2. How do you describe your search process?

3.3. What are the most important attributes when buying these products?

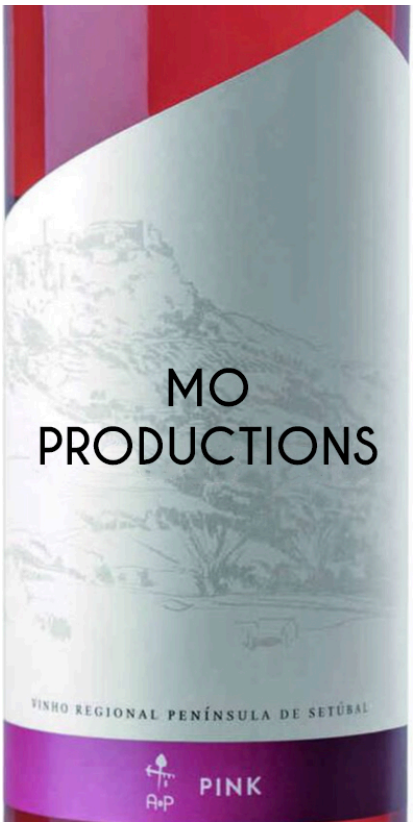
3.4. Where did you buy the wine (online/shop/etc.)?

4. Labels

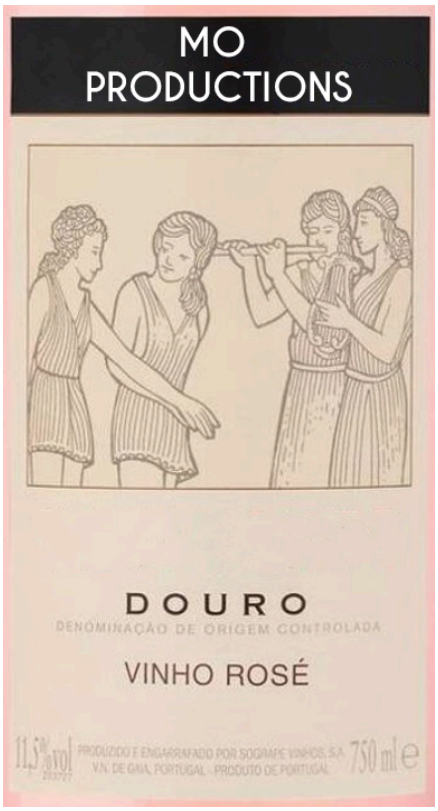
Now take a look at the following labels. They were considered as being more feminine.



