



# The Impact of Perceived Store Image and Service Quality on the Purchase Intention for Private Label Brands

The Moderating Role of Consumer's Value Consciousness

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## **ABSTRACT**

**Title:** The impact of perceived store image and service quality on the purchase intention for Private Label brands: The moderating role of consumer's value consciousness

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In recent years, the retail industry has experienced a significant rise in terms of the competitiveness between companies to attract the preferences of consumers. This scenario has led to the generalized introduction of Private Label brands, especially by companies operating in the grocery retail market.

Although the engagement in this strategy has allowed most retail companies to accumulate numerous benefits, it is becoming increasingly difficult for them to differentiate their Private Label brands from those of their competitors, namely in terms of the product features.

Following this, the primary purpose of the present study is to assess the impact of perceived store image and service quality on the consumers' purchase intention for Private Label brands, specifically in the Portuguese grocery market. On a secondary level, the potential moderating effect of the consumer's degree of value consciousness will be evaluated as well.

The methodology used for this investigation involves the collection and subsequent analysis of primary and secondary data. More specifically, the primary data collection process integrates both pre-survey and main survey online questionnaires.

The results obtained suggest a significant impact of the store image and service quality perceptions on the purchase intention for Private Label brands. However, the moderating role of value consciousness was not found to be sufficiently relevant in this particular context.

## SUMÁRIO

**Título:** O impacto das percepções de imagem de loja e qualidade de serviço na intenção de compra por marcas próprias: O papel moderador da consciência de valor do consumidor.

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Nos últimos anos, a indústria do retalho tem registado um aumento significativo em termos de competitividade entre empresas para atrair as preferências dos consumidores. Este cenário tem levado à introdução generalizada de marcas próprias, especialmente por empresas a operar no mercado de retalho alimentar.

Apesar do envolvimento nesta estratégia ter permitido à maioria das empresas de retalho acumular numerosos benefícios, está a tornar-se cada vez mais difícil para as mesmas diferenciarem as suas marcas próprias face às dos seus concorrentes, nomeadamente em termos das características do produto.

No seguimento do referido, o principal propósito do presente estudo é avaliar o impacto das percepções de imagem de loja e qualidade de serviço na intenção de compra dos consumidores relativamente a marcas próprias, especificamente no mercado de retalho alimentar em Portugal. A nível secundário, o potencial efeito moderador do grau de consciência de valor do consumidor será também avaliado.

A metodologia utilizada para esta investigação envolve a recolha e posterior análise de dados primários e secundários. Mais especificamente, o processo de obtenção de dados primários integra um pré-questionário e um questionário principal, ambos distribuídos online.

Os resultados obtidos sugerem um impacto significativo das percepções de imagem de loja e de qualidade de serviço na intenção de compra por marcas próprias. Contudo, o papel moderador da consciência de valor não foi considerado suficientemente relevante neste contexto em particular.

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# TABLE OF CONTENTS

<b>ABSTRACT</b> .....	<b>II</b>
<b>SUMÁRIO</b> .....	<b>III</b>
<b>ACKNOWLEDGEMENTS</b> .....	<b>IV</b>
<b>TABLE OF CONTENTS</b> .....	<b>V</b>
<b>TABLE OF FIGURES</b> .....	<b>VII</b>
<b>TABLE OF TABLES</b> .....	<b>VIII</b>
<b>TABLE OF APPENDICES</b> .....	<b>IX</b>
<b>GLOSSARY</b> .....	<b>X</b>
<b>1 INTRODUCTION</b> .....	<b>1</b>
1.1 BACKGROUND.....	1
1.2 PROBLEM STATEMENT.....	3
1.3 RELEVANCE.....	4
1.4 RESEARCH METHODS.....	5
1.5 DISSERTATION OUTLINE.....	6
<b>2 LITERATURE REVIEW</b> .....	<b>8</b>
2.1 RETAIL INDUSTRY AND THE EVOLUTION OF PRIVATE LABEL BRANDS.....	8
2.2 PURCHASE INTENTION.....	10
2.3 PERCEIVED STORE IMAGE.....	10
2.3.1 Conceptualization.....	10
2.3.2 Integrated Dimensions.....	11
2.3.3 Effects in Store and Private Labels Contexts.....	12
2.4 PERCEIVED SERVICE QUALITY.....	13
2.5 THE MODERATING ROLE OF CONSUMER’S VALUE CONSCIOUSNESS.....	16
2.6 CONCEPTUAL FRAMEWORK.....	18
<b>3 METHODOLOGY</b> .....	<b>19</b>
3.1 RESEARCH APPROACH.....	19
3.2 SECONDARY DATA.....	20
3.3 PRIMARY DATA.....	20
3.3.1 Pre-Survey.....	21
3.3.2 Main Survey.....	24
<b>4. RESULTS</b> .....	<b>28</b>

4.1 SAMPLE CHARACTERIZATION .....	28
4.2 MEASURES RELIABILITY .....	31
4.3 HYPOTHESES TESTING .....	32
4.3.1 The Impact of Perceived Store Image on Private Label Purchase Intention .....	32
4.3.2 The Impact of Perceived Service Quality on Private Label Purchase Intention .....	35
4.3.3 The Moderating Effect of Value Consciousness on the Impact of Perceived Store Image.....	38
4.4 FURTHER RESULTS: INDEPENDENT SAMPLES T-TESTS .....	40
<b>5 CONCLUSIONS AND LIMITATIONS .....</b>	<b>42</b>
5.1 MAIN FINDINGS AND CONCLUSIONS .....	42
5.1.1 The Impact of Perceived Store Image on Private Label Purchase Intention .....	42
5.1.2 The Impact of Perceived Service Quality on Private Label Purchase Intention .....	43
5.1.3 The Moderating Role of Consumer’s Value Consciousness .....	43
5.1.4 Additional Considerations .....	44
5.2 ACADEMIC/MANAGERIAL IMPLICATIONS .....	44
5.3 LIMITATIONS AND FURTHER RESEARCH .....	46
<b>REFERENCE LIST .....</b>	<b>I</b>
<b>APPENDICES .....</b>	<b>VI</b>

**TABLE OF FIGURES**

Figure 1 - Conceptual Framework ..... 18

Figure 2 - Pre-Survey: Store Image Perceptions ..... 23

Figure 3 - Pre-Survey: Service Quality Perceptions ..... 24

Figure 4 - Respondents Choice for Retailer Associated with their Highest Budget Share ..... 29

Figure 5 - Main Survey: Store Image Perceptions ..... 30

Figure 6 - Main Survey: Service Quality Perceptions..... 30

Figure 7 - Purchase Intention towards Private Labels..... 31

Figure 8 - Effect of PSI (H1)..... 33

Figure 9 - Effects of the PSI Dimensions..... 35

Figure 10 - Effect of PSQ (H2) ..... 36

Figure 11 - Effects of PSI and PSQ..... 38

Figure 12 - Moderating Effect of CVC (H3)..... 40

**TABLE OF TABLES**

Table 1 - Pre-Survey: Measurement Model ..... 22

Table 2 - Main Survey: Measurement Model ..... 25

Table 3 - Reliability Statistics: Cronbach’s Alpha for the Study’s Constructs ..... 32

Table 4 - Regression Unstandardized Coefficients and Significance Level ..... 34



## TABLE OF APPENDICES

Appendix 1 - Pre-Survey Questionnaire .....	VI
Appendix 2 - SPSS Output – Pre-Survey: Mean Values of Retailers .....	XI
Appendix 3 - Main Survey Questionnaire.....	XII
Appendix 4 - SPSS Output – Demographic Factors and Shopping/Retailer Preferences.....	XXI
Appendix 5 - SPSS Output – Measures Reliability (Cronbach’s Alpha).....	XXIV
Appendix 6 - SPSS Output – Simple Linear Regression (H1: Effect of PSI).....	XXVII
Appendix 7 - SPSS Output – Multiple Linear Regression (PSI Dimensions) .....	XXVIII
Appendix 8 - SPSS Output – Simple Linear Regression (H2: Effect of PSQ) .....	XXX
Appendix 9 - SPSS Output – Multiple Linear Regression (PSI & PSQ Effects).....	XXXII
Appendix 10 - SPSS Output – Multiple Linear Regression (H3: CVC Moderation Effect) .....	XXXIII
Appendix 11 - SPSS Output – Further Results: Independent Samples T-Tests.....	XXXIV

## **GLOSSARY**

<b>CVC</b>	Consumer's Value Consciousness
<b>FMCG</b>	Fast-Moving Consumer Goods
<b>Med_SI</b>	Mean Value of Store Image Perceptions
<b>Med_SQ</b>	Mean Value of Service Quality Perceptions
<b>National Brands</b>	Brand name of a product owned by the producer or distributor
<b>PI</b>	Purchase Intention
<b>PI_Overall</b>	Purchase Intention for Private Labels in General
<b>PI_Utilitarian</b>	Purchase Intention for Private Label Utilitarian Product Category
<b>PI_Hedonic</b>	Purchase Intention for Private Label Hedonic Product Category
<b>PSI</b>	Perceived Store Image
<b>PSQ</b>	Perceived Service Quality
<b>SI</b>	Store Image Variable
<b>SI_ValueC</b>	Interaction between Perceived Store Image and Value Consciousness
<b>SPSS</b>	Statistical Package for the Social Sciences
<b>SQ</b>	Service Quality Variable
<b>ValueC_Dummy</b>	Dummy Variable Created for Value Consciousness
<b>VIF</b>	Variance Inflation Factor

# 1 INTRODUCTION

## 1.1 Background

As there has been an imperative need to adapt to the complexity of the emerging preferences and consumption patterns of consumers, the retail industry has been experiencing deep changes in the last decades (Ailawadi & Keller, 2004). The competitive environment among retail companies is becoming significantly fiercer with a strong need for differentiation (Kim, Lee, & Park, 2014), while ensuring high product quality and competitive prices for consumers.

In order to shift consumers' preferences towards their stores and secure considerable economic benefits, one strategy retailers commonly use is the creation and further introduction of Private Label brands (Kremer & Viot, 2012; Kumar & Steenkamp, 2007; Steenkamp & Dekimpe, 1997). These can be referred to either by "Private Labels" (Batra & Sinha, 2000) or "Store brands" (Ailawadi, Neslin, & Gedenk, 2001), varying by author. For the purpose of the present research, the term used to designate them is "Private Labels".

According to Kotler & Armstrong (1996), Private Labels can be broadly defined as brands owned and distributed by a particular retailer in its own stores. From the retailers' perspective, Private Labels offer numerous advantages, namely, higher retail margins, potential to increase control over shelf space, increased store traffic, store loyalty, profitability along the supply chain and negotiating power over national brand manufacturers (Ailawadi, Pauwels, & Steenkamp, 2008; Batra & Sinha, 2000; Koschate-Fischer, Cramer, & Hoyer, 2014). As far as consumers are concerned, besides increasing the overall product category assortment, which expands the set of available choices, Private Labels often provide lower prices as well as quality levels not far below from those of national brands, thus offering good value for money (Koschate-Fischer et al., 2014; Pauwels & Srinivasan, 2004).

Leveraging on the aforementioned benefits, Private Labels have been consistently growing in terms of sales volume as well as market penetration and share (Accenture 2012; Batra & Sinha, 2000). According to Nielsen (2014), this trend is particularly evident in the North

American and European markets, especially within Western European countries. Regarding the same report which refers to 2013 data, Europe is the most developed region in terms of Private Labels' market penetration with 70% of consumers considering them to be a viable alternative to national brands. However, some retail markets, like the Portuguese one, are progressively reaching a maturity stage in terms of Private Labels' development and, consequently, the respective growth rates have been slightly decelerating in recent years.

In order to remain competitive and maintain or even improve the benefits provided by the trade of Private Labels, retailers may focus on less explored factors in the industry, which are proven to influence consumers' purchase intention for this particular type of brands, especially in mature markets, such as the Portuguese one.

Regarding the variables that affect the consumption of Private Labels, previous research has been mostly focused on product-level factors. However, store-level factors are becoming significantly relevant within the retail industry (Semeijn, Van Riel, & Ambrosini, 2004). According to the literature, the perceived store image, either through its functional or psychological dimensions, has an impact on the purchase intention for Private Labels (Collins-Dodd & Lindley, 2003; Wu, Yeh, & Hsiao, 2011). In an additional assessment, perceived service quality towards retail stores is also considered to influence the purchase intention for this type of brands (Carrillat, Jaramillo, & Mulki, 2009).

Particularly in mature markets with high levels of Private Labels' penetration, consumers tend to base their decision-making process concerning these brands mainly on the perceived value that they attach to them rather than on the perceived price alone. Additionally, the consumer segment that is mostly associated with the purchase of Private Labels is the value-conscious one (Ailawadi et al., 2001; Sprott & Shimp, 2004). Taking these facts into consideration and referring to the Portuguese retail market, it is expected that the degree of consumer's value consciousness (CVC) might play a relevant role on what the relationships between the perceptions of particular store-level factors and purchasing behavior are concerned.

The present research will be focused on the Portuguese grocery market due to the size and significance of the grocery sector within the global and, more specifically, the Portuguese retail settings. In fact, recent data shows that the Portuguese grocery market represents

approximately half (21,556.4 € million) of the overall retail value sales in the country (Euromonitor, 2018).

Besides assessing the above mentioned effects on the overall purchase intention for Private Labels, the present research will also provide a comparative analysis based on the nature of the product categories in order to understand if there might be any potential disparities between the degrees of purchase intention for utilitarian and hedonic products in the context of Private Labels. This assumes particular relevance as the utilitarian vs hedonic features of the products might produce an impact on the consumers' decision-making process and, ultimately, on their purchase intention (Dhar & Wertenbroch, 2000). In fact, when consumers rely on utilitarian aspects for the purchasing decision, they tend to prioritize the functional dimensions of products. In turn, when consumers rely on the hedonic attributes, the predicted consumption experience per se is considered to be the main criterion of choice (Coelho do Vale & Verga Matos, 2015).

Having the previously mentioned line of reasoning in mind, the aim of this research is to identify the impact of perceived store image and service quality on consumers' purchase intention towards Private Labels, as well as to investigate how consumers' value consciousness affects the influence of perceived store image on their purchase intention.

## **1.2 Problem Statement**

The scope of this research is to understand how the store-level concepts of perceived store image and service quality influence the purchase intentions of consumers towards Private Labels within the Portuguese grocery market, as well as to engage in a comparative assessment of the impact levels of both variables and, this way, identifying their relevance in this particular context. Furthermore, the present research intends to analyze if the consumers' various degrees of value consciousness moderate the expected causal relationship between store image perceptions and their purchase intention for Private Labels. The problem statement can be summarized as follows:

What is the impact of perceived store image and service quality on the purchase intention for Private Label brands? Does the consumer's value consciousness moderate the effect of the store image perceptions on purchase intention?

This problem statement substantiates itself in the following research questions:

**RQ1:** What is the impact of perceived store image and service quality on the purchase intention for Private Label brands?

**RQ2:** Does the degree of consumer's value consciousness moderate the influence of store image perceptions on the purchase intention for Private Label brands?

### **1.3 Relevance**

The present research assumes particular relevance in both academic and managerial contexts. From an academic perspective, while variables such as the perceived price, quality and value of Private Labels have been widely explored in previous studies due to their long-recognized significance to understand the motivations for consumers' purchase decisions, other influencing variables have not received such attention by the academic community. In fact, the majority of researchers tend to focus on product-level factors to the detriment of store-level factors (Semeijn et al., 2004). However, both theoretical developments and the real retail setting have been proving the growing importance of some of the latter, which include perceived store image (Beristain & Zorrilla, 2011), as well as perceived service quality (Brady & Cronin, 2001).

In order to complement the academic relevance of this study, the additional focus on the moderating role of the consumer's degree of value consciousness should be valuable as this consumer-level factor is directly associated with the consumer's likelihood to rely on either heuristic or systematic decision-making processes (Ballester, Espallardo, & Orejuela, 2014). Furthermore, the impact of the referred variables will be assessed through an innovative model based on previously studied specific relationships. This way, the present research might provide additional insights by deepening the study of these variables and their effects while consolidating the various scholars' perspectives regarding them, in a single study applied to the Portuguese grocery market.

In terms of managerial relevance, this research is intended to address two significant issues in the retail setting, which are closely related to the impacting variables of the present study.

Firstly, the diversity of dimensions that constitute the perceived store image concept contributes to its subjectivity feature. In fact, these dimensions vary according to the researcher and consensus is far from being reached by the academic community, which makes perceived store image even more ambiguous for retailers. As a consequence and since the retail managers' performance is not measured based on the levels of store image provided by a particular retailer, this concept is less noticeable, quantifiable and prioritized by them.

Secondly, retailers are mostly focused on product-level factors, such as the price or quality of specific products, as these are considered to be important sources of competitive advantage. Nevertheless, the levels of service quality in retail stores are emerging as a relevant differentiating factor for retailers. In fact, the perceptions concerning this particular variable are increasingly regarded as a complement to the perceptions of the product features, thus influencing the purchase intention as well. Additionally, since retailers are increasingly offering a mix of products and services (Siu & Cheung, 2001), the impact of perceived service quality is becoming increasingly relevant in a retail context.

Given the particular passion of the author of this Master's dissertation for the retail industry and for the FMCG sector, there is an intention to further explore the phenomenon of Private Labels due to its growing impact on retail markets worldwide. More specifically, by directing this research to more unconventional variables, which are considered to be relevant in the current stage of the retail industry, its aim is to provide a better understanding regarding them, both on a personal level and for the various consignees of this study.

