# REVOLUTIONIZING THE SUPERMARKET EXPERIENCE: 

The effect of Real Time Promotions on Coupon Conversion and Brand Equity

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#### Abstract

Title: Revolutionizing the Supermarket Experience: The Effect of Real Time Promotions on


Coupon Conversion and Brand Equity
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Retailers face a complex task in designing promotional strategies in today's business environment and, since Millennials will revolutionize consumer marketing, it is critical for companies to succeed in attracting them in order to thrive. As consumers shop while using their smartphone, there is an opportunity window for retailers to easily attract them, by sending push notifications with Real Time Promotions to their smartphones.

Hence, the main purpose of this dissertation is to understand whether having Real Time Promotions, in the form of digital coupons, increases coupon redemption and retailer's brand equity. It also aims to understand if the form in which the coupon is presented, either percentage or cents-off, influences its usage by consumers. Additionally, it will allow us to see if there is a specific consumer profile who will value the most these promotions. For this matter, an online experimental study and seven in-depth interviews were made to reach insightful information.

The main conclusions taken from the present study indicate that RTP may increase coupon redemption since coupons are delivered in the store and available for a short time period, signalling time urgency. Regarding the coupon face value, being framed in percentageoff (vs. cents-off) increases coupon redemption for both low-priced and high-priced products, in a supermarket context. Moreover, the implementation of Real Time Promotions enhances retailer's Brand Equity and these promotions were found to be more relevant for younger consumers.

Keywords: Real Time Promotions, Brand Equity, Innovation, Retail Industry, Customer Experience, Pingo Doce, M-coupons, App

## Resumo

Título: Revolucionando a Experiência em Supermercado: O Efeito de Promoções em Tempo Real na Conversão de Vales de Desconto e na Brand Equity do retalhista

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Os retalhistas enfrentam uma tarefa complexa ao desenvolver estratégias promocionais no atual ambiente de negócios e, uma vez que os Millennials irão revolucionar o marketing de consumo, é fundamental que as empresas consigam atraí-los para prosperar. Uma vez que os consumidores utilizam o telemóvel enquanto fazem compras, existe uma oportunidade para os retalhistas os atraírem facilmente enviando notificações com promoções em tempo real para os seus smartphones.

Assim, o objetivo principal desta dissertação é perceber se as Promoções em Tempo Real, na forma de vales de desconto digitais, aumentam a redenção dos mesmos e a brand equity do retalhista. Este estudo pretende também investigar se a forma em que o cupão é apresentado, quer em percentagem ou dinheiro, influencia o seu uso pelos consumidores e se existe um perfil específico do consumidor que valorize mais estas promoções. Com este propósito, um questionário on-line e sete entrevistas foram feitas para obter informações mais detalhadas.

As principais conclusões do presente estudo indicam que as Promoções em Tempo Real podem aumentar o uso de vales de desconto, uma vez que são entregues em loja e estão disponíveis por um período limitado de tempo, criando pressão no consumidor. Verificou-se também que os cupões em percentagem, em vez de euros, têm um resgate maior tanto para produtos mais baratos como para os produtos mais caros. Além disso, a implementação destas promoções aumenta a brand equity do retalhista e é mais relevante para os consumidores mais jovens.

Palavras-chave: Promoções em Tempo Real, Brand Equity, Inovação, Retalho, Experiência do Consumidor, Pingo Doce, Vales de Desconto, App

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## Glossary

PD - Pingo Doce
RTP - Real Time Promotions

## Chapter 1: Introduction

### 1.1 Topic Presentation

Nowadays there is a great need for retailers to adapt in order to stay relevant and to differentiate from competitors. A general decline in customers' loyalty and the increase of their demand for value, lead businesses to start focusing on customers (Jüttner \& Wehrli, 1994). Consumers value more experiences than things, and are demanding an interaction between all channels (Omni Channel) (Melsted, 2015).

In a recent Nielsen study of manufacturers, 68 percent of respondents said that they face more competitive price pressure than ever, mainly due to the new technologies, creating new demands for them to be agile and adaptive in setting price and promotion plans. Not only is competition high, but consumers are increasingly choosy and cost conscious. Mobile has completely transformed the retail landscape, and in a world where mobile ownership is growing at record speeds, it gives retailers unprecedented opportunities to target consumers by their geolocation data, allowing brands to pinpoint where a customer is at any given moment, and then send them push notifications with coupons, promotions or other targeted offers, providing immediate relevancy and value to customers (Bedgood, 2016).

Also, more and more, people are buying based on whether a certain product is on sale or not and many consumers are addicted to coupons and like to collect them, because that makes them feel smart and empowers them (Cooper \& Schindler, 1998). On the other hand, Pingo Doce, a Portuguese supermarket chain, does not have this practice of providing coupons to their customers, since they live by the premise of having "low prices every day of the year", although they provide in-store discounts. Taking into consideration that some consumers might actually like to have coupons, since it probably gives them the perception that they are saving more, it would be interesting to study whether having Real Time Promotions, in the form of digital coupons, would have an impact on Pingo Doce's brand equity, translating into a high conversion rate. This would work on the following manner: as soon as clients enter the store, they would receive in their Pingo Doce's app the coupons available for them to use while they are in the store (consumers would not be able to use them later - limited time offers (LTOs)).