Label A

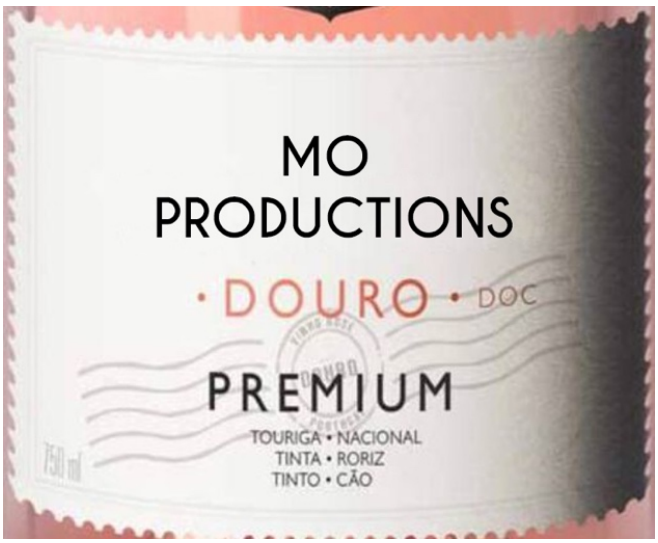


Label B



Label C

Label D



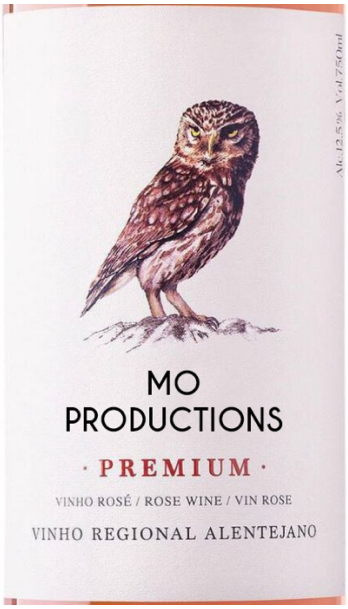
Label E

4.1. What do you think about these labels?

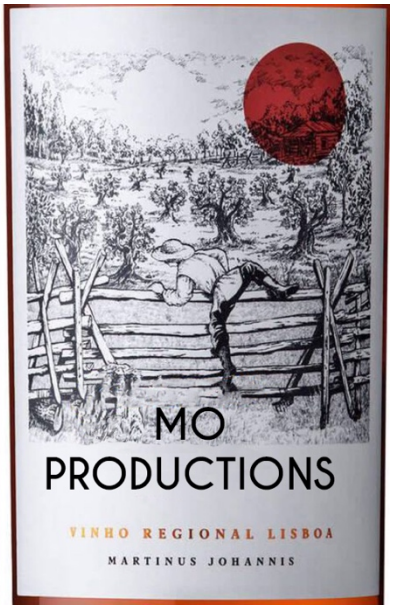
4.2. What is your favorite label? Would you like to change anything about these labels? If yes, what?

4.3. What do you identify as feminine elements in these labels?

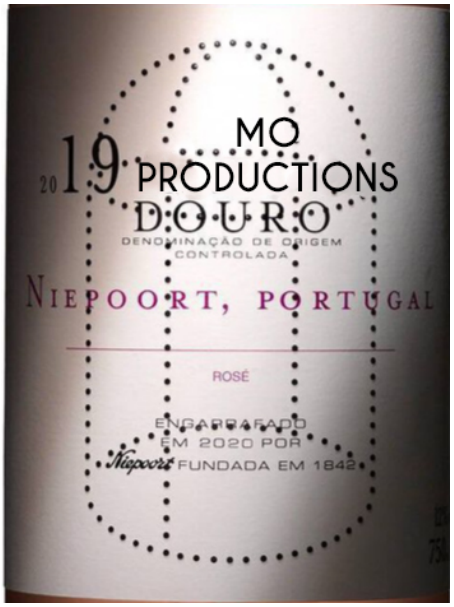
Now take a look at the following labels. They were considered as being more masculine.



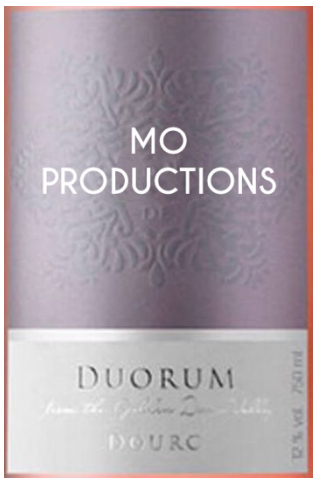
Label F



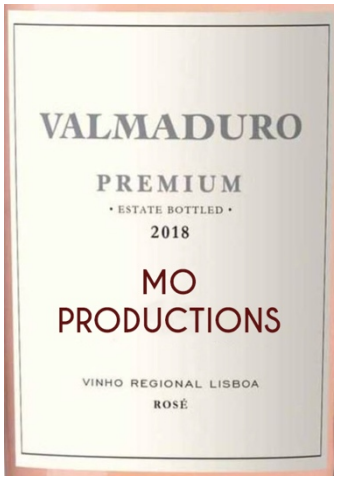
Label G



Label H



Label I



Label J

4.4. What do you think about these labels?

4.5. What is your favorite label? Would you like to change anything about these labels? If yes, what?

4.6. What do you identify as masculine elements in these labels?

5. Bottle Shapes

Now take a look at the following bottles. They were considered as having a feminine shape.