#### **1.4 Research Methods**

With the main purpose of answering the research questions previously defined, both primary and secondary data will be collected.

Firstly, secondary data will be used as a means to provide academic validity to the concepts integrating the present research and the proposed relationships between them. This data will be presented through a detailed literature review of relevant existing research, which will be

supplemented by data based on distinct market reports, thus providing a consistent basis for further primary data collection and analysis.

Secondly, and referring to the primary data collection process, a short online pre-survey questionnaire will be administered to the target audience in order to effectively select the grocery retailers operating in the Portuguese market perceived by consumers as possessing either the lowest or highest levels of store image (SI) and service quality (SQ). Based on the results provided by the respondents, the retailers that score the lowest and highest values for both variables will receive the focus on the final stage.

Lastly, the main survey online questionnaire will be designed and distributed in order to assess the formulated hypotheses in the literature review. This questionnaire will be based on specific relevant constructs, previously used in the context of Private Labels' research and in accordance with the main purpose of the present study.

The referred questionnaire will be answered exclusively by consumers living in Portugal and the entire set of responses will be analyzed using IBM's SPSS statistical software. More particularly, the set of questions will allow for the identification of the participants' personal level of value consciousness as well as their perceptions of both store image and service quality towards the pre-defined retailers. Additionally, their purchase intention both at an overall level and for specific product categories will be assessed. On top of this, relevant data concerning demographics and shopping/retailer preferences will be collected. In the subsequent stage, the data analysis will be essentially comprised of a set of simple and multiple linear regressions in order to test the proposed effects. Moreover, frequencies analysis will be performed to provide an accurate description of the selected sample and a set of independent samples t-tests will be applied to draw additional considerations regarding this study.

## **1.5 Dissertation Outline**

The next chapter presents a literature review as well as the development of the set of hypotheses, which is directly attached to the research questions previously stated and which will guide the present study. The literature review provides insights regarding the relevance of the several concepts addressed throughout this study. The third chapter includes the



methodology that will be followed in order to test the proposed hypotheses and provide answers to the research questions identified. The fourth chapter presents the results obtained through the analysis of the data resultant from both surveys. Lastly, the fifth chapter states the main conclusions and findings of this research, both its academic and managerial implications, as well as its limitations and indications for further research on the approached topics.

## **2 LITERATURE REVIEW**

The purpose of the following chapter is to provide a meaningful and consistent theoretical background in order to establish a context for the research questions to be appropriately answered. In this section, a set of research hypotheses will be developed. These statements will rely on an analysis of previously studied concepts and relationships by the academic community, thus contributing to the scientific validity of this research as well as providing a context for its findings. In an initial stage of this chapter, insights will be provided concerning the recent dynamics of the retail industry and, in this context, the emergence of Private Labels. Following this, the concept of purchase intention (PI) as a dependent variable of this study will be presented, followed by a descriptive and critical assessment of both impacting variables, namely, perceived store image (PSI) and perceived service quality (PSQ), together with their influence on the purchase intention towards Private Labels. Subsequently, the proposed moderating role of consumer's value consciousness (CVC) for the interaction between PSI and PI is depicted. Lastly, the conceptual framework for the entire set of interactions and developed hypotheses is demonstrated in order to provide an overview of the studied issues.

### **2.1 Retail Industry and the Evolution of Private Label Brands**

The retail environment is becoming increasingly competitive with a significant number of retailers expanding their strategies and operations from a local to a global scale (Grewal & Levy, 2007). Moreover, this setting is mostly influenced by constant changes regarding the retail companies and their ways of conducting their businesses, as well as the consumers and their progressively complex consumption preferences.

From a retailers' perspective, there has been an emergence of new types of retailing formats and technological innovations, as well as significant modifications in retail ownership prompted by a recent growing spate of mergers and acquisitions in the sector (Theodoridis & Chatzipanagiotou, 2009).

In turn, consumers are becoming more intricate and demanding in terms of their decision-making process and consumption behaviors, while attaching more value and developing greater expectations about their consumption experiences (Dabholkar, Thorpe, & Rentz, 1996).

In this global and highly competitive scenario, there has been a growing need for retailers to further differentiate themselves from their competitors, while maintaining the focus on profitability (Ailawadi & Keller, 2004). Following this necessity, the major retail companies started to engage in an innovative branding and product-related strategy, the introduction and development of Private Labels.

The main feature distinguishing the referred brands from the national brands is the fact that the retailers who own them are fully responsible for their success, in the sense that they are entirely liable for the functions of product introduction, procurement, promotion and distribution to the final customer.

During the first considerable wave of Private Labels' introduction in the 1970s and 1980s, retailers positioned these brands as generic lower quality products provided to consumers at significantly lower prices when compared to national brands (Kumar & Steenkamp, 2007). With this value proposition, they were able to efficiently target a more price-sensitive market segment and collect benefits from this strategy. However, in the long run, this positioning decision was limiting retailers from exploring the additional potential of their Private Labels. In fact, in order to maximize the benefits of their Private Labels, retailers acknowledged that they should provide not only low prices but also increase the investment in the quality of their own brand's products (Corstjens & Lal, 2000). On top of that, retailers began to realize that consumers mostly prioritized the product value in their purchase decision-making for Private Labels (Ailawadi et al., 2001). The value of a particular product is generally measured as a ratio between its perceived quality and its established purchasing price for the consumer (Lichtenstein, Ridgway, & Netemeyer, 1993).

Taking these facts into consideration, over recent years, retailers have started to complement the price-advantageous value proposition of their Private Labels with a more brand-oriented strategic focus mostly based on significant product quality improvements, superior packaging and the pursue of a differentiated identity (Beristain & Zorrilla, 2011). This re-positioning

strategy, allowed them to provide more value to consumers, thus expanding their target segments from the previously mentioned price-sensitive one to other consumer groups, such as the value-conscious segment (Pauwels & Srinivasan, 2004).

## **2.2 Purchase Intention**

Purchase intention may be defined as the probability of consumers planning, or being willing, to purchase a particular product or service in the future (Wu et al., 2011). As preceding steps to this concept, consumers base their product evaluations essentially on two distinct factors: their personal characteristics and their individual decision-making process, which may be influenced by a multitude of external factors (Kotler, 2000). In turn, these factors combined, affect the degree of satisfaction that consumers expect to achieve after purchasing a product, which is a consistent predictor of the purchase intention (Kupiec & Revell, 2001). Furthermore and considering the impact of PI, this concept is often regarded as the specific previous stage to the engagement in the actual purchase behavior (Grewal et al., 1998).

Several authors have previously used the PI construct in the context of Private Labels' research (Bao, Bao, & Sheng, 2011; Wu et al., 2011), which indicates its scientific validity. On what retailers are concerned, PI is considered to be the most precise indicator in terms of purchase behavior projections (Morwitz & Schmittlein, 1992), and its measurements are cost-effective, as well as easily understood and interpreted.

## **2.3 Perceived Store Image**

### **2.3.1 Conceptualization**

Following a review of existing literature, one denotes that the concept of PSI is considerably broad and non-consensual. Considering this fact, it is crucial to shed a light on the applicable conceptualization of this construct for further assessment of its effects in the context of Private Labels.

Despite the lack of consensus concerning the definition of SI, most studies mention the conceptualization proposed by Martineau (1958). According to the author, SI is idealized as “the way a store is defined in the consumer’s mind, partly due to its functional qualities and partly due to an aura of psychological attributes”. Furthermore, Martineau refers to the concept as a “store’s personality”. Whereas the functional component of SI is mostly associated with a cognitive dimension and tangible attributes of the store, the psychological aspect is mostly related to the affective dimension and its intangible characteristics. This research is mostly focused on the functional perspective of PSI to the detriment of the psychological one. This is mainly due to the fact that the store’s functional aspects are more effectively comparable between retailers. Moreover, these dimensions are the ones determined and manageable by the retail companies (Stern, Zinkhan, & Jaju, 2001), which reinforces the managerial relevance and implications of this study.

### **2.3.2 Integrated Dimensions**

Similarly to the definition of PSI, the establishment of the set of dimensions that constitute this construct has also been somewhat inconsistent, with researchers reporting a wide range of store attributes (Visser, Preez, & Noordwyk, 2006).

For the purpose of this research and following an assessment of the commonalities between the existing studies and this one, the decision was to engage in a six-dimensional classification. The selected attributes were: Store atmosphere, product quality, product variety, price, value for money and the overall attitude towards the store. These dimensions were adapted from Collins-Dodd & Lindley (2003), who adjusted the attributes initially developed by Chowdhury, Reardon, & Srivastava (1998) to a grocery market setting and conducted a research fairly similar to the present one in terms of studied variables and geographical market characteristics. Furthermore, this set of dimensions was considered to be the most appropriate one taking into account the wide coverage of SI features perceived by consumers as relevant in previous studies (Ailawadi & Keller, 2004; Bao et al., 2011).

The SI attributes of employee service and location were excluded from this research. The former was not considered since its quantification and subsequent analysis in later stages of this study would probably overlap the assessment of the effects of the other influencing construct, PSQ. In turn, location was not included since it is intended for the effects of PSI to

be generalizable across different store locations. If this dimension was included it would potentially produce a halo effect over the remaining dimensions, thus affecting the findings from this research.

### **2.3.3 Effects in Store and Private Labels Contexts**

PSI has been consistently proven to produce an effect on consumers' decision-making process. First of all, the cue utilization theory suggests that consumers' judgements of the quality of a particular product are influenced by intrinsic and extrinsic cues (Olson & Jacoby, 1972). The store name is considered to be an extrinsic cue which, ultimately, is a cue for the store and its image. Following this, it is assumed that SI produces an impact on the perceptions of product quality (Dawar & Parker, 1994). Moreover, the referred effect is likely to be more decisive when compared to the reality of national brands, since Private Labels are exclusive to and owned by one specific retailer, as previously stated.

In line with the application of the cue utilization theory, Bao et al (2011) distanced themselves from the previous academic focus on the tangible extrinsic cues (e.g. price, advertising) and specifically assessed the effects of a set of intangible extrinsic cues on PI for Private Labels. In fact, their study suggested a significant impact of the perceptions of SI on the PI in a Private Label context.

In an additional perspective, considering that Private Labels can be assumed to be an extension of the retailer brand itself, it is reasonable to state that the equity and the evaluations developed by consumers with regards to a particular retailer are transferred to its Private Label (Aaker & Keller, 1990). This way, positive associations towards a store will contribute to positive perceptions relative to its Private Label.

In line with the attribution theory, the impact of PSI on the decision-making process assumes increased relevance when consumers do not possess sufficient information or are unfamiliar with a certain Private Label (Vahie & Paswan, 2006). In other words, in the absence of adequate knowledge or appropriate cognitive structure, consumers tend to rely more heavily on extrinsic cues (e.g. SI) to form their PI for Private Labels, thus enhancing the importance of PSI.

In a more detailed analysis of the influence of SI, this construct has been found to have a multitude of effects in the perceptions towards stores and, ultimately, Private Labels. The multiple attributes of SI developed by retailers actually allow them to expand their targeted consumer segments beyond the price-sensitive one (Wu et al., 2011), as well as producing positive effects regarding store choice, differentiation and attitude towards the retailer (Visser et al., 2006).

In a product-related perspective, besides enhancing the brand image of Private Labels through the improvement of the product quality perceptions, PSI may also positively impact the affective dimension of Private Labels' image (Vahie & Paswan, 2006). In turn, the brand image of this type of products is considered to be a determinant of consumers' purchase behaviors (Semeijn et al., 2004). Moreover, this construct has been proven to reduce the perceived risk related to the purchase of Private Labels, which is regarded as a major blocking factor of the PI for this type of products (Semeijn et al., 2004). This is in part attributable to the contribution of SI for the assurance of consistent product usage outcome, thus reducing the likelihood of purchasing mistakes for the consumer (Bao et al., 2011).

Apart from its mentioned indirect effects on PI for Private Labels, PSI is also stated to have a direct positive impact on consumers' PI towards these brands in multiple studies analyzing different retail formats, consumer markets or product categories (Dodds, Monroe, & Grewal, 1991; Grewal et al., 1998; Paswan, Pineda, & Ramirez, 2010), hence:

*Hypothesis 1: Perceived store image has a positive impact on the purchase intention for Private Labels.*

## **2.4 Perceived Service Quality**

Following the presented rationale for the relevance of the impact of intangible extrinsic cues on the consumers' attitudes, and ultimately their PI towards Private Labels, it seems valuable to complement this research with the introduction of an additional potentially impactful construct, PSQ. As already mentioned, retailers are increasingly offering a mix of both products and services to their customers, thus it is important to also assess the perceptions of

this component in order to provide further insights, which might have relevant strategic and operational implications for retail companies.

Similarly to PSI, the conceptualization of PSQ has been somewhat ambiguous and inconclusive (Parasuraman, Zeithaml, & Berry, 1985). Nevertheless, it is commonly defined in a retail context as the overall evaluation by consumers of the variance between their perceptions and expectations of the service delivered by the retailer (Parasuraman et al., 1985).

There are two major approaches generally emphasized in the existing literature. The first one is commonly known as the “Nordic approach”. According to this theoretical perspective developed by Grönroos (1984), PSQ comprises functional and technical quality. More precisely, whereas the functional component is related to the interactions between consumers and employees along the service encounter (service process), the technical one refers to the service outcome to consumers after its delivery process (service outcome).

Alternatively, Parasuraman et al. (1985) proposed a different view on this subject, the “American approach”, also known as SERVQUAL. Under this perspective, the degree of PSQ is obtained through a comparative assessment between the expectations of service levels to be delivered and the perceptions of the actual service levels provided to consumers. This innovative model included five dimensions: reliability, responsiveness, assurance, empathy and tangibility (Parasuraman, Zeithaml, & Berry, 1988). Despite being widely applied in “pure” service settings with sufficient significance (Dabholkar et al., 1996), the model was considered to be excessively generic to be implemented in a retail environment (Carman, 1990).

The theoretical framework adopted in this research will be an adaptation of the hierarchical service quality model (HSQM) developed by Brady & Cronin (2001) with the main purpose of bridging both aforementioned approaches. This mixed approach is simpler and easier to quantify while encompassing relevant features of both models, capturing additional retail-related dimensions and producing the same results in a retail environment (Brady, Cronin, & Brand, 2002).



The proposed model assesses four dimensions: interaction, service environment and outcome quality, as well as the overall SQ on a broader level. The evaluation of service interaction quality is intended to measure the consumers' perceptions of the interpersonal interactions along the service delivery process and includes quantifications of three sub-dimensions: attitudes, behaviors and expertise of the employees (Brady & Cronin, 2001). In turn, the service outcome quality allows to specifically determine the degree of SI in terms of the purchasing experience. In other words, it is related with the perceptions of the actual service that customers receive. The sub-dimensions included in this SQ component are the waiting time, tangibles and valence (Brady & Cronin, 2001). For the purpose of this research, the dimension of service environment quality is not going to be considered due to its potential overlapping with the store atmosphere evaluations, included in the PSI construct.

Concerning the impact of PSQ in the context of the retail environment and, in particular, Private Labels, it is regarded as a relevant influencing variable in consumers' decisions, as well as in their behavioral intentions (Brady et al., 2002). Particularly regarding the consumers' attitude towards retailers, the referred construct is proven to improve the degree of store satisfaction as well as the frequency of consumer visits to the store (Carrillat et al., 2009).

As in the case of PSI, perceptions of superior levels of SQ relative to the retailer are likely to be extended to its Private Labels for the exact same reason. Following this perspective, a potential halo effect may arise between positive perceptions of SQ and positive consumer attitudes towards Private Labels from the same retailer (Huang, 2009). Furthermore, the perceptions of high SQ may have a direct positive effect in the Private Labels' brand image, which can increase patronage intentions by consumers (Zeithaml, Berry, & Parasuraman, 1996).

From a consumer behavior perspective, this construct assumes a significant relevance, since consumers are increasingly attaching more value to the buying experience and not solely to the perceived value of the purchased products. Regarding this, a high level of SQ reflects on the experiences engaged in by consumers while shopping, mainly through the interaction with the store's staff (Reynolds & Beatty, 1999). In turn, a positive interaction can lead to repurchase and recommendation intentions by consumers, which is considerably beneficial to the retailer and its Private Labels' performance (Dabholkar et al., 1996).

Besides the mentioned impact of this construct, PSQ has also been regarded as a direct influencing variable on the purchase intention towards Private Labels in various retail contexts (Cronin & Taylor, 1992; Szymanski & Henard, 2001; Zeithaml et al., 1996). Therefore, the following hypothesis is proposed:

*Hypothesis 2: Perceived service quality has a positive impact on the purchase intention for Private Labels.*

## **2.5 The Moderating Role of Consumer's Value Consciousness**

As stated by Lichtenstein et al. (1993), value consciousness can be defined as the consumers' "concern for price paid relative to quality received". Value-conscious consumers tend to attribute higher importance to the value of the products they purchase, which means that they consistently pursue quality-price maximization. Consequently, either they demand higher quality for a certain price (Bao et al., 2011) or for a given product quality they seek a lower price (Burton et al., 1998).