This will eventually translate into a greater likelihood of conversion, since consumers will want to use their coupons right away, because they know that if they do not use them that day they won't be able to use them later, which creates some pressure to convert. This is a very convenient solution, since nowadays we are used to have everything on our mobile phones and this prevents consumers to arrive at the supermarket realizing they forgot to bring the coupons
or worrying about when the promotion starts or ends, because they will know that when they arrive to Pingo Doce they will always have their coupons. Furthermore, this idea will create enthusiasm among consumers and for sure improve their customer experience that many seek for.

### 1.2 Problem Statement

This thesis strives to understand if by having Real Time Promotions, in the form of digital coupons, consumers would adhere by converting the digital coupons and if it would increase retailer's brand equity, in a supermarket context. This dissertation has also the objective of understanding if the face value of the coupon itself, the price of the product in the coupon being high or low, and the coupon being framed in percentage or cents-off has any influence on its redemption by consumers. It also aims to understand if Real Time Promotions elicit impulsive buying behaviour and whether there is a specific consumer profile who will value the most these promotions. For that matter, three research questions were formulated in order to answer to the main question proposed by this study.

RQ1: Does the integration of Real Time Promotions impacts Pingo Doce's Brand Equity?
The first question tries to measure if Pingo Doce is perceived positively different just by adding Real Time Promotions to their promotional strategy. It is important to infer if noncustomers would become customers and if actual customers would go more often to the stores.

## RQ2: Does the demographic profile of the consumers who would be interested in receiving

 this type of promotions differ from those who would not?This question allows us to investigate if the coupon conversion varies from consumer to consumer based on specific consumer characteristics.

RQ3: Are consumers more likely to redeem a m-coupon for low-priced products in percentage-off and for high-priced products in cents-off?

This question does provide tentative managerial implications regarding how best to frame the face value of m-coupons, either percentage-off or cents-off, in order to increase coupon redemption, depending on the products base price (high vs low priced products).

### 1.3 Scope of Analysis

Since this study intends to examine consumer's attitudes towards Real Time Promotions in the form of digital coupons in a supermarket context, only people who go to the supermarket will be considered, to assure that respondents' opinions and perspectives will add value to the present dissertation. The topic here presented will be applied to a Portuguese retailer - Pingo Doce.

### 1.4 Academic and Managerial Relevance

The research findings will provide Jerónimo Martins with some relevant information on whether or not they should implement Real Time Promotions across their stores and whether it will bring substantial benefits regarding retailer's brand equity and coupon redemption. It will also be possible to see if customers would prefer Pingo Doce, instead of their usual retailer, due to these Real Time Promotions and revolutionary customer experience.

From a managerial perspective, this thesis also intends to acknowledge which consumers are more prone to respond positively to real time m-couponing efforts, which concerns marketers. Moreover, it is also relevant to understand how does the expiration date of a coupon affects its redemption by consumers and how time pressure can be used effectively as a competitive marketing strategy. Furthermore, it is also important to know if there is any difference in redemption between having the face value of the coupon in percentage or centsoff, the amount of the discount itself (big vs. small) and whether it is a high vs low-priced product.

Lastly, there are no studies, to the author's knowledge, on Real Time Promotions and very little is known regarding coupon duration and consumer's response to it. The author did not find substantial information regarding the differences between cents-off and percentage-off discounts in a supermarket context. On the other hand, the effect of scarcity on consumer behaviour has been widely studied, but time-limited offers are somewhat mixed and suggest the presence of moderator variables.

### 1.5 Dissertation Outline

The following dissertation will be divided into five chapters. Chapter 1 started with the Topic Presentation and its relevance for the purpose study. The Problem Statement was also presented as well as the Research Questions, the Scope of Analysis, and its Academic and Managerial Relevance for this study. In order to properly approach the topics related to this study and to accurately answer to the research questions, Chapter 2 will present the Literature

Review of previously published studies on subjects of interest and the respective Hypothesis. Moreover, Chapter 3 will describe the Methodology used, as well as, explain how the data was obtained. In Chapter 4, the results will be analysed and interpreted. Finally, in Chapter 5, the conclusions will be drawn, the main ideas highlighted and the limitations presented. Additionally, future research will be proposed.

## Chapter 2: Literature Review

### 2.1 FMCG

The competition in the supermarket retailing industry is reaching unprecedented levels of rivalry, and the widespread focus on price has intensified the competition among retailers, which translated into an increased pressure on retail margins (Van Heerde et al., 2008). Therefore, in order for retailers to survive, they need to stay relevant and to adapt to the new industry trends. As consumers turned to digital, retailers must invest in their e-commerce and adopt an Omni-channel strategy, to be able to fulfil consumer's demands (Sinke and Heiberg, 2017). With all the existing offer, consumers are demanding an increase in the value for money, and a more tailored customer experience. Nowadays, retailers face big challenges, being one of them the fact that they have to deal with five generations of consumers (Acosta, 2018).