Bottle A Bottle B Bottle C Bottle D Bottle E

5.1. What do you think about these shapes?

5.2. What is your favorite shape? Would you like to change anything about these shapes? If yes, what?

5.3. What do you identify as feminine elements in these shapes?

Now take a look at the following bottles. They were considered as having a masculine shape.

Bottle F Bottle G Bottle H Bottle I Bottle J

5.4. What do you think about these shapes?

5.5. What is your favorite shape? Would you like to change anything about these shapes? If yes, what?

5.6. What do you identify as masculine elements in these shapes?

Conclusion

Thank you for your participation. Your opinions will be a valuable contribution to my thesis.

Appendix 2 - Online Questionnaire

Introduction

Q1:

Dear participant,

First of all, thank you in advance for participating in this survey!

This questionnaire was developed as a part of my Master Thesis at Católica-Lisbon School of Business and Economics. It will take around 5 minutes to complete.

I kindly ask you to answer the questions truthfully since what is important to me is to know your authentic opinions and perceptions. I would remind you that there are no correct nor incorrect answers and all of them are confidential, so your anonymity is ensured. The data gathered will exclusively be used for the purpose of my master's dissertation.

In case of any doubt, please do not hesitate to send an e-mail to: 152120243@alunos.lisboa.ucp.pt.

Thank you for your time and cooperation!

Maria Oliveira

Sample Characterization

Q2: On average, how often did you purchase rosé wine per month?

- Never
- Once a month or less
- 2 – 3 times a month
- 1 – 3 times a week
- 4 times a week or more

Q3: On average, how much do you spend on rosé wine per month?

- Less than 5€
- 5€ - 9,99€
- 10€ - 14,99€
- 15€ - 19,99€
- 20€ - 24,99€
- 25€ - 30€
- More than 30€

Q4: On average, how often do you consume rosé wine per month?

- Never
- Once a month or less
- 2 – 3 times a month
- 1 – 3 times a week
- 4 times a week or more

Stimuli

Imagine that you are in the supermarket looking to buy rosé wine. While you are browsing the shelves, you come across the following product:

(Each respondent is assigned randomly to one of the three *stimuli*)

Please answer the following questions having this product in mind.

Main Questions

Attitude

Q5: Please indicate your level of agreement with the following statements [(1) Strongly Disagree) – (7) Strongly Agree]:

- Overall this product is interesting.

- I would like to try this product.
- I would probably take a look at this product in a store.
- Overall, I like this product.
- The packaging is attractive.
- This product makes a strong impression on my visual senses.
- I find this product interesting in a sensory way.
- This product does not appeal to my senses.

Purchase Intentions

Q6: Please indicate your level of agreement with the following statements [(1) Strongly Disagree) – (7) Strongly Agree]:

- I would never buy this product.
- I definitely do not intend to buy this product.
- I have very low purchase interest in this product.
- I would definitely buy this product.
- I would probably not buy this product.

Brand Image

Q7: Please indicate your level of agreement with the following statements [(1) Strongly Disagree) – (7) Strongly Agree]:

- There is a reason to buy this brand instead of others.
- This brand has a good personality.
- This brand is interesting.
- This brand is different from competing brands.

Manipulation Check

Q8: Have you heard of this brand?

- Yes
- No

Demographics

Q9: What is your gender?

- Male
- Female
- Other

Q10: What is your age?

- Less than 18
- 18-29
- 30-39
- 40-49
- 50-59
- More than 60

Q11: What is your nationality?

- Drop-down menu from Qualtrics

Q12: What is your current occupation?

- Student
- Student-Worker
- Employed

- Unemployed
- Retired
- Other

Q13: Only for statistical purposes, what is your monthly gross income?

- Less than 500€
- 500€ - 999€
- 1000€ - 1499€
- 1500€ - 1999€
- 2000€ - 2499€
- 2500€ - 2999€
- 3000€ - 3499€
- 3500€ - 4000€
- More than 4000€

Thank you for filling out this survey!