According to Richardson, Dick & Jain (1994), value-conscious consumers tend to rely less on extrinsic factors (e.g. SI) when evaluating the quality and value of a given product. In fact, the degree of value consciousness is assumed to produce an impact on the extent to which consumers engage in judgements regarding the value of products, namely, on the adopted method for information processing while performing product evaluations (Mandrik, 1996). These methods can be either systematic or heuristic information processing. As value-conscious consumers are more eager to put additional effort in the evaluation of intrinsic need-satisfying components of a product, they tend to be more involved with the product's attributes, thus engaging in a systematic method to process the available information (Pillai and Kumar, 2012). This method implies a thorough comparison between product-related features in order to rationally decide for the most valuable option (Chaiken, 1980). On the other hand, consumers that are less value-conscious are rarely willing to engage in an additional effort in order to secure the option with the highest value due to their reduced involvement in the products' evaluation process. This, in turn, indicates that they favor

heuristic information processing, which is broadly characterized by a consistent reliance on basic inferential rules (Chaiken, 1980).

Following the mentioned points, it is reasonable to assume that a higher degree of value consciousness is associated with increased proneness to engage in a systematic information processing method, thus reducing the probability for the consumer to rely on PSI as an influencing cue to the evaluation of Private Labels and, ultimately, to their PI. Conversely, a lower value consciousness level would indicate a lower involvement and, consequently, a stronger orientation for a heuristic information processing method, resulting in a higher dependency on the SI perceptions of the retailer to influence the PI towards its Private Labels. Therefore, it is expected that the degree of CVC would assume a moderating role in the effect of PSI on the PI for Private Labels.

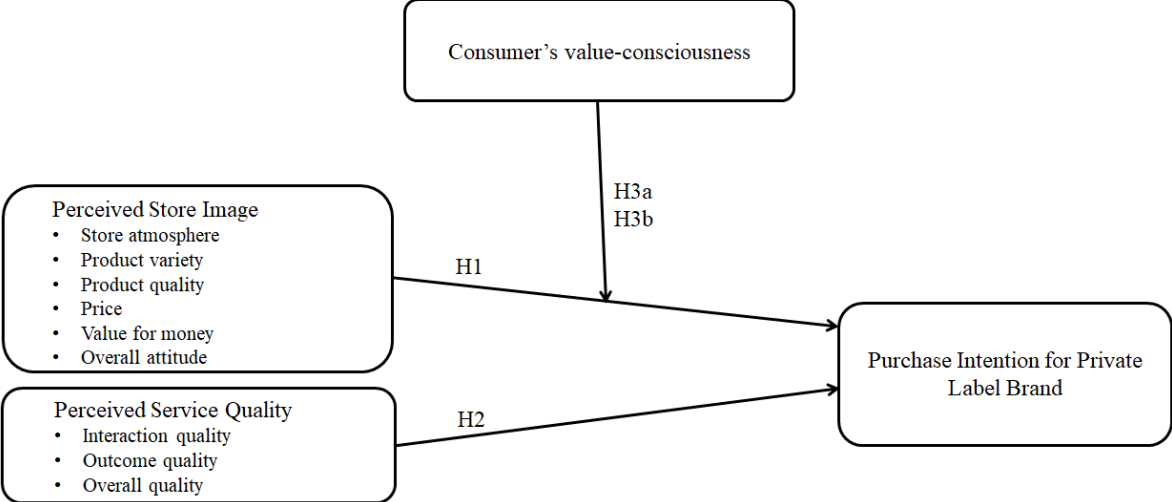
*Hypothesis 3: Consumer's value consciousness (CVC) moderates the relationship between perceived store image (PSI) and purchase intention (PI) for private label brands.*

*Hypothesis 3a: The impact of PSI on the PI for Private Labels is higher with lower levels of CVC.*

*Hypothesis 3b: The impact of PSI on the PI for Private Labels is lower with higher levels of CVC.*

## 2.6 Conceptual Framework

Figure 1 fully depicts the conceptual model of the present research. It presents the investigated variables together with the proposed relationships between them, which will be tested through data collection and statistical analysis.



**Figure 1 – Conceptual Framework**

### **3 METHODOLOGY**

This chapter describes in detail the methodology used in order to effectively study the developed research questions in the first chapter, as well as test and reach conclusions regarding the proposed hypotheses in chapter 2. Firstly, the research approach will be comprehensively defined, followed by a broad explanation of the secondary data collected for the purpose of this study. Finally, the primary data collection and analysis processes will be thoroughly exposed, together with the construct measurement applied in the context of this research. For further convenience, the designation of “retailers” will include its own concept and the concept of retail banners.

#### **3.1 Research Approach**

As a starting point to the operationalization of the proposed concepts and the potential relationships between them, a fully-representative conceptual model based on existing literature and previous studies was developed (chapter 2). This model constitutes the basis for the empirical tests that will be performed and which are expected to provide consistent insights to appropriately address both the research questions and the related hypotheses.

For this study, both exploratory and explanatory research approaches were followed. The exploratory approach is generally engaged in with the purpose of obtaining a new, deeper or clearer understanding regarding a particular topic and its components, while contributing to the assurance of the most efficient way to study them (Saunders, Lewis, & Thornhill, 2009). Following this, the exploratory approach to the present study substantiates itself in the process of reviewing the existing literature related with the concepts that constitute this research, together with the subsequent critical analysis, which was followed to provide a consistent structure for further empirical testing. Considering that a significant part of the constructs included in this study are somewhat subjectively conceptualized and measured, it became necessary to engage in exploratory research in an initial stage, which corresponded to the collection, assessment and structuring of secondary data.

In order to complement this first step, an explanatory research approach was implemented as well. This approach is typically intended to assess and explain the existence of potential causal relationships between the studied variables and it often includes quantitative data collection with further statistical analysis (Saunders et al., 2009). Since this research involves the assumption of possible effects of PSI and PSQ on the PI for Private Labels, as well as the moderating impact of value consciousness, this was regarded as a valuable complementary approach to follow. More specifically, this approach was operationalized through the collection and analysis of primary data provided by a pre-survey and a subsequent final one, both distributed through online platforms.

### **3.2 Secondary Data**

The secondary data collected for the purpose of this research was essentially used in the first chapter to provide a consistent background for the overall study and in the previous chapter (the literature review) to establish a comprehensive theoretical framework for the further adequate assessment of the constructs and respective effects. Furthermore, the secondary data collection and framing also contributed to the rationale that led to the formation of the hypotheses for this study. Finally, it provided a solid background for the construct measurement, which will be defined in the present chapter. This data was collected in the form of academic articles, published books and market reports.

### **3.3 Primary Data**

In order to appropriately address both the research questions and the related hypotheses, primary data was collected and analyzed through the distribution of one pre-survey, followed by the final main survey.

### **3.3.1 Pre-Survey**

#### **3.3.1.1 Data Collection**

After a review of existing literature on the topic of this research, a trend for using exclusively the retailer's market share as main criterion for the selection of the retailers to be included in the studies was identified (Ballester et al., 2014; Beristain & Zorrilla, 2011). As this selection procedure might involve a considerably high probability for producing similar results in terms of perceptions of the considered variables, an alternative procedure was developed.

Based on 2017 data from Euromonitor International (2018), the main retailers in the Portuguese grocery market in terms of retail value market share who owned at least one private label brand were selected. The accumulated value share of the retailers amounted to slightly above half of the Portuguese grocery market (55.1%), and included: Pingo Doce (17%), Continente (15%), Intermarché (6.4%), Lidl (5.9%), Jumbo (5.3%), Minipreço (3.3%) and E.Leclerc (2.2%).

A pre-survey was designed with the main purpose of assessing the SI and SQ perceptions regarding the mentioned retailers, this way, enabling the selection of the retailers with the lowest/highest values of both variables. This procedure was expected to prevent the existence of identical perceptions of the retailers in the main survey, thus providing additional interest and relevance for the results and conclusions of the overall research.

Between the 7<sup>th</sup> May 2018 and the 8<sup>th</sup> May 2018, the online pre-survey questionnaire was distributed to the general public via social media channels and e-mail. The target population was defined as consumers living in Portugal and a non-probability sampling method was selected, namely a convenient sampling technique was followed, mainly due to time and resource constraints. Given these limitations, this specific sampling technique is considered to be appropriate (Saunders et al., 2009). However, the results obtained for the selected sample may be biased, and so, they cannot be generalized to the target population (Aaker, Kumar, & Day, 1995).

The pre-survey questionnaire consisted of a set of four questions, which included: one initial question referring to the awareness of the previously identified retailers, one screening

question to identify the retailers in which the respondent had purchased any products for the previous year, one question to assess SI perceptions and a final one to evaluate SQ perceptions, being these two dependent on the selected retailers in the screening question. The pre-survey was available in Portuguese and English as the target population was not restricted by nationality. In total, 71 responses were collected, from which 52 were considered to be valid, thus resulting in a 73.2% response rate. The 19 responses were excluded as they were only partially completed. The English version of the pre-survey questionnaire can be found in Appendix 1.

### 3.3.1.2 Constructs Measurement

Both constructs included in the aforementioned questionnaire were based on existing studies, as represented in Table 1. Moreover, the same original 7-point Likert scales were used to assess the perceptions of both variables, ranging from “Strongly Disagree” (1) to “Strongly Agree” (7). The six items used to measure the PSI construct were adapted from Collins-Dodd & Lindley (2003), who, in turn, adapted the items previously developed by Chowdhury et al. (1998) to a grocery market context in Canada, which has a fairly similar level of Private Label market penetration as the Portuguese market. The nine items that constitute the PSQ construct were adapted from the original 35 items developed by Brady & Cronin (2001), as these were found to be more appropriate for the assessment of PSQ in a retail context (Brady et al., 2002). From the original set, the items constituting the service environment quality dimension were excluded. Furthermore, several items included in the measurement of the other dimensions of PSQ were excluded as well, due to excessive complexity of the entire original set for the purpose of this study.

<b>Measurement Model</b>		
<b>Constructs</b>	<b>Literature Sources for Scale Items</b>	<b>Number of Items</b>
<b>Perceived Store Image</b>	Collins-Dodd & Lindley (2003): Adapted from Chowdhury, Reardon, & Srivastava (1998)	6
<b>Perceived Service Quality</b>	Brady & Cronin (2001)	9

**Table 1 – Pre-Survey: Measurement Model**



### 3.3.1.3 Data Analysis and Results

The quantitative data collected from the pre-survey was analyzed using SPSS. With the purpose of identifying the retailers with the lowest/highest values of both PSI and PSQ, new variables were computed to generate the mean values on both variables for each retailer provided by each respondent. Following this, Descriptive Statistics and Frequencies were performed for the computed variables, this way providing the mean values of each retailer on both variables, which are represented, together with the number of answers collected for each retailer, in Appendix 2. Additionally, it was decided to exclude E.Leclerc from the results as only two answers from a total of 52 were provided, which would not be sufficiently significant to evaluate this retailer.

Following the interpretation of the final results of the analysis and excluding the answers concerning E.Leclerc, the average values of PSI and PSQ were 5.1 and 4.9, respectively. Four retailers were selected to be included in the final main study. As observed in Figures 2 and 3, while Pingo Doce and Continente obtained the highest scores for PSI (5.4), Jumbo was selected as the retailer with the highest PSQ (5.2). On the other hand, Minipreço obtained the lowest scores on these variables, 4.0 and 4.3, respectively.

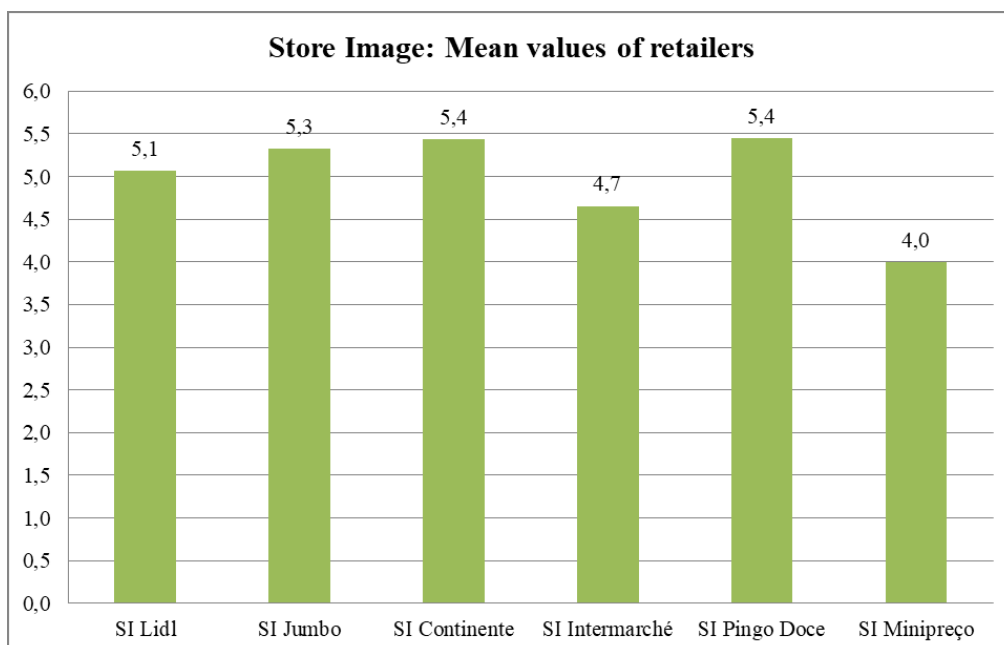
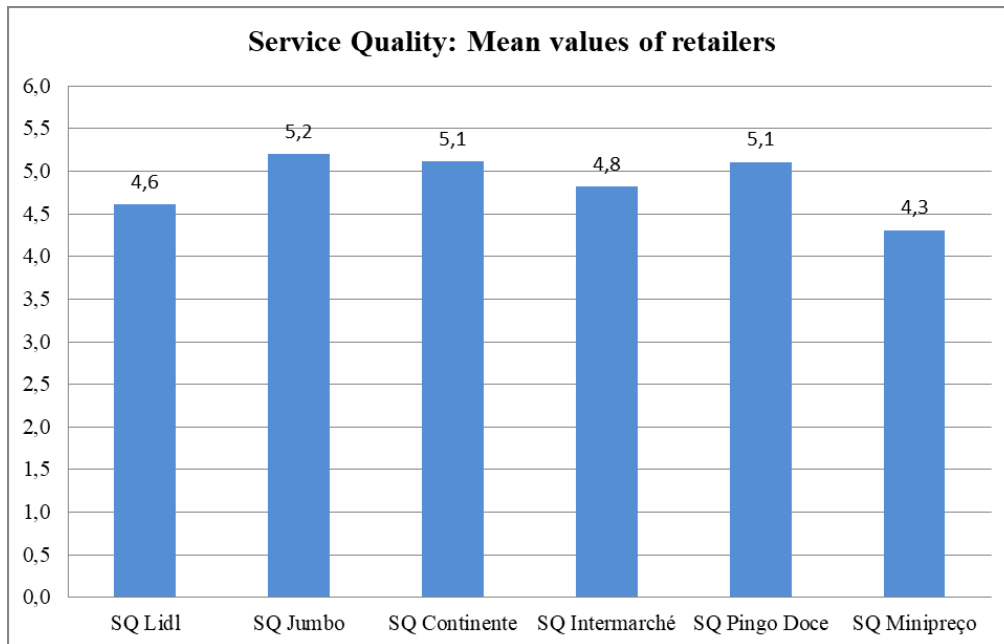


Figure 2 – Pre-Survey: Store Image Perceptions



**Figure 3 – Pre-Survey: Service Quality Perceptions**

### 3.3.2 Main Survey

#### 3.3.2.1 Data Collection

Following the first stage of primary data collection and analysis, the online main survey questionnaire was distributed between the 14<sup>th</sup> May 2018 and the 24<sup>th</sup> May 2018. The target population, distribution channels and sampling technique were replicated from the aforementioned pre-survey. The primary goal of the main survey was to fully assess the overall set of relationships proposed in the conceptual framework of this research in relation to the selected retailers from the pre-survey.

The survey questionnaire comprised a total of 29 questions. More specifically, an initial question to evaluate the degree of the respondent's value consciousness, followed by the awareness and shopping questions included in the pre-survey but applied only to the four retailers previously identified. Moreover, the respondents were asked to select the retailer in which they usually spent their highest shopping budget share and, based on the feedback to this screening question, they provided their SI and SQ perceptions. Finally, three PI questions for the Private Labels from the identified retailer in the shopping budget share question were asked to each respondent. The English version of the main survey questionnaire can be found in Appendix 3.

609 responses were collected in total, from which 501 were considered to be valid, this way, leading to an 82.2% response rate. 105 responses were disregarded due to partial completion, as well as 3 responses in which the respondents checked the same response category in every item of the Likert scales.

### 3.3.2.2 Constructs Measurement

Besides the PSI and PSQ constructs, which were included in both surveys, the CVC and PI constructs were adapted from previous studies as well. The overall measurement model is represented in Table 2. The CVC items and measurement scale were extracted from Lichtenstein et al., (1993), which had previously adapted the items developed by Lichtenstein, Netemeyer, & Burton (1990) to a field study with the purpose of assessing price perceptions and consumers' shopping behavior. Regarding the PI construct, the items and respective scale were adapted from Dodds et al. (1991) to a Private Label context. Besides an overall assessment item, two additional ones were included to establish a comparison and draw potential differences in terms of the PI towards Private Label utilitarian and hedonic product categories. Packs of spaghetti were identified as a utilitarian product and ice creams as a hedonic one for this study (Coelho do Vale & Verga Matos, 2015). All items were presented on a 7-point Likert scale, ranging from “Strongly Disagree” (1) to “Strongly Agree” (7), except for the purchase intention items, which ranged from “Very Low” (1) to “Very High” (7).

<b>Measurement Model</b>		
<b>Constructs</b>	<b>Literature Sources for Scale Items</b>	<b>Number of Items</b>
<b>Perceived Store Image</b>	Collins-Dodd & Lindley (2003): Adapted from Chowdhury, Reardon, & Srivastava (1998)	6
<b>Perceived Service Quality</b>	Brady & Cronin (2001)	9
<b>Value Consciousness</b>	Lichtenstein, Ridgway, & Netemeyer (1993): Adapted from Lichtenstein, Netemeyer, & Burton (1990)	7
<b>Purchase Intention</b>	Dodds, Monroe, & Grewal (1991)	3

**Table 2 – Main Survey: Measurement Model**

### 3.3.2.3 Data Analysis

Similarly to the pre-survey, SPSS was used to analyze the quantitative data collected. In an initial stage of the data analysis, the sample was characterized both in terms of demographics, as well as preferences and perceptions regarding the presented retailers. For this purpose, both Frequencies and Descriptive Statistics were performed.

In order to complement the preliminary data analysis, the reliability of the constructs included in the main survey questionnaire was assessed by obtaining the internal consistency coefficients (Cronbach's alpha) for the multiple sets of items. These calculations were executed at the overall level and at the retailer-specific level.

Concerning the hypotheses testing, a series of simple and multiple linear regressions were performed over the different variables in order to produce the main results and conclusions of this study.

First of all, the assumption of a positive impact of PSI on the PI towards Private Labels (H1) was tested through a simple linear regression, followed by an additional multiple linear regression that was intended to assess in further detail the effect of each SI dimension on the same dependent variable, thus providing deeper insights on this hypothesized relationship.

Subsequently, a second simple linear regression was performed with the purpose of evaluating the direction and intensity of the impact of PSQ on the dependent variable (H2). Moreover, a multiple linear regression including both the overall PSI and PSQ variables was carried out in order to compare both effects on the dependent variable.

Furthermore, the potential moderating effect of the CVC on the initially proposed relationship between the SI perceptions and the purchase intention (H3) was tested through a multiple linear regression, where a dummy variable for the levels of value consciousness was included, together with a specific variable representing the interaction between both independent variables. A moderator is expected to influence the direction and/or strength of the relationship between an independent and a dependent variable. The cut-off value for the dummy variable creation was defined as the mean value of the answers provided to the CVC items included in the initial section of the questionnaire. Scores below the mean value were

converted into “0”, representing low value consciousness, while the ones above the average were transformed into “1”, which implied a high degree of value consciousness.

As an additional analysis, two independent samples t-tests were performed in order to statistically assess the differences in the mean values of PI between the retailers with the lowest and highest levels of PSI and PSQ, as well as to evaluate the magnitude of these gaps, thus providing further interesting considerations regarding the present study.

## **4. RESULTS**

The purpose of the following chapter is to present the primary results from the analysis of the quantitative data collected through the main survey, this way, allowing the further formulation of relevant conclusions regarding the research questions proposed in the initial chapter. This chapter is divided into four major sections. In a first stage, the sample of the study will be characterized, followed by an assessment of the included constructs' reliability. The subsequent section of this chapter will comprise the results provided by the statistical testing of the previously proposed hypotheses, as well as their resulting acceptance or rejection. In the final section, additional results provided by the analysis of the quantitative data will be presented.

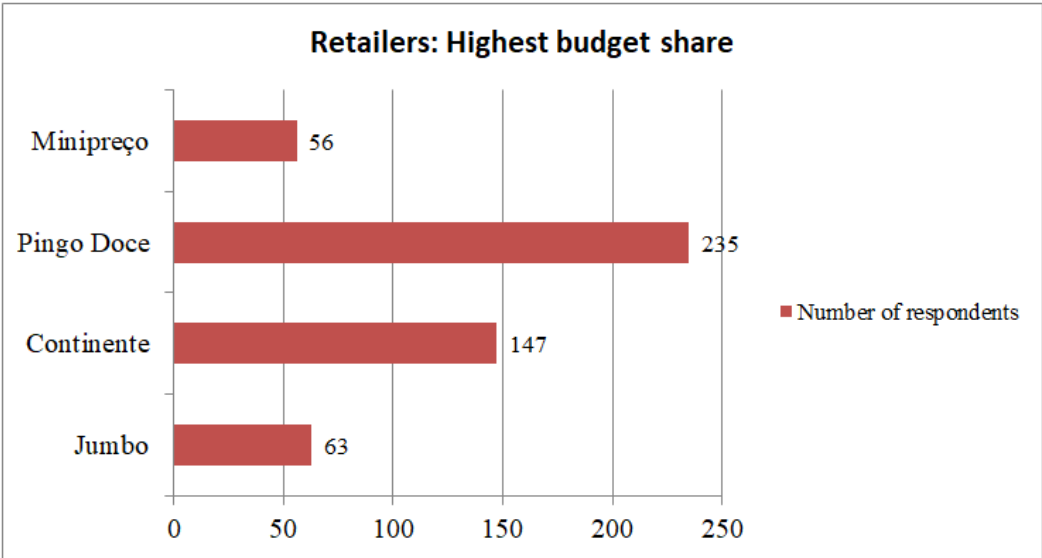
### **4.1 Sample Characterization**

As stated in the previous chapter, the main survey questionnaire provided 501 valid answers. From the responses collected, some relevant considerations based on the statistical information included in Appendix 4 are presented.

As there were no restrictions concerning the demographics and psychographics of the target population, except for respondents residing in Portugal, the sample was expected to be diverse. Regarding the gender of the identified sample, a slight predominance of female respondents was observed, as they amounted to 61.3% of the total sample, against 38.7% of their male peers. As far as the age is concerned, the respondents were fairly distributed, with the major segments being younger consumers and middle-aged adults, namely, the age groups of 25 to 34 (27.9%), 18 to 24 (20%) and 45 to 54 (19.6%). Considering their occupation, a considerable majority of the respondents were employed (70.1%) with 52.5% of them working for someone else and 17.6% being self-employed. Overall, the collected sample was well-educated, as 81.6% of the respondents completed either a Bachelor's Degree (48.9%) or a Master's Degree (32.7%). As for the respondents' household yearly income, a "Don't know/Don't answer" option was included in the set of available choices since this might be regarded as a sensitive issue. In fact, this was the predominant choice with 25% of the respondents preferring not to specify their household incomes. Excluding the results for the

referred option, the responses were somewhat evenly distributed for the available options with the primary segment being the 20,000€ to 34,999€ yearly household income one (19.8%) and, on the other hand, the higher income ones being the least selected: 75,000€ to 99,999€ (4.8%) and 100,000€ or above (7.2%).

The answers provided for the screening question concerning the specific retailer in which the respondents spent the highest share of their shopping budget on a regular basis, were distributed as follows: 235 for Pingo Doce (46.9%), 147 for Continente (29.3%), 63 for Jumbo (12.6%) and 56 for Minipreço (11.2%). This distribution, depicted in Figure 4, is fairly in line with the aforementioned retailers’ value share in the Portuguese grocery market.



**Figure 4 – Respondents Choice for Retailer Associated with their Highest Budget Share**

Regarding the SI and SQ perceptions provided by the main survey respondents, the average values obtained were higher when compared with the ones resulting from the pre-survey. While PSQ registered a slight increase from 4.91 (1 to 7) to 5.03, PSI went from an average of 5.13 to 5.44, thus obtaining a somewhat significant increase. These increments have not only resulted to a great extent from the fact that Lidl and Intermarché, which had obtained below average values for both variables, were both disregarded from the main survey, but also from the considerable increase in the mean values for Minipreço, as represented in Figures 5 and 6. As the first Descriptive Statistics table in Appendix 4 indicates, there were no significant changes for the values regarding the other retailers. Whilst Minipreço maintained the lowest

values on both variables, Jumbo and Pingo Doce achieved the highest scores for PSQ and PSI, respectively.

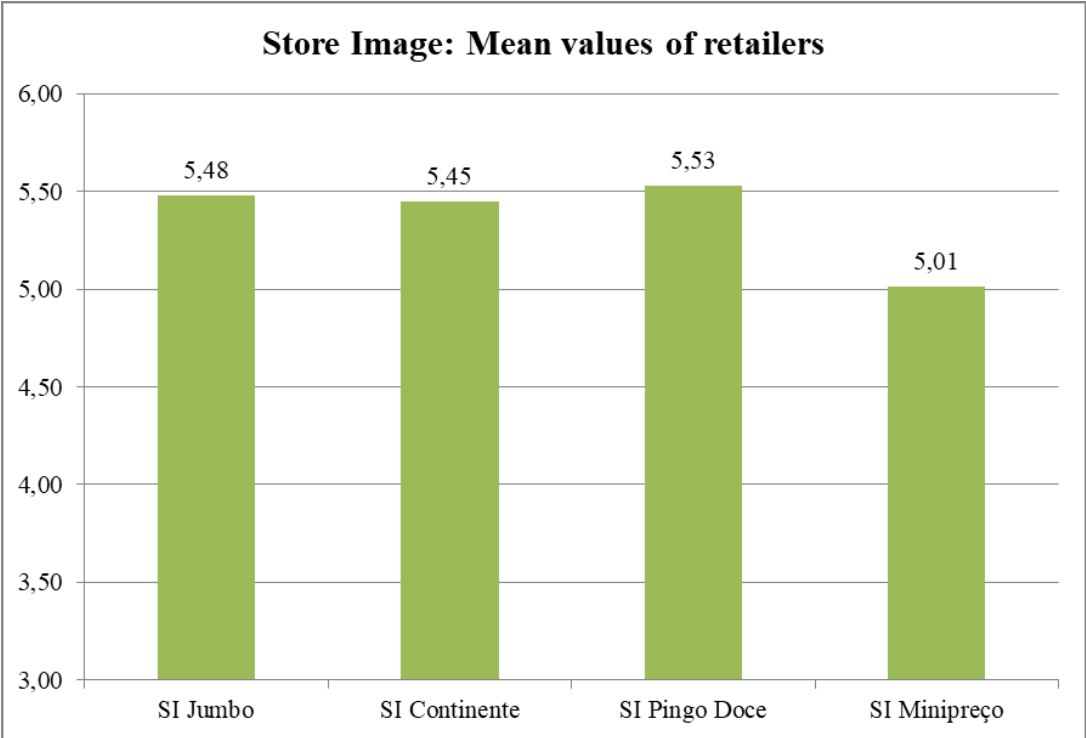


Figure 5 – Main Survey: Store Image Perceptions

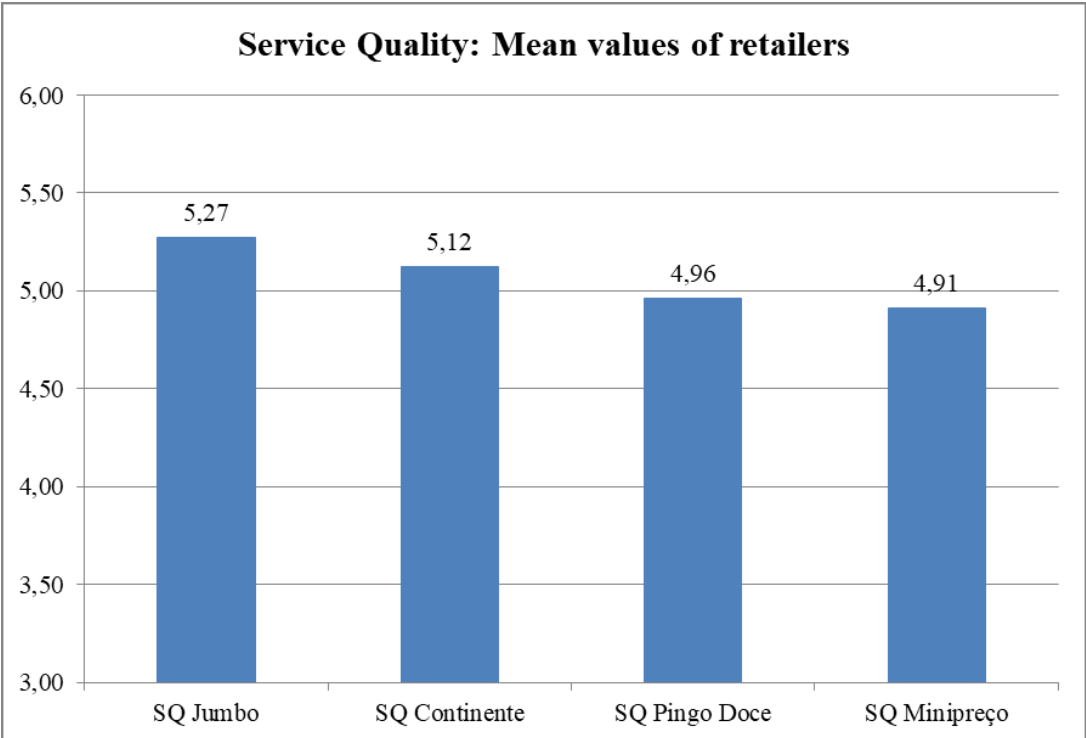
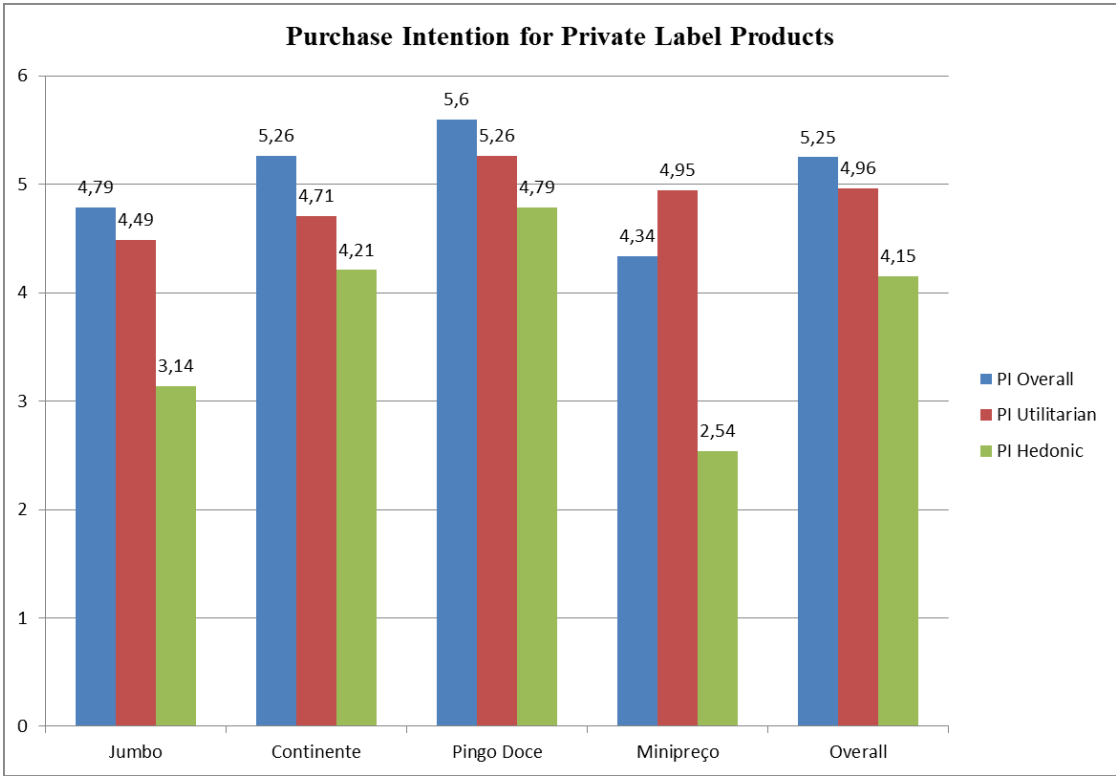


Figure 6 – Main Survey: Service Quality Perceptions



Finally, on what the PI of the respondents towards Private Labels is concerned, interesting considerations can be stated from the results provided. As depicted in Figure 7 and based on the last Descriptive Statistics tables from Appendix 4, a gap between the PI for utilitarian and hedonic product categories was observed. In fact, on both overall and retailer-specific levels, the values associated with the PI for the utilitarian category (pack of spaghetti) were consistently superior to the ones linked with the hedonic category (ice-cream). More specifically, and on a scale from 1 to 7 (Likert scale), the average values for Private Label categories in general were set at 5.25, followed by 4.96 for the utilitarian category and 4.15 for the hedonic one. When assessing the magnitude of the gaps at an overall level the 0.81 gap between the average values of the utilitarian and hedonic product categories emerges as a significantly relevant additional result for the present research.



**Figure 7 – Purchase Intention towards Private Labels**

**4.2 Measures Reliability**

As above stated, the entire set of items included in the main questionnaire were either extracted or adapted from previous studies. Despite this fact, the assessment of the reliability of the used constructs and respective items was considered to be relevant. To this end, the

Cronbach's Alpha was calculated, as this method is one of the most frequently used to assess the internal consistency of the items (Saunders et al., 2009). This measure indicates how closely related a set of items are as a group, in this case, how consistent they are as integrating elements of a construct. Furthermore, on what the constructs of PSI, PSQ as well as PI are concerned, the Cronbach's alpha was calculated both on a deeper level, namely, for the items regarding each single retailer selected by the respondents, and on a broader level in order to appropriately assess the overall internal consistency of those constructs across all retailers by aggregating the items used to evaluate each of them, as represented in Appendix 5.

The ratings for the Cronbach's alpha which are equal to or higher than 0.70 are considered to be ranging from acceptable values to excellent ones, i.e., the items are reliable measures to predict the actual variable. Through the observation of Table 3, one can notice that most of the values presented indicate reliability, since they are superior to 0.70. Even though the SI items associated with Jumbo and the PI ones for Minipreço seem to have underscored, the values obtained for both measures (0.690 and 0.682, respectively) were very close to 0.70, thus they can be considered as sufficiently acceptable for the present study.