Appendix 3 – SPSS Output: Sample Characterization

Statistics

		What is your gender?	What is your age?	What is your nationality?	What is your current occupation?	Only for statistical purposes, what is your monthly gross income?
N	Valid	355	355	355	355	355
	Missing	1	1	1	1	1
Mean		1.57	2.90	1.21	2.00	2.53
Std. Deviation		.496	1.370	1.423	1.252	2.122
Minimum		1	1	1	1	1
Maximum		2	6	14	6	9

Frequency Table

What is your gender?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	153	43.0	43.1	43.1
	Female	202	56.7	56.9	100.0
	Total	355	99.7	100.0	
Missing	System	1	.3		
Total		356	100.0		

What is your age?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 18	3	.8	.8	.8
	18-29	232	65.2	65.4	66.2
	30-39	9	2.5	2.5	68.7
	40-49	40	11.2	11.3	80.0
	50-59	51	14.3	14.4	94.4
	More than 60	20	5.6	5.6	100.0
	Total	355	99.7	100.0	
Missing	System	1	.3		
Total		356	100.0		

What is your nationality?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Portuguese	339	95.2	95.5	95.5
	German	7	2.0	2.0	97.5
	Spanish	2	.6	.6	98.0
	British	1	.3	.3	98.3
	French	2	.6	.6	98.9
	Other	4	1.1	1.1	100.0
	Total	355	99.7	100.0	
Missing	System	1	.3		
Total		356	100.0		

What is your current occupation?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	195	54.8	54.9	54.9
	Student-Worker	9	2.5	2.5	57.5
	Employed	132	37.1	37.2	94.6
	Unemployed	4	1.1	1.1	95.8
	Retired	4	1.1	1.1	96.9
	Other	11	3.1	3.1	100.0
	Total	355	99.7	100.0	
Missing	System	1	.3		
Total		356	100.0		

Only for statistical purposes, what is your monthly gross income?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 500€	200	56.2	56.3	56.3
	500€ - 999€	10	2.8	2.8	59.2
	1000€ - 1499€	48	13.5	13.5	72.7
	1500€ - 1999€	30	8.4	8.5	81.1
	2000€ - 2499€	32	9.0	9.0	90.1
	2500€ - 2999€	15	4.2	4.2	94.4
	3000€ - 3499€	7	2.0	2.0	96.3
	3500€ - 4000€	1	.3	.3	96.6
	More than 4000€	12	3.4	3.4	100.0
	Total	355	99.7	100.0	
Missing	System	1	.3		
Total		356	100.0		

Frequencies

Statistics

		On average, how often did you purchase wine per month?	On average, how much do you spend on wine per month?	On average, how often do you consume wine per month?
N	Valid	356	356	356
	Missing	0	0	0
Mean		2.16	1.94	2.82
Std. Deviation		.623	1.317	.980
Minimum		1	1	1
Maximum		5	6	5

Frequency Table

On average, how often did you purchase wine per month?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	32	9.0	9.0	9.0
	Once a month or less	247	69.4	69.4	78.4
	2 - 3 times a month	66	18.5	18.5	96.9
	1 - 3 times a week	10	2.8	2.8	99.7
	4 times a week or more	1	.3	.3	100.0
	Total	356	100.0	100.0	

On average, how much do you spend on wine per month?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 5€	183	51.4	51.4	51.4
	5€ - 9,99€	96	27.0	27.0	78.4
	10€ - 14,99€	33	9.3	9.3	87.6
	15€ - 19,99€	20	5.6	5.6	93.3
	20€ - 24,99€	9	2.5	2.5	95.8
	More than 25€	15	4.2	4.2	100.0
	Total	356	100.0	100.0	

On average, how often do you consume wine per month?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	17	4.8	4.8	4.8
	Once a month or less	136	38.2	38.2	43.0
	2 - 3 times a month	120	33.7	33.7	76.7
	1 - 3 times a week	61	17.1	17.1	93.8
	4 times a week or more	22	6.2	6.2	100.0
	Total	356	100.0	100.0	

Appendix 4 – SPSS Output: Linear Regression

Regression_H1

Descriptive Statistics

	Mean	Std. Deviation	N
Mean Purchase Intent	3.4399	1.52862	336
Mean Gender Clues	4.8019	1.55930	336