Reliability Statistics: Cronbach's Alpha						
Construct	Number of items	Overall	Continete	Minipreço	Jumbo	Pingo Doce
Store Image	6	0.756	0.842	0.753	0.690	0.715
Service Quality	9	0.906	0.921	0.870	0.909	0.903
Purchase Intention	3	0.768	0.781	0.682	0.747	0.759
Value Consciousness	7	0.782				

**Table 3 – Reliability Statistics: Cronbach's Alpha for the Study's Constructs**

### 4.3 Hypotheses Testing

In order to appropriately test the research hypotheses formulated in the second chapter, a set of simple and multiple linear regressions were performed.

#### 4.3.1 The Impact of Perceived Store Image on Private Label Purchase Intention

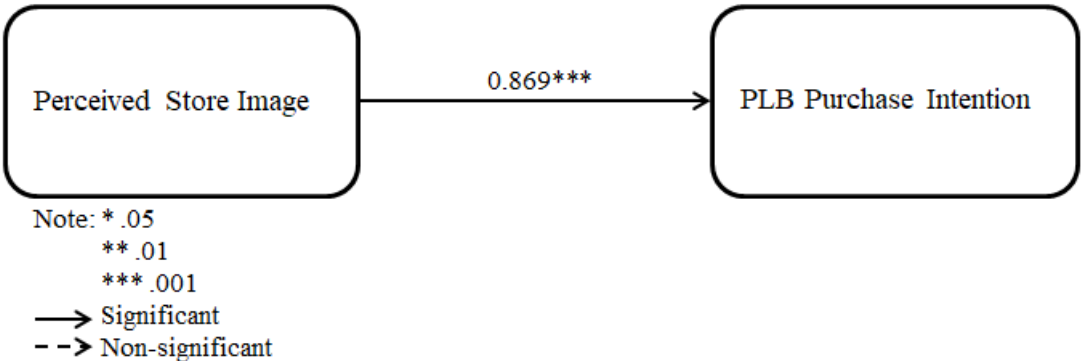
**Hypothesis 1:** Perceived store image has a positive impact on the purchase intention for private label brands.

With the main purpose of assessing the direction and intensity of the effect of PSI on the PI towards Private Labels, a simple linear regression was performed.

As a first step of this procedure, it was mandatory to ensure that all the assumptions to run the model were met. As represented in Appendix 6, there were no violations of the independence of observations (Durbin-Watson statistical test), linearity (simple scatter graph), homoscedasticity (scatterplot) and normality (normal P-P plot). Moreover, both variables were normally distributed and the Pearson correlation coefficient (0.427) indicated a medium-to-large strength of association between them.

Based on the results provided by the ANOVA table (Appendix 6), the regression model was found to be statistically significant ( $F_{(1,499)}=111,253$ ;  $p<.001$ ). Regarding the model's goodness of fit, it was observed a  $R^2$  value of 18.2%, i.e., the model explains 18.2% of the variation in the outcome variable. On what the direction and intensity of the proposed impact are concerned, both Figure 8 and the Coefficients table revealed that the effect of PSI is positive, since the regression coefficient was  $+0.869$  ( $\beta_2=0.869$ ) with  $p<.001$ . In other words, this specific coefficient indicates that for every unit increased in the PSI variable, the PI for Private Labels will register an increase of 0.869 units, all other variables remaining constant.

Hence, **Hypothesis 1** is confirmed.



**Figure 8 – Effect of PSI (H1)**

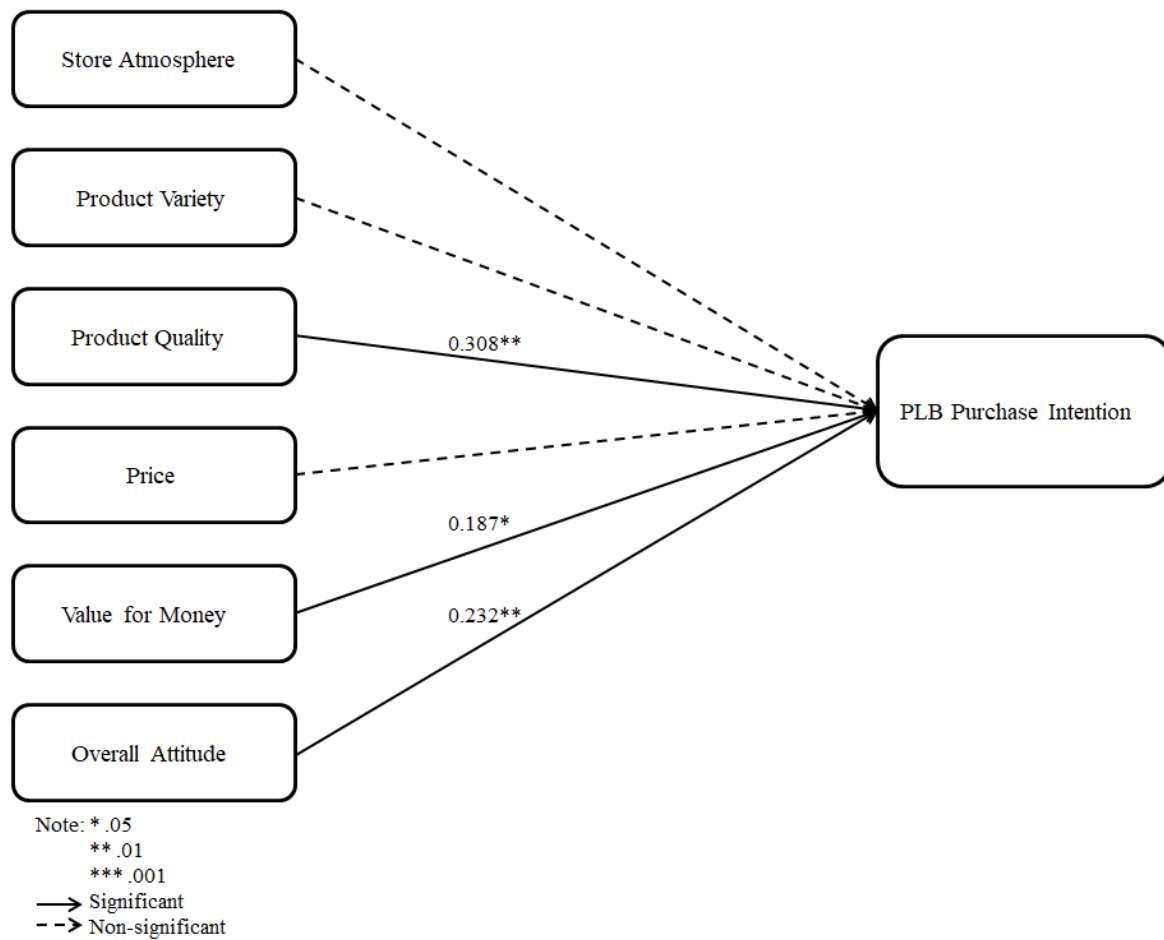
As there was a considerable diversity of dimensions included in the PSI construct and to further enhance the implications of the present research, an additional multiple linear regression was performed in order to specifically test the impact of each considered dimension on the same outcome variable.

Similarly to the previous regression model, there were no violations of the assumptions in terms of independence of observations, linearity, homoscedasticity and normality (Appendix 7). Additionally, the variables included in the model were normally distributed and the collinearity statistics revealed that the values obtained for tolerance and VIF associated with each dimension assure the absence of multicollinearity between them, as demonstrated in the Coefficients table of Appendix 7.

According to the SPSS output presented in Appendix 7, the multiple regression performed was statistically significant ( $F_{(6,494)}=20.314$ ;  $p<.001$ ), with an adjusted  $R^2$  value of 18.8%. Complementary to the statistical information provided by Appendix 7, both Table 4 and Figure 9 indicate the direction and intensity of the relationships. Based on these, one concludes that the impact on PI is positive for all the PSI dimensions, even though some of the effects were not considered to be statistically significant ( $p<.05$ ).

<b>Variables</b>	<b>Unstandardized Coefficients <math>\beta</math></b>	<b>Sig.</b>
SI_Store_Atmosphere_All	0.069	.208
SI_Product_Variety_All	0.036	.510
SI_Product_Quality_All	0.308	.001
SI_Price_All	0.063	.323
SI_Value_for_money_All	0.187	.031
SI_Overall_Attitude_All	0.232	.007

**Table 4 – Regression Unstandardized Coefficients and Significance Level**



**Figure 9 – Effects of the PSI Dimensions**

Regarding the dimensions which effect was found to be statistically significant, the results reveal that for every increased unit of perceived product quality, the purchase intention for Private Labels is expected to increase by 0.308 units ( $\beta_4=0.308$ ), all other variables remaining constant. In turn, a unit increase in the overall attitude dimension will produce a 0.232 unit ( $\beta_7=0.232$ ) increase in the same outcome variable. Lastly, if a unit is increased in the perceptions of value for money, the dependent variable is expected to increase by 0.187 units ( $\beta_6=0.187$ ).

#### **4.3.2 The Impact of Perceived Service Quality on Private Label Purchase Intention**

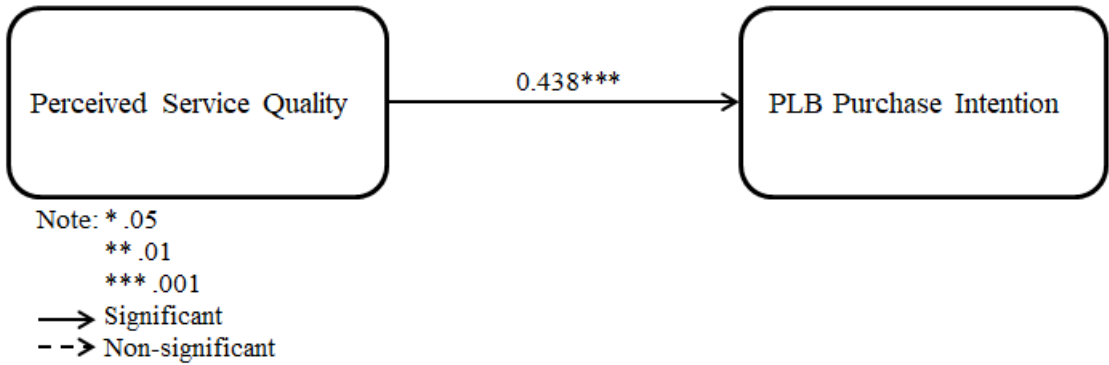
**Hypothesis 2:** Perceived service quality has a positive impact on the purchase intention for private label brands.

Similarly to the testing of Hypothesis 1, a simple linear regression model was performed in order to assess the existence and degree of impact of the SQ perceptions on the PI towards Private Labels.

Following the statistical analysis results included in Appendix 8, there was no evidence of any transgression of the assumptions to run the regression model. Furthermore, the PSQ variable was normally distributed and the Pearson correlation coefficient (0.273) revealed a close-to-medium strength of association between both variables.

According to the output tables presented in Appendix 8, the tested regression proved to be statistically significant ( $F_{(1,499)}=40.127$ ;  $p<.001$ ) and the model’s goodness of fit was translated into a  $R^2$  value of 7.4%. As depicted in Figure 10, the regression coefficient was +0.438 ( $\beta_2=0.438$ ) with  $p<.001$ , therefore indicating a positive effect of PSQ on the PI. In practical terms, an increase of one unit of PSQ will lead to an increase of 0.438 units of the outcome variable, all other variables remaining constant.

Consequently, **Hypothesis 2** is confirmed.



**Figure 10 - Effect of PSQ (H2)**

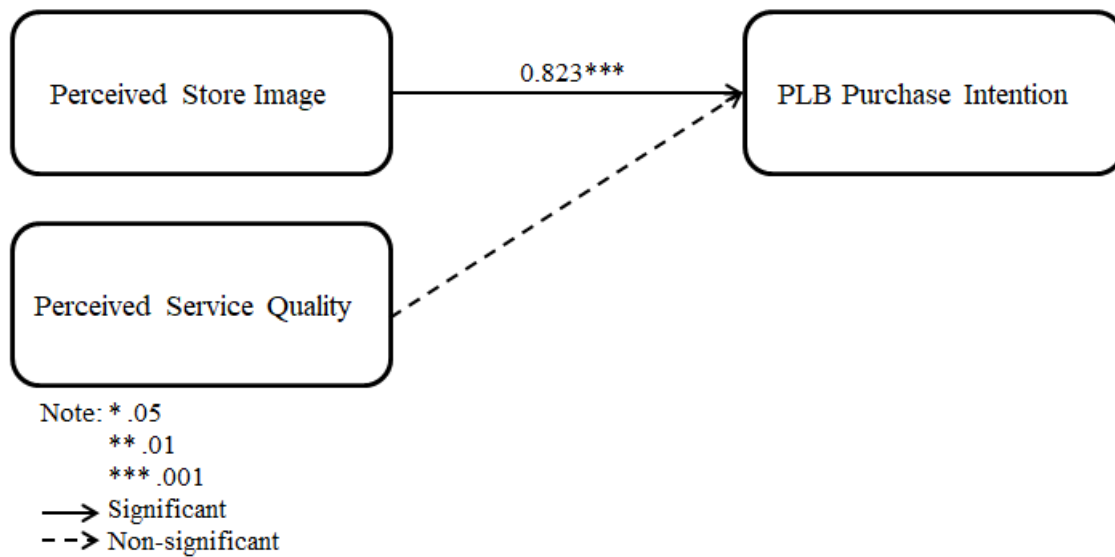
Concerning the dimensions included in the PSQ construct (interaction quality, outcome quality and overall quality), it was defined that measuring their individual impact on PI would not provide additional insights to the present research. This is due to the lack of diversity and complexity in this set of dimensions, as well as the fact that it seemed difficult for the respondents to appropriately differentiate between the three sub-concepts when communicating their SQ perceptions.

Despite this fact, a multiple linear regression was performed, as in the case of the perceived SI dimensions. Although all the assumptions to run the model were met, none of the regression coefficients was significant with  $p < .05$ , thus reinforcing the decision to exclude this specific assessment from the study.

Finally, both the impacts of PSI and PSQ on the Private Labels PI were tested in a single multiple linear regression. The main purpose of this particular test was to simultaneously assess the effects of both explanatory variables when put together in the same model, as well as to determine the existence of any possible differences in their impacts relative to the simple linear regressions previously tested.

In accordance with the output included in Appendix 9, the statistical results show a compliance with the aforementioned assumptions to run the multiple linear regression model.

The tested regression model was identified as being statistically significant ( $F_{(2;498)}=55.893$ ;  $p < .001$ ), with an adjusted  $R^2$  value of 18%. As indicated in the variable relationships of Figure 11, as well as in the Coefficients table of Appendix 9, while the regression coefficient associated with the PSI variable was  $+0.823$  ( $\beta_2=0.823$ ) with  $p < .001$ , the PSQ coefficient was not statistically significant ( $\beta_3=0.063$ ) with  $p < .05$ . By interpreting the mentioned results, one concludes that, when having its effect simultaneously assessed with the one of PSQ in the same regression model, PSI still produces a positive impact on the outcome variable. While in the first regression presented (H1), PSI had a corresponding regression coefficient of  $+0.869$ , with the introduction of the PSQ variable in the regression model its impact in the dependent variable registered a slight reduction. More specifically, for each unit increased in this explanatory variable, PI towards Private Labels will register an increase of 0.823 units. In turn, PSQ, which had a statistically significant positive impact on the dependent variable (H2) with a regression coefficient of  $+0.438$ , has no longer a sufficiently significant influence, as its regression coefficient indicates ( $\beta_3=0.063$  with  $\text{sig.}=.432$ ).



**Figure 11 – Effects of PSI and PSQ**

### 4.3.3 The Moderating Effect of Value Consciousness on the Impact of Perceived Store Image

**Hypothesis 3:** Consumer’s value consciousness (CVC) moderates the relationship between perceived store image (PSI) and purchase intention (PI) for private label brands.

**Hypothesis 3a:** The impact of PSI on the PI for Private Labels is higher with lower levels of CVC.

**Hypothesis 3b:** The impact of PSI on the PI for Private Labels is lower with higher levels of CVC.

The next stage of the present study involved the testing of a potential moderating effect of the degree of CVC on the already measured relationship between PSI and the PI for Private Labels. For this purpose, a multiple linear regression was performed.