Correlations

		Mean Purchase Intent	Mean Gender Clues
Pearson Correlation	Mean Purchase Intent	1.000	-.897
	Mean Gender Clues	-.897	1.000
Sig. (1-tailed)	Mean Purchase Intent	.	<.001
	Mean Gender Clues	.000	.
N	Mean Purchase Intent	336	336
	Mean Gender Clues	336	336

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Mean Gender Clues[b]	.	Enter

a. Dependent Variable: Mean Purchase Intent

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.897[a]	.805	.804	.67601	1.840

a. Predictors: (Constant), Mean Gender Clues

b. Dependent Variable: Mean Purchase Intent

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	630.151	1	630.151	1378.912	<.001[b]
	Residual	152.635	334	.457		
	Total	782.786	335			

a. Dependent Variable: Mean Purchase Intent

b. Predictors: (Constant), Mean Gender Clues

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	7.663	.120		64.092	<.001		
	Mean Gender Clues	-.880	.024	-.897	-37.134	<.001	1.000	1.000

a. Dependent Variable: Mean Purchase Intent

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	Mean Gender Clues
1	1	1.951	1.000	.02	.02
	2	.049	6.326	.98	.98

a. Dependent Variable: Mean Purchase Intent

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.5065	6.7839	3.4399	1.37151	336
Residual	-1.74518	2.81396	.00000	.67500	336
Std. Predicted Value	-1.410	2.438	.000	1.000	336
Std. Residual	-2.582	4.163	.000	.999	336

a. Dependent Variable: Mean Purchase Intent

Appendix 5 – SPSS Output: Mediation Matrix

Matrix_Mediation Model

```
Run MATRIX procedure:

***************** PROCESS Procedure for SPSS Version 4.0 *****************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2022). www.guilford.com/p/hayes3

**************************************************************************
Model  : 4
    Y  : Q15_PI4
    X  : Mean_GC
    M  : Mean_BI

Sample
Size:  336

**************************************************************************
OUTCOME VARIABLE:
 Mean_BI

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .6579      .4328      .7491   254.8492     1.0000   334.0000      .0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     2.5688      .1531    16.7797      .0000     2.2677     2.8700
Mean_GC       .4841      .0303    15.9640      .0000      .4245      .5438

Standardized coefficients
             coeff
Mean_GC      .6579

**************************************************************************

**************************************************************************
OUTCOME VARIABLE:
 Q15_PI4

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .8401      .7057      .7161   399.2798     2.0000   333.0000      .0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     -.3061      .2032    -1.5064      .1329     -.7058      .0936
Mean_GC       .6982      .0394    17.7331      .0000      .6207      .7756
Mean_BI       .2624      .0535     4.9045      .0000      .1571      .3676

Standardized coefficients
             coeff
Mean_GC      .7000
Mean_BI      .1936

************************** TOTAL EFFECT MODEL ****************************
OUTCOME VARIABLE:
 Q15_PI4

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .8273      .6845      .7655   724.4972     1.0000   334.0000      .0000

Model
              coeff         se          t          p       LLCI       ULCI
constant      .3679      .1548     2.3774      .0180      .0635      .6723
Mean_GC       .8252      .0307    26.9165      .0000      .7649      .8855

Standardized coefficients
             coeff
Mean_GC      .8273
```

```
************** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y **************

Total effect of X on Y
     Effect         se          t          p       LLCI       ULCI       c_cs
      .8252      .0307    26.9165      .0000      .7649      .8855      .8273

Direct effect of X on Y
     Effect         se          t          p       LLCI       ULCI      c'_cs
      .6982      .0394    17.7331      .0000      .6207      .7756      .7000

Indirect effect(s) of X on Y:
            Effect     BootSE   BootLLCI   BootULCI
Mean_BI      .1270      .0300      .0689      .1869

Completely standardized indirect effect(s) of X on Y:
            Effect     BootSE   BootLLCI   BootULCI
Mean_BI      .1274      .0296      .0695      .1854

************************ ANALYSIS NOTES AND ERRORS ************************

Level of confidence for all confidence intervals in output:
  95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000

------ END MATRIX -----
```