In order to engage in this procedure, two new variables had to be created and introduced in the model. Firstly, as the CVC variable was not normally distributed and a very weak linear relationship was observed between this variable and the outcome one, a dummy variable was created for the original predictor (ValueC\_Dummy). This new dichotomous variable assumed the values of “0” or “1”, as described in the Methodology chapter. Subsequently, and in order to specifically test the possible moderating effect, an additional variable resulting from the

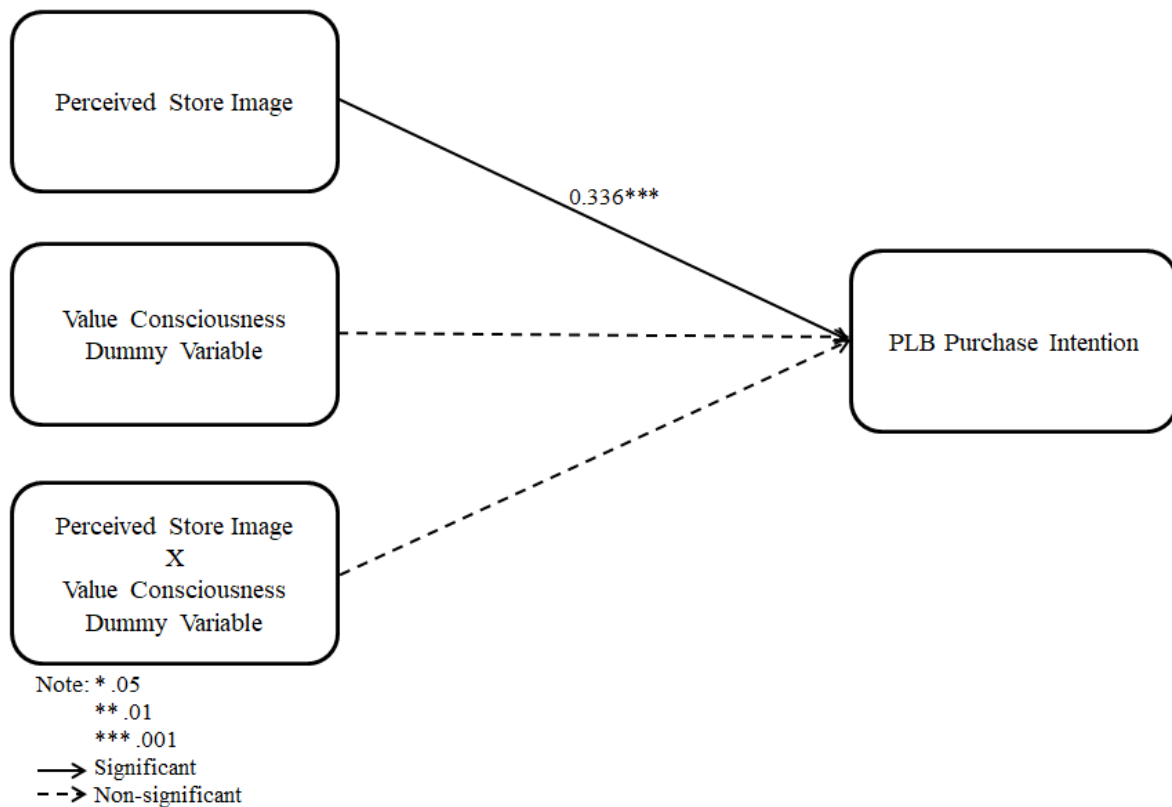


interaction between perceived SI and the mentioned value consciousness dummy variable was introduced in the regression model as well (SI\_ValueC). All in all, the regression model was composed by the original PSI variable as well as the outcome one, and both created variables.

As presented in Appendix 10, all the assumptions to run this specific regression model were complied with. More particularly, the assumptions of normality, linearity, homoscedasticity, independence of observations, absence of multicollinearity and the existence of a dichotomous variable in the set of explanatory variables were validated. On this matter, it should be noted that the high values for tolerance and VIF included in the collinearity statistics for both newly created variables were expected, as they partly explain the same thing.

On what the regression model itself is concerned, it was found to be statistically significant ( $F_{(3;497)}=40.679$ ;  $p<.001$ ). Furthermore, the Model Summary in Appendix 10 indicates an adjusted  $R^2$  value of 19.2%. Therefore, it can be stated that the introduction of both created variables in the set of predictors raised the model's goodness of fit from 18.2% to 19.2%, thus being increasingly explanatory of the variation in the outcome variable when compared to the simple linear regression which only included PSI as an independent variable (H1). Relying as well in the visual representation of the variable relationships in Figure 12, additional considerations can be stated from the regression standardized coefficients interpretation, which were regarded in this case instead of the unstandardized ones due to the usage of different measures for the variables. While PSI obtained a regression coefficient of +0.336 with  $p<.001$  (standardized  $\beta_2=0.336$ ), thus maintaining a positive impact on the PI since the regression standardized coefficient in the first regression model (H1) was +0.427, the created variables to assess the moderating effect were not statistically significant with  $p<.05$  (standardized  $\beta_3=-0.381$  with  $\text{sig}=.225$ ; standardized  $\beta_4=0.511$  with  $\text{sig}=.117$ ). As the interaction variable (SI\_ValueC) was not statistically significant and there was no sufficiently relevant change in either the direction or the intensity of the PSI impact, one concludes that there is no statistically significant moderating effect of CVC on the proposed relationship. In other words, the degree of value consciousness demonstrated by a particular consumer will produce no relevant impact in the way his/her SI perceptions towards a specific retailer affect his/her PI for the retailer's Private Labels.

Thus, **Hypotheses 3, 3a and 3b** are **not validated**.



**Figure 12 – Moderating Effect of CVC (H3)**

#### 4.4 Further Results: Independent Samples T-Tests

As the final stage of the quantitative data statistical analysis, two independent samples t-tests were performed. The main goal of this procedure was to assess the existence of any relevant differences in the Private Labels PI mean values between (1) the retailers with the lowest and highest PSI and (2) the retailers with the lowest and highest PSQ. This way, these tests were intended to reveal a potential association on a retailer-specific level, through which higher levels of PSI would originate a higher PI towards Private Labels, while lower levels of the former variable would produce lower values of the dependent variable. If validated, the results could provide additional impact in terms of this study's implications, namely on what the managerial perspective is concerned. In terms of the statistical procedure itself, the respondents' feedback provided to the Budget Share question (Q4) of the main survey questionnaire was used as the grouping variable to run the t-tests. By doing so, it was possible to aggregate the PI mean values by retailer and measure the differences.

While Pingo Doce obtained the highest mean score in terms of PSI (5.53 on the 7-point Likert scale), Minipreço registered the lowest mean value (5.01). With both retailers identified, the t-test was performed. As indicated in the first Levene's Test for Equality of Variances of Appendix 11, the homogeneity of variances for the dependent variable was rejected with  $p < .05$  (sig=.012), thus the equality of variances was not assumed. This absence of homogeneity might be due to the considerable gap between the amount of answers collected for each retailer (Pingo Doce: 235; Minipreço: 56). The t-test table revealed that the mean values for PI of the two retailers were indeed significantly different from each other ( $t_{(101.253)}=7.543$ ;  $p < .001$ ). More particularly, while Pingo Doce obtained a mean PI value of approximately 5.21 (7-point Likert scale), Minipreço got a mean value of 3.94, thus originating a difference of roughly 1.27 between the retailers.

For the t-test associated with the levels of PSQ, Jumbo and Minipreço were selected as the retailers with the highest (5.27 on the 7-point Likert scale) and lowest (4.91) mean scores on this variable, respectively. Regarding the statistical testing, the second Levene's Test for Equality of Variances of Appendix 11 determined the non-rejection of the homogeneity of variances for the PI variable with  $p < .05$  (sig=.105), which suggests equality of variances. The performed t-test indicated that the mean values for PI of the two retailers were not significantly different from each other with  $p < .05$  (sig=.372). Despite this outcome, a difference of approximately 0.20 (7-point Likert scale) between the mean values of both retailers could still be noted, as Jumbo and Minipreço obtained mean scores of 4.14 and 3.94, respectively.

## **5 CONCLUSIONS AND LIMITATIONS**

This research aimed at achieving two objectives. Firstly, its main purpose was to provide an understanding of whether the consumers' perceptions of the retailers' SI and SQ would impact the purchase intention towards their Private Labels, as well as to assess the relevance and intensity of such effects. Secondly, the present study was also intended to investigate the potential existence of a moderating effect of the consumers' degree of value consciousness on the causal relationship between the PSI and the PI for Private Labels.

The following chapter will be divided into three major sections. Firstly, a summary of the main findings along with the conclusions of this study will be presented and discussed, followed by the identification and further development of a set of academic and managerial implications. Lastly, the limitations to the present research will be outlined and recommendations, together with practical suggestions, for further research will be stated.

### **5.1 Main Findings and Conclusions**

#### **5.1.1 The Impact of Perceived Store Image on Private Label Purchase Intention**

The assessment of the PSI effect on the PI for Private Labels constituted the first of two components of the first research question previously formulated. The existing literature on this topic (Chapter 2.3.3 – Effects in Store and Private Labels Contexts) suggested that favorable SI perceptions of a particular retailer would produce positive associations towards the retailer's stores and, consequently, a positive influence on the consumer's decision-making process. In turn, this positive effect was expected to increase the consumer's PI towards the retailer's exclusive Private Label brands, since these were likely to be perceived as an extension of the retailer brand itself.

In fact, the outcome from the simple linear regression performed confirmed the positive impact of PSI on the dependent variable, thus revealing consistency with the theoretical background. Furthermore, the results from the multiple linear regression indicated that from the entire set of dimensions extracted from the existing studies (Chapter 2.3.2 – Integrated

Dimensions), the perceptions of store atmosphere, product variety and price were found to have a non-significant effect on the purchase intention. Conversely, the dimensions of perceived product quality, value for money and overall attitude were revealed to have a significant impact.

### **5.1.2 The Impact of Perceived Service Quality on Private Label Purchase Intention**

The second component of the first research question was the evaluation of the impact of consumers' PSQ provided by a retailer on the PI towards its Private Labels. According to previous studies on this interaction (Chapter 2.4 – Perceived Service Quality), the perceptions of SQ have been regarded as an influencing factor, either directly or indirectly, on both consumers' behavioral intentions and purchasing decisions.

The results from the second simple linear regression executed are consistent with the suggestions from the previous studies, as PSQ was found to have a significant positive effect on PI. However, when having its effect simultaneously measured with the one produced by PSI through a multiple linear regression, it was found that the impact was no longer significant, while PSI maintained a significant effect on the outcome variable. This absence of statistical significance of the PSQ effect can potentially be explained by the fact that consumers may regard it as an integrating part of their SI perceptions. In fact, several authors have included the perceptions of SQ in the pre-defined set of dimensions to assess PSI (Bao et al., 2011; Vahie & Paswan, 2006). All in all, it can be concluded that even though both the studied impacts are significant, the effect of PSI was proven to be much more substantial than the one from PSQ.

### **5.1.3 The Moderating Role of Consumer's Value Consciousness**

The second research question was concerned with the potential moderating effect of the CVC on the relationship between PSI and PI for Private Labels. According to the previously described studies on this issue (Chapter 2.5 – The Moderating Role of Consumer's Value Consciousness), there was evidence that the degree of value consciousness possessed by a particular consumer would affect the selected information processing method by that same consumer when engaging in product evaluations, thus influencing the intensity of the variables that contributed to the purchase decision.

By means of a multiple linear regression, which included as explanatory variables the SI perceptions, together with a dummy variable created to represent the levels of value consciousness and an interaction variable between these two, the latter was considered to be non-significant in the model and no relevant variations of the PSI impact were observed with the introduction of the moderator. For this reason, the conclusions from previous studies in this matter were not validated by this study.

#### **5.1.4 Additional Considerations**

The initial expectation that higher and lower levels of PSI and PSQ would originate higher and lower scores of PI for Private Labels was reinforced to some extent by the independent samples t-tests conducted on a retailer-specific level. While in the case of SI there was a significant difference in terms of the mean values for PI between the retailers with the highest (Pingo Doce) and lowest (Minipreço) perceptions, the difference between the retailers with the highest (Jumbo) and lowest (Minipreço) perceptions of SQ was in fact observed but it was not significant.

Secondly, the data collected from the answers provided to the PI questions of the main survey questionnaire indicated that there was a substantially higher consumer intention to purchase the utilitarian Private Label category when compared with the hedonic one. As previously referred ([Chapter 1.1 – Background](#)), a utilitarian product tends to be valued for its functional features, while a hedonic one is mostly evaluated by the consumption experience it provides. Considering this, one potential explanation for the observed gap might be the fact that Private Labels in general tend to be perceived as being more valuable in terms of their basic product features, while usually not being able to effectively arouse more intrinsic and subjective feelings in the final consumers' minds as some national brands do, therefore being less valued for the consumption experience that they provide.

#### **5.2 Academic/Managerial Implications**

Previous research concerned with the consumers' PI towards Private Labels mostly focused on the influence of product-level factors on this outcome variable. In fact, from the scarce portion of studies that focused on the store-level factors, the most part of them either assessed the individual impact of PSI or PSQ, and these effects were mostly studied through indirect

relationships with PI, by using intermediary factors such as brand image, perceived risk, among others. Taking these facts into consideration, the present research provides additional value to the academic community, in the sense that it demonstrates the impact of both PSI and PSQ on Private Labels PI in a single explanatory model, thus not only providing insights related with the individual effects of both factors but also studying the variations in their effects when in the presence of one another.

Furthermore, while other studies generally investigated these effects for one single retailer or for the top retailers in terms of market share in a particular setting, which often resulted in similar perceptions of the different retailers by the consumers, this study assessed the impacts for the retailers with the lowest and highest values of PSI and PSQ in the Portuguese grocery market. This way, the mentioned effects were not only measured at an overall level but also explored at a retailer-specific level, as the impacts on purchase intention might not have the same intensity for retailers with different perception levels of the variables, as confirmed in this study.

Complementarily, the obtained results from this study are also valuable for marketers working in the grocery industry. It is reasonable to state that it is getting increasingly difficult for FMCG managers to differentiate their Private Label offerings from those provided by their competitors and, ultimately, accumulate a higher market share, specifically regarding this type of products. Generally, this involves a potentially excessive focus on the enhancement of the product features and, more generally, of the product-related factors, which may originate inefficiencies in terms of resources allocation, since nowadays a considerable part of Private Labels have already reached satisfactory value standards for consumers. Following this, it is recommended that marketers try to further differentiate their Private Label brands by implementing strategies and taking actions to improve both the perceptions of SI and SQ.

By enhancing these store-related factors, retailers will be able to develop a solid positive image in consumers' minds, which in turn, will originate two main benefits. Firstly, this favorable image of both factors developed by consumers towards a particular retailer will likely be extended to its offered products, namely its Private Label brands, thus increasing the PI through a halo effect, as validated by this study. Secondly, even though this process may take a longer time span to produce effects when compared with adjustments in the product-

related factors, the positive image created will be very difficult to be reversed, as it will be deeply established in consumers' minds.

### **5.3 Limitations and Further Research**

A set of limitations had been identified while performing this Master's dissertation. Leveraging on these limitations, a range of recommendations will be provided for further research.

Firstly, a non-probability sampling method was used in this research, which did not allow for generalizations to the target population. In addition, and despite the number of valid answers collected for both surveys (pre-survey:52; main survey:501) being acceptable for this study's specifications, discrepancies related with the quantitative feedback provided by the respondents for certain retailers were observed, considering the total number of answers collected. This was mainly due to the fact that the answers for each retailer were dependent on the participants' shopping preferences and habits, thus naturally more answers were collected for retailers with higher market share. For instance, in the main survey while Pingo Doce accumulated 235 valid answers, 56 valid responses were collected for Minipreço. Therefore, it is advised for future research to use a quota sampling method, since this is considered to be ideal when investigating a specific characteristic of certain subgroups, and if necessary establish an over-quota for specific retailers. This way, each subgroup can be more representative of the target population.

Furthermore, PSI can be considered to some extent as a broad and subjective concept. For this reason, certain consumers may find it challenging to recall the precise image developed in their minds regarding a specific retailer. As the surveys' questionnaires integrated in this study were solely distributed and answered through online platforms given the time constraints, it may have possibly been more difficult for some respondents to provide accurate answers on this regard, since they were not providing feedback at the store's physical location. Hence, it is recommended for further studies related with the purpose of this research that the survey questionnaires are completed in a store environment in order to try to avoid this issue.



Finally and as previously stated, the CVC was disregarded as a moderator of the PSI on Private Labels PI, since the results were found to be non-significant. Despite this fact, there is plenty of room for the assessment of a potential moderating or mediating effect of specific factors in the proposed relationship. For instance, the researcher may introduce factors like the consumers' degree of knowledge and familiarity with the retailer or the level of involvement with the product category or categories in which the retailer's Private Label is included.

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## APPENDICES

### Appendix 1: Pre-Survey Questionnaire

#### Block 1: Awareness

Q1: Are you aware of the following retailers?



	Yes	No
Lidl	<input type="radio"/>	<input type="radio"/>
Jumbo	<input type="radio"/>	<input type="radio"/>
Continente	<input type="radio"/>	<input type="radio"/>
Intermarché	<input type="radio"/>	<input type="radio"/>
E.Leclerc	<input type="radio"/>	<input type="radio"/>
Pingo Doce	<input type="radio"/>	<input type="radio"/>
Minipreço	<input type="radio"/>	<input type="radio"/>

#### Block 2: Shopping

Q2: Have you shopped at one of the following retailers' stores **in the past 12 months**?

	Yes	No
Lidl	<input type="radio"/>	<input type="radio"/>
Jumbo	<input type="radio"/>	<input type="radio"/>
Continente	<input type="radio"/>	<input type="radio"/>
Intermarché	<input type="radio"/>	<input type="radio"/>
E.Leclerc	<input type="radio"/>	<input type="radio"/>
Pingo Doce	<input type="radio"/>	<input type="radio"/>
Minipreço	<input type="radio"/>	<input type="radio"/>

*If "yes" for Lidl is selected, the respondent skips Blocks 4,5,6,7,8 and 9.*

If “yes” for Jumbo is selected, the respondent skips Blocks 3,5,6,7,8 and 9.

If “yes” for Continente is selected, the respondent skips Blocks 3,4,6,7,8 and 9.

If “yes” for Intermarché is selected, the respondent skips Blocks 3,4,5,7,8 and 9.

If “yes” for E.Leclerc is selected, the respondent skips Blocks 3,4,5,6,8 and 9.

If “yes” for Pingo Doce is selected, the respondent skips Blocks 3,4,5,6,7 and 9.

If “yes” for Minipreço is selected, the respondent skips Blocks 3,4,5,6,7 and 8.

### Block 3: Lidl



Q3: Please, indicate to which extent do you agree or disagree with the following statements regarding **Lidl**, in terms of **store image**:

	1 = Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	7 = Strongly agree
The interior decoration of this store lets me feel a pleasant atmosphere	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This store provides a broad variety of products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The products of this store have good quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The products of this store are low-priced	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The products of this store represent good value for money	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, I have a positive attitude towards this store	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q4: Please, indicate to which extent do you agree or disagree with the following statements regarding **Lidl**, in terms of **service quality**:



	1 = Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	7 = Strongly agree
Overall, I would say that the quality of my interaction with this store's employees is excellent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can count on the store's employees being friendly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can count on the store's employees taking actions to address my needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The store's employees are able to answer my questions quickly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I always have an excellent experience when I visit this store	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The retailer tries to keep my waiting time to a minimum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The retailer knows the kind of products its customers are looking for	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe the retailer knows the type of experience its customers want	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would say that this store provides superior service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

#### Block 4: Jumbo



Q5: Please, indicate to which extent do you agree or disagree with the following statements regarding **Jumbo**, in terms of **store image**:

*Same items and scales as Q3 were presented.*

Q6: Please, indicate to which extent do you agree or disagree with the following statements regarding **Jumbo**, in terms of **service quality**:

*Same items and scales as Q4 were presented.*

## Block 5: Continente



Q7: Please, indicate to which extent do you agree or disagree with the following statements regarding **Continente**, in terms of **store image**:

*Same items and scales as Q3 were presented.*

Q8: Please, indicate to which extent do you agree or disagree with the following statements regarding **Continente**, in terms of **service quality**:

*Same items and scales as Q4 were presented.*

## Block 6: Intermarché



Q9 - Please, indicate to which extent do you agree or disagree with the following statements regarding **Intermarché**, in terms of **store image**:

*Same items and scales as Q3 were presented.*

Q10: Please, indicate to which extent do you agree or disagree with the following statements regarding **Intermarché**, in terms of **service quality**:

*Same items and scales as Q4 were presented.*

## Block 7: E.Leclerc



Q11: Please, indicate to which extent do you agree or disagree with the following statements regarding **E.Leclerc**, in terms of **store image**:

*Same items and scales as Q3 were presented.*

Q12: Please, indicate to which extent do you agree or disagree with the following statements regarding **E.Leclerc**, in terms of **service quality**:

*Same items and scales as Q4 were presented.*

## Block 8: Pingo Doce



Q13: Please, indicate to which extent do you agree or disagree with the following statements regarding **Pingo Doce**, in terms of **store image**:

*Same items and scales as Q3 were presented.*

Q14: Please, indicate to which extent do you agree or disagree with the following statements regarding **Pingo Doce**, in terms of **service quality**:

*Same items and scales as Q4 were presented.*

## Block 9: Minipreço



Q15: Please, indicate to which extent do you agree or disagree with the following statements regarding **Minipreço**, in terms of **store image**:

*Same items and scales as Q3 were presented.*

Q16: Please, indicate to which extent do you agree or disagree with the following statements regarding **Minipreço**, in terms of **service quality**:

*Same items and scales as Q4 were presented.*

## Appendix 2: SPSS Output – Pre-Survey: Mean Values of Retailers

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Med_SI_Lidl	41	3.33	6.33	5.0691	.76374
Med_SQ_Lidl	41	2.67	6.56	4.6152	.88370
Med_SI_Jumbo	28	3.33	6.50	5.3214	.80626
Med_SQ_Jumbo	28	3.33	6.78	5.2063	.87579
Med_SI_Continente	48	3.00	7.00	5.4340	.80391
Med_SQ_Continente	48	1.78	7.00	5.1204	.98394
Med_SI_Intermarché	14	2.33	6.00	4.6548	1.18478
Med_SQ_Intermarché	14	3.67	6.22	4.8175	.81604
Med_SI_E.Leclerc	2	5.00	5.33	5.1667	.23570
Med_SQ_E.Leclerc	2	2.22	4.33	3.2778	1.49278
Med_SI_Pingo_Doce	49	2.17	7.00	5.4490	1.00761
Med_SQ_Pingo_Doce	49	1.00	7.00	5.1088	1.22254
Med_SI_Minipreço	23	2.00	5.00	4.0000	.71421
Med_SQ_Minipreço	23	2.44	6.00	4.3092	.78063
Valid N (listwise)	1				

## Appendix 3: Main Survey Questionnaire

### Block 1: Value Consciousness

Q1: Please, indicate to which extent do you agree or disagree with the following statements:

	1 = Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	7 = Strongly agree
I am very concerned about low prices, but I am equally concerned about product quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When grocery shopping, I compare the prices of different brands to be sure I get the best value for the money	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When purchasing a product, I always try to maximize the quality I get for the money I spend	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I buy products, I like to be sure that I am getting my money's worth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I generally shop around for lower prices on products, but they still must meet certain quality requirements before I buy them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I shop, I usually compare the "price per kilogram" information for brands I normally buy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I always check prices at the grocery store to be sure I get the best value for the money I spend	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Block 2: Awareness

Q2: Are you aware of the following retailers?



	Yes	No
Pingo Doce	<input type="radio"/>	<input type="radio"/>
Jumbo	<input type="radio"/>	<input type="radio"/>
Minipreço	<input type="radio"/>	<input type="radio"/>
Continente	<input type="radio"/>	<input type="radio"/>

### Block 3: Shopping

Q3: Have you shopped at one of the following retailers' stores **in the past 12 months**?

	Yes	No
Pingo Doce	<input type="radio"/>	<input type="radio"/>
Jumbo	<input type="radio"/>	<input type="radio"/>
Minipreço	<input type="radio"/>	<input type="radio"/>
Continente	<input type="radio"/>	<input type="radio"/>

### Block 4: Budget Share

Q4: In which of the following retailers do you usually spend the highest share of your shopping budget?

- Pingo Doce
- Jumbo
- Minipreço
- Continente

*If "Continente" is selected, the respondent skips Blocks 7,8,9,10,11 and 12.*

*If "Minipreço" is selected, the respondent skips Blocks 5,6,9,10,11 and 12.*

*If "Jumbo" is selected, the respondent skips Blocks 5,6,7,8,11 and 12.*

*If "Pingo Doce" is selected, the respondent skips Blocks 5,6,7,8,9 and 10.*

**Block 5: Continente**



Q5: Please, indicate to which extent do you agree or disagree with the following statements regarding **Continente**, in terms of **store image**:

	1 = Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	7 = Strongly agree
The interior decoration of this store lets me feel a pleasant atmosphere	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This store provides a broad variety of products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The products of this store have good quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The products of this store are low-priced	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The products of this store represent good value for money	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overall, I have a positive attitude towards this store	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q6: Please, indicate to which extent do you agree or disagree with the following statements regarding **Continente**, in terms of **service quality**:

	1 = Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	7 = Strongly agree
Overall, I would say that the quality of my interaction with this store's employees is excellent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I can count on the store's employees being friendly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can count on the store's employees taking actions to address my needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The store's employees are able to answer my questions quickly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I always have an excellent experience when I visit this store	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The retailer tries to keep my waiting time to a minimum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The retailer knows the kind of products its customers are looking for	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe the retailer knows the type of experience its customers want	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would say that this store provides superior service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Block 6: Contimente Purchase Intention



Q7: The likelihood of purchasing private label products from **Contimente** is:

1 = Very low      Low      Somewhat low      Neutral      Somewhat high      High      7 = Very high

Q8: The likelihood of purchasing a private label **pack of spaghetti** from **Contimente** is:

1 = Very low      Low      Somewhat low      Neutral      Somewhat high      High      7 = Very high

Q9: The likelihood of purchasing a private label **ice cream** from **Contimente** is:



1 = Very low      Low      Somewhat low      Neutral      Somewhat high      High      7 = Very high

### Block 7: Minipreço



Q10: Please, indicate to which extent do you agree or disagree with the following statements regarding **Minipreço**, in terms of **store image**:

*Same items and scales as Q5 were presented.*

Q11: Please, indicate to which extent do you agree or disagree with the following statements regarding **Minipreço**, in terms of **service quality**:

*Same items and scales as Q6 were presented.*

### Block 8: Minipreço Purchase Intention



Q12: The likelihood of purchasing private label products from **Minipreço** is:

1 = Very low      Low      Somewhat low      Neutral      Somewhat high      High      7 = Very high

Q13: The likelihood of purchasing a private label **pack of spaghetti** from **Minipreço** is:

1 = Very low      Low      Somewhat low      Neutral      Somewhat high      High      7 = Very high

Q14: The likelihood of purchasing a private label **ice cream** from **Minipreço** is:

1 = Very low      Low      Somewhat low      Neutral      Somewhat high      High      7 = Very high

**Block 9: Jumbo**



Q15: Please, indicate to which extent do you agree or disagree with the following statements regarding **Jumbo**, in terms of **store image**:

*Same items and scales as Q5 were presented.*

Q16: Please, indicate to which extent do you agree or disagree with the following statements regarding **Jumbo**, in terms of **service quality**:

*Same items and scales as Q6 were presented.*

**Block 10: Jumbo Purchase Intention**



Q17: The likelihood of purchasing private label products from **Jumbo** is:

1 = Very low      Low      Somewhat low      Neutral      Somewhat high      High      7 = Very high

Q18: The likelihood of purchasing a private label **pack of spaghetti** from **Jumbo** is:

1 = Very low      Low      Somewhat low      Neutral      Somewhat high      High      7 = Very high

Q19: The likelihood of purchasing a private label **ice cream** from **Jumbo** is:

1 = Very low      Low      Somewhat low      Neutral      Somewhat high      High      7 = Very high

### Block 11: Pingo Doce



Q20: Please, indicate to which extent do you agree or disagree with the following statements regarding **Pingo Doce**, in terms of **store image**:

*Same items and scales as Q5 were presented.*

Q21: Please, indicate to which extent do you agree or disagree with the following statements regarding **Pingo Doce**, in terms of **service quality**:

*Same items and scales as Q6 were presented.*

### Block 12: Pingo Doce Purchase Intention



Q22: The likelihood of purchasing private label products from **Pingo Doce** is:

1 = Very low      Low      Somewhat low      Neutral      Somewhat high      High      7 = Very high

Q23: The likelihood of purchasing a private label **pack of spaghetti** from **Pingo Doce** is:

1 = Very low      Low      Somewhat low      Neutral      Somewhat high      High      7 = Very high

Q24: The likelihood of purchasing a private label **ice cream** from **Pingo Doce** is:

1 = Very low      Low      Somewhat low      Neutral      Somewhat high      High      7 = Very high

### Block 13: Demographics

Q25: What is your gender?

- Male
- Female

Q26: What is your age?

Less than 18      18 - 24      25 - 34      35 - 44      45 - 54      55 - 64      65 or above

Q27: What is your current occupation?

- Student
- Working student
- Employed
- Self-employed
- Unemployed
- Retired

Q28: What is your current level of academic qualifications?

- Primary school
- High school
- Bachelor's degree
- Master's degree
- Doctorate degree

Q29: What is the **yearly** cumulative value of your household income?

- Less than 20,000€
- 20,000€ - 34,999€
- 35,000€ - 49,999€
- 50,000€ - 74,999€
- 75,000€ - 99,999€
- 100,000€ or above
- Don't know/Don't answer

## Appendix 4: SPSS Output – Demographic Factors and Shopping/Retailer Preferences

### Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	307	61.3	61.3	61.3
	Male	194	38.7	38.7	100.0
	Total	501	100.0	100.0	

### Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 - 24	100	20.0	20.0	20.0
	25 - 34	140	27.9	27.9	47.9
	35 - 44	67	13.4	13.4	61.3
	45 - 54	98	19.6	19.6	80.8
	55 - 64	79	15.8	15.8	96.6
	65 or above	17	3.4	3.4	100.0
	Total	501	100.0	100.0	

### Occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	90	18.0	18.0	18.0
	Working student	23	4.6	4.6	22.6
	Employed	263	52.5	52.5	75.0
	Self-employed	88	17.6	17.6	92.6
	Unemployed	15	3.0	3.0	95.6
	Retired	22	4.4	4.4	100.0
	Total	501	100.0	100.0	

### Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary school	3	.6	.6	.6
	High school	84	16.8	16.8	17.4
	Bachelor's degree	245	48.9	48.9	66.3
	Master's degree	164	32.7	32.7	99.0
	Doctorate degree	5	1.0	1.0	100.0
	Total	501	100.0	100.0	

**Income**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 20,000€	75	15.0	19.9	19.9
	20,000€ - 34,999€	99	19.8	26.3	46.3
	35,000€ - 49,999€	87	17.4	23.1	69.4
	50,000€ - 74,999€	55	11.0	14.6	84.0
	75,000€ - 99,999€	24	4.8	6.4	90.4
	100,000€ or above	36	7.2	9.6	100.0
	Total	376	75.0	100.0	
Missing	Don't know/Don't answer	125	25.0		
Total		501	100.0		

**Shopping - Pingo Doce**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	20	4.0	4.0	4.0
	Yes	481	96.0	96.0	100.0
Total		501	100.0	100.0	

**Shopping - Jumbo**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	183	36.5	36.5	36.5
	Yes	318	63.5	63.5	100.0
Total		501	100.0	100.0	

**Shopping - Minipreço**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	200	39.9	39.9	39.9
	Yes	301	60.1	60.1	100.0
Total		501	100.0	100.0	

**Shopping - Continente**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	56	11.2	11.2	11.2
	Yes	445	88.8	88.8	100.0
Total		501	100.0	100.0	

**Budget share**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Pingo Doce	235	46.9	46.9	46.9
	Jumbo	63	12.6	12.6	59.5
	Minipreço	56	11.2	11.2	70.7
	Continente	147	29.3	29.3	100.0
	Total	501	100.0	100.0	

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Med_SI_Continente	147	2.50	7.00	5.4524	.81463
Med_SQ_Continente	147	1.89	7.00	5.1217	.97607
Med_SI_Minipreço	56	3.00	6.67	5.0179	.68952
Med_SQ_Minipreço	56	2.78	6.89	4.9187	.84447
Med_SI_Jumbo	63	3.83	6.67	5.4841	.62340
Med_SQ_Jumbo	63	3.00	6.78	5.2769	.89866
Med_SI_Pingo_Doce	235	3.33	7.00	5.5319	.64774
Med_SQ_Pingo_Doce	235	2.89	6.56	4.9608	.87603
Valid N (listwise)	0				

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
PI_Overall_All	501	1.00	7.00	5.2555	1.35595
PI_Utilitarian_All	501	1.00	7.00	4.9681	1.89815
PI_Hedonic_All	501	1.00	7.00	4.1597	1.98052
Valid N (listwise)	501				

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Continente - Private label products	147	1	7	5.26	1.453
Continente - Private label pack of spaghetti	147	1	7	4.71	2.088
Continente - Private label ice cream	147	1	7	4.21	1.949
Valid N (listwise)	147				

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Minipreço - Private label products	56	1	7	4.34	1.116
Minipreço - Private label pack of spaghetti	56	1	7	4.95	1.531
Minipreço - Private label ice cream	56	1	7	2.54	1.452
Valid N (listwise)	56				

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Jumbo - Private label products	63	1	7	4.79	1.272
Jumbo - Private label pack of spaghetti	63	1	7	4.49	1.917
Jumbo - Private label ice cream	63	1	7	3.14	1.712
Valid N (listwise)	63				



**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Pingo Doce - Private label products	235	1	7	5.60	1.231
Pingo Doce - Private label pack of spaghetti	235	1	7	5.26	1.806
Pingo Doce - Private label ice cream	235	1	7	4.79	1.853
Valid N (listwise)	235				

**Appendix 5: SPSS Output – Measures Reliability (Cronbach’s Alpha)**

**Overall**

**Case Processing Summary**

		N	%
Cases	Valid	501	100.0
	Excluded <sup>a</sup>	0	.0
	Total	501	100.0

a. Listwise deletion based on all variables in the procedure.

**Store Image**

Cronbach's Alpha	N of Items
.756	6

**Service Quality**

Cronbach's Alpha	N of Items
.906	9

**Purchase Intention**

Cronbach's Alpha	N of Items
.768	3

**Value Consciousness**

Cronbach's Alpha	N of Items
.782	7

## Continente

### Case Processing Summary

		N	%
Cases	Valid	147	29.3
	Excluded <sup>a</sup>	354	70.7
	Total	501	100.0

a. Listwise deletion based on all variables in the procedure.

#### Store Image

Cronbach's Alpha	N of Items
.842	6

#### Service Quality

Cronbach's Alpha	N of Items
.921	9

#### Purchase Intention

Cronbach's Alpha	N of Items
.781	3

## Minipreco

### Case Processing Summary

		N	%
Cases	Valid	56	11.2
	Excluded <sup>a</sup>	445	88.8
	Total	501	100.0

a. Listwise deletion based on all variables in the procedure.

#### Store Image

Cronbach's Alpha	N of Items
.753	6

#### Service Quality

Cronbach's Alpha	N of Items
.870	9

#### Purchase Intention

Cronbach's Alpha	N of Items
.682	3

## Jumbo

### Case Processing Summary

		N	%
Cases	Valid	63	12.6
	Excluded <sup>a</sup>	438	87.4
	Total	501	100.0

a. Listwise deletion based on all variables in the procedure.

#### Store Image

Cronbach's Alpha	N of Items
.690	6

#### Service Quality

Cronbach's Alpha	N of Items
.909	9

#### Purchase Intention

Cronbach's Alpha	N of Items
.747	3

## Pingo Doce

### Case Processing Summary

		N	%
Cases	Valid	235	46.9
	Excluded <sup>a</sup>	266	53.1
	Total	501	100.0

a. Listwise deletion based on all variables in the procedure.

#### Store Image

Cronbach's Alpha	N of Items
.715	6

#### Service Quality

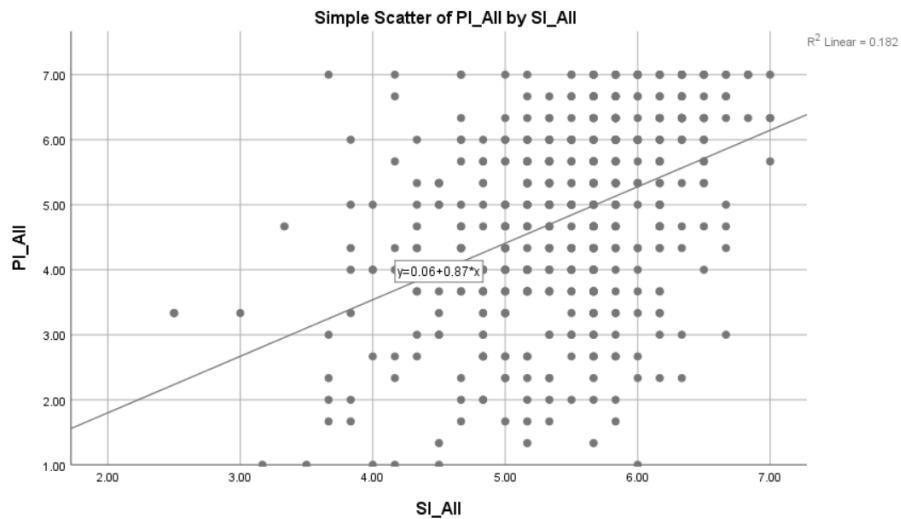
Cronbach's Alpha	N of Items
.903	9

#### Purchase Intention

Cronbach's Alpha	N of Items
.759	3

## Appendix 6: SPSS Output – Simple Linear Regression (H1: Effect of PSI)

**Hypothesis 1:** Perceived store image has a positive impact on the purchase intention for private label brands.



### Correlations

		PI_All	SI_All
Pearson Correlation	PI_All	1.000	.427
	SI_All	.427	1.000
Sig. (1-tailed)	PI_All	.	.000
	SI_All	.000	.
N	PI_All	501	501
	SI_All	501	501

### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.427 <sup>a</sup>	.182	.181	1.32211	1.999

a. Predictors: (Constant), SI\_All

b. Dependent Variable: PI\_All

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	194.468	1	194.468	111.253	.000 <sup>b</sup>
	Residual	872.245	499	1.748		
	Total	1066.713	500			

a. Dependent Variable: PI\_All

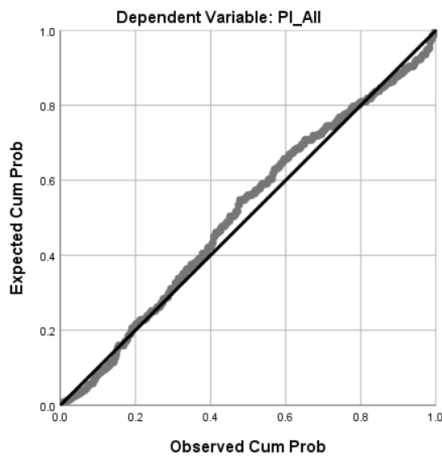
b. Predictors: (Constant), SI\_All

**Coefficients<sup>a</sup>**

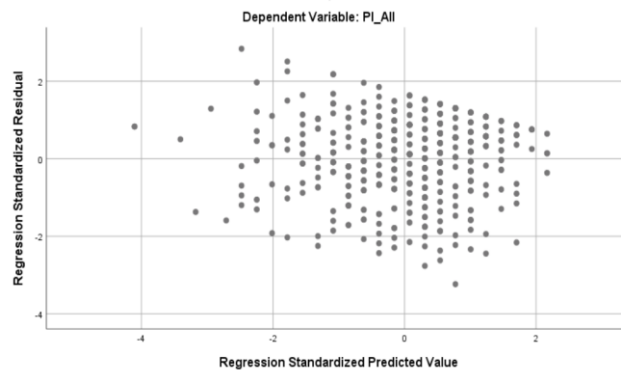
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.062	.453		.136	.892
	SI_All	.869	.082	.427	10.548	.000

a. Dependent Variable: PI\_All

Normal P-P Plot of Regression Standardized Residual



Scatterplot



**Appendix 7: SPSS Output – Multiple Linear Regression (PSI Dimensions)**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.445 <sup>a</sup>	.198	.188	1.31606	2.001

a. Predictors: (Constant), SI\_Overall\_Attitude\_All, SI\_Price\_All, SI\_Product\_Variety\_All, SI\_Store\_Atmosphere\_All, SI\_Product\_Quality\_All, SI\_Value\_for\_money\_All

b. Dependent Variable: PI\_All

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	211.103	6	35.184	20.314	.000 <sup>b</sup>
	Residual	855.610	494	1.732		
	Total	1066.713	500			

a. Dependent Variable: PI\_All

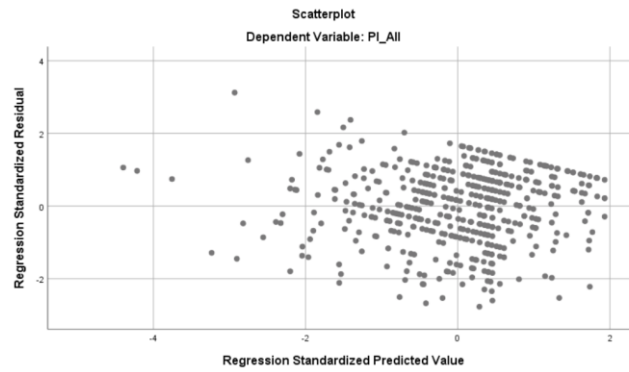
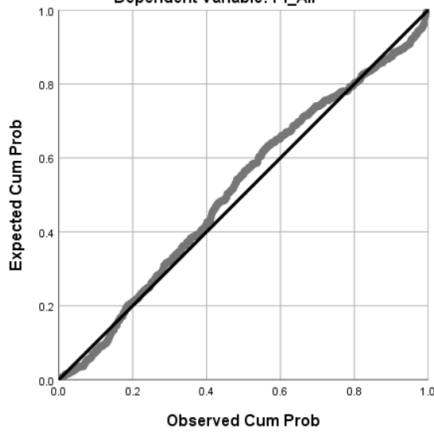
b. Predictors: (Constant), SI\_Overall\_Attitude\_All, SI\_Price\_All, SI\_Product\_Variety\_All, SI\_Store\_Atmosphere\_All, SI\_Product\_Quality\_All, SI\_Value\_for\_money\_All

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.217	.471		-.461	.645		
	SI_Store_Atmosphere_All	.069	.054	.060	1.262	.208	.716	1.397
	SI_Product_Variety_All	.036	.054	.031	.659	.510	.748	1.337
	SI_Product_Quality_All	.308	.088	.185	3.499	.001	.579	1.727
	SI_Price_All	.063	.064	.046	.989	.323	.737	1.357
	SI_Value_for_money_All	.187	.087	.118	2.162	.031	.542	1.846
	SI_Overall_Attitude_All	.232	.085	.150	2.728	.007	.537	1.863

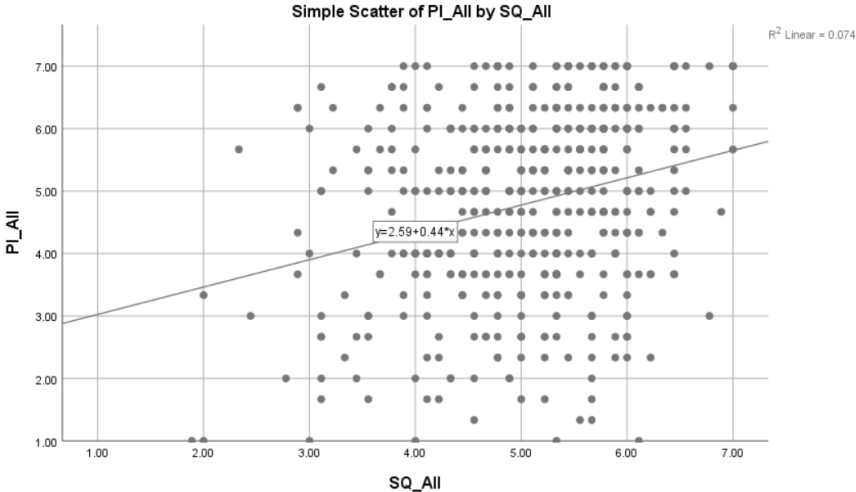
a. Dependent Variable: PI\_All

Normal P-P Plot of Regression Standardized Residual  
Dependent Variable: PI\_All



**Appendix 8: SPSS Output – Simple Linear Regression (H2: Effect of PSQ)**

**Hypothesis 2:** Perceived service quality has a positive impact on the purchase intention for private label brands.



**Correlations**

		PI_All	SQ_All
Pearson Correlation	PI_All	1.000	.273
	SQ_All	.273	1.000
Sig. (1-tailed)	PI_All	.	.000
	SQ_All	.000	.
N	PI_All	501	501
	SQ_All	501	501

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.273 <sup>a</sup>	.074	.073	1.40663	1.993

a. Predictors: (Constant), SQ\_All

b. Dependent Variable: PI\_All

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	79.394	1	79.394	40.127	.000 <sup>b</sup>
	Residual	987.319	499	1.979		
	Total	1066.713	500			

a. Dependent Variable: PI\_All

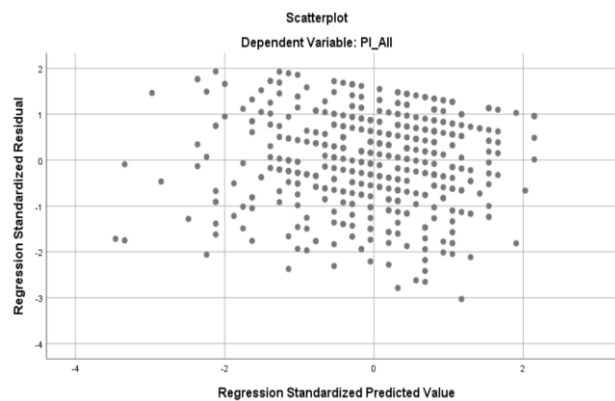
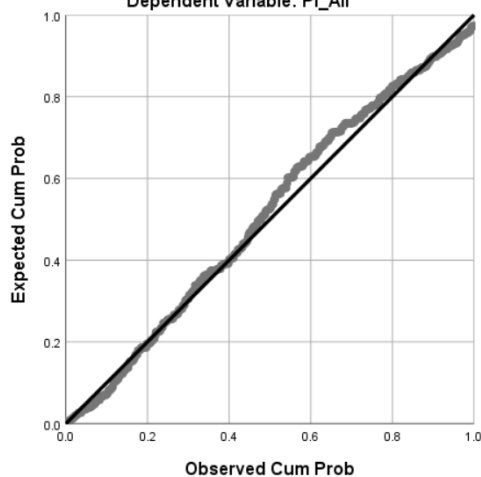
b. Predictors: (Constant), SQ\_All

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.588	.354		7.312	.000
	SQ_All	.438	.069	.273	6.335	.000

a. Dependent Variable: PI\_All

Normal P-P Plot of Regression Standardized Residual  
Dependent Variable: PI\_All





## Appendix 9: SPSS Output – Multiple Linear Regression (PSI & PSQ Effects)

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.428 <sup>a</sup>	.183	.180	1.32262	1.999

a. Predictors: (Constant), SQ\_All, SI\_All

b. Dependent Variable: PI\_All

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	195.549	2	97.774	55.893	.000 <sup>b</sup>
	Residual	871.165	498	1.749		
	Total	1066.713	500			

a. Dependent Variable: PI\_All

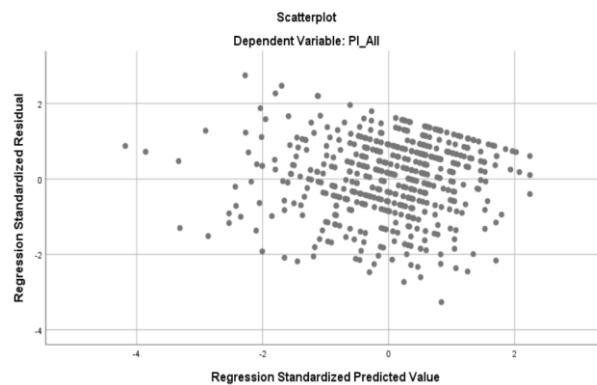
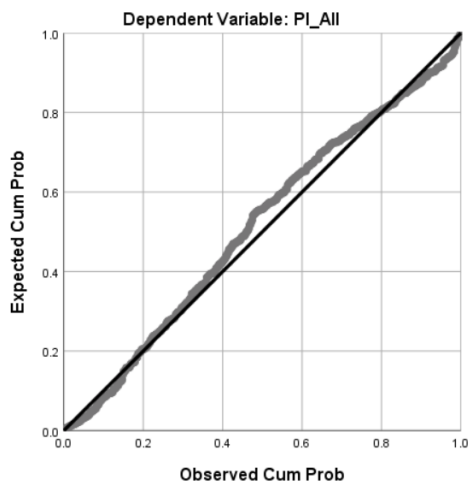
b. Predictors: (Constant), SQ\_All, SI\_All

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.004	.460		-.008	.993		
	SI_All	.823	.101	.404	8.149	.000	.666	1.502
	SQ_All	.063	.080	.039	.786	.432	.666	1.502

a. Dependent Variable: PI\_All

**Normal P-P Plot of Regression Standardized Residual**



## Appendix 10: SPSS Output – Multiple Linear Regression (H3: CVC Moderation Effect)

**Hypothesis 3:** Consumer’s value consciousness (CVC) moderates the relationship between perceived store image (PSI) and purchase intention (PI) for private labels brands.

- a) The impact of PSI on the PI for Private Labels is higher with lower levels of CVC.
- b) The impact of PSI on the PI for Private Labels is lower with higher levels of CVC.

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.444 <sup>a</sup>	.197	.192	1.31270	2.035

a. Predictors: (Constant), SI\_ValueC, SI\_All, ValueC\_Dummy

b. Dependent Variable: PI\_All

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	210.290	3	70.097	40.679	.000 <sup>b</sup>
	Residual	856.423	497	1.723		
	Total	1066.713	500			

a. Dependent Variable: PI\_All

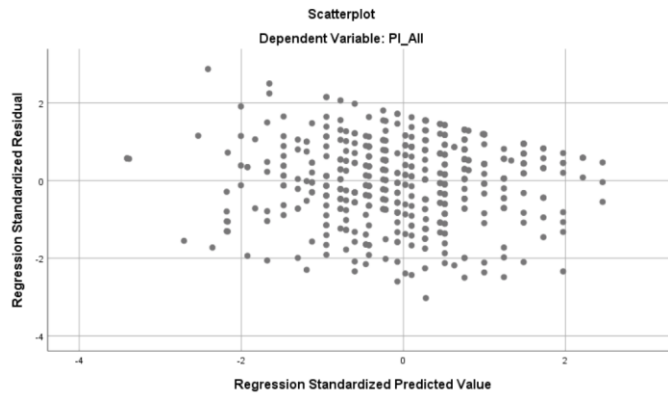
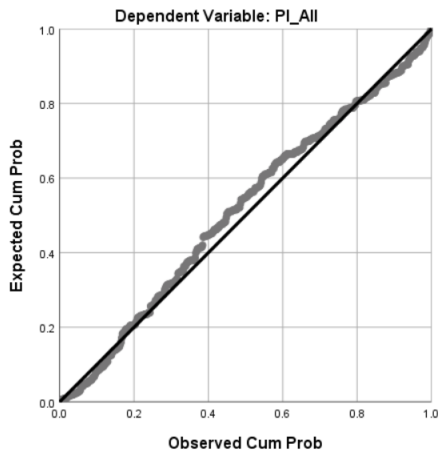
b. Predictors: (Constant), SI\_ValueC, SI\_All, ValueC\_Dummy

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.876	.640		1.368	.172		
	SI_All	.683	.121	.336	5.666	.000	.461	2.171
	ValueC_Dummy	-1.118	.921	-.381	-1.215	.225	.016	60.854
	SI_ValueC	.264	.168	.511	1.570	.117	.015	65.699

a. Dependent Variable: PI\_All

Normal P-P Plot of Regression Standardized Residual



## Appendix 11: SPSS Output – Further Results: Independent Samples T-Tests

Group Statistics

Budget share	N	Mean	Std. Deviation	Std. Error Mean
PI_All Pingo Doce	235	5.2156	1.35938	.08868
Minipreço	56	3.9405	1.07705	.14393

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
PI_All	Equal variances assumed	6.378	.012	6.544	289	.000	1.27513	.19485	.89162	1.65863
	Equal variances not assumed			7.543	101.253	.000	1.27513	.16905	.93979	1.61047

**Group Statistics**

Budget share	N	Mean	Std. Deviation	Std. Error Mean
PI_All Jumbo	63	4.1429	1.34899	.16996
Minipreço	56	3.9405	1.07705	.14393

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
PI_All	Equal variances assumed	2.673	.105	.897	117	.372	.20238	.22565	-.24452	.64928
	Equal variances not assumed			.909	115.722	.365	.20238	.22271	-.23874	.64350