This study will focus on one specific retailer, Pingo Doce. Pingo Doce is one of the leading supermarket chains in Portugal with a market share of $26,3 \%$ (Nielson, 2017), 422 stores, 700,000 daily visits and $3,667 \mathrm{M} €$ in sales (Jerónimo Martins, 2018). Pingo Doce distinguishes himself by its quality perishables, its private label brand ( $34 \%$ weight on sales), its meal solutions, its competitive pricing and its proximity to consumers (Jerónimo Martins, 2018). According to a study done by PRM (2017), the main reasons consumers choose to shop at Pingo Doce are: proximity ( 28 percent), product's variety ( 20 percent), price ( $15 \%$ ), product's quality ( $12 \%$ ) and promotions ( 8 percent). When compared to the other supermarkets in Portugal, Pingo Doce was associated with making the best promotions, having the best price/quality relation and the lowest prices (PRM, 2017). Pingo Doce's consumers are mainly women ( 73 percent), with an average age of 50 years old (PRM, 2017).

Pingo Doce belongs to the international group Jerónimo Martins SGPS, S.A., that is one of the biggest retail groups in Portugal and the $56^{\text {th }}$ in the world (Deloitte, 2018). It was founded in 1792 by Jerónimo Martins and started as a small grocery store in Lisbon. Since 1996 the Group was led by Alexandro Soares dos Santos, but in 2013 he left for personal reasons and his son, Pedro Soares dos Santos, became the Chairman and CEO of Jerónimo Martins. Nowadays, Jerónimo Martins operates in the Food Distribution sector, which is their core business, representing more than $95 \%$ of the Group's total sales, with Pingo Doce and Recheio (Cash \& Carry) in Portugal, Biedronka in Poland and Ara in Colombia. They also operate in the Specialised Retail sector with Hebe (drugstores), Hussel (chocolate and confectionery stores) and Jeronymo (coffee shops). In total, the Group has over 3,850 stores and 4.7 million visits per day across all stores. Jerónimo Martins's vision is to make quality food accessible to
everyone and accounts with 104,203 thousand workers. Jerónimo Martins finished the year with 16,276M€ in sales (Jerónimo Martins, 2018).

### 2.2 Millennials vs Other Generations

According to (Howe \& Strauss, 2000), a group of people born in the same place and interval are designated as generational cohorts and share the same perceived membership, common beliefs, behaviours and common location in history (living through the same episodes). Currently, there are five generations coexisting: the Silent generation (1925-1942), the Boom generation (1943-1960), Generation X (1961-1981), the Millennial Generation (or Generation Y) (1982-2000) (Howe \& Strauss, 2007) and the Homeland Generation, also called Generation Z, born between 2001 and 2025 (Montana \& Petit, 2008). However most authors agree with the generational names, there are some discrepancy with regard to age intervals (Williams \& Page, 2011; Howe \& Strauss, 2007). For the sake of this study, Millennials are those born between 1982 and 2000.

A lot have changed from the time when the Silent Generation (now in their 80s and 90s) was in their adulthood compared to Millennials nowadays. Millennials have lost interest on politics, religion, the military and marriage while, on the other hand, the percentage of people going to college increased (more educated), race and ethnicity are more diverse and women are increasingly assuming a bigger role in society (Fry et al., 2018).

Millennials are usually denominated as digital natives (Prensky, 2001) who value more experiences than things (Correia et al., 2016) and are always connected with each other via social media (Bucic, Harris, \& Arli, 2012). This generation is very aware and concerned with the environment and social responsibility issues (Barber, Taylor, \& Dodd, 2009; Bucic et al., 2012; Eastman, Iyer, \& Thomas, 2013). Goldenberg (2005) defined this generation as people who prefer using Internet to shop rather than going for shopping themselves.

Nowadays, there are more than 1,7 billion millennials in the world (Nielsen, 2016), being the largest population group in the United States (DeVaney, 2015) and they are predicted to account for $30 \%$ of retail sales by 2020 (Knobler, 2015). In Portugal, $72 \%$ of Millennials still live with their parents, $92 \%$ browse the internet, $94 \%$ use the computer and $33 \%$ shop online (Correia et al., 2016). The Millennial generation will revolutionize consumer marketing thus, it is critical for companies to succeed in attracting them, in order to thrive (Barton, Koslow, \& Beauchamp, 2015). They possess an enormous access to information (Parment, 2013), but they do not make decisions on their own. In fact, they will ask their friends for an opinion (Eastman et al., 2013; Tapscott, 2009; Smith, 2012), and will search for online reviews of products and services before they purchase them (Schawbel, 2015). Actually, $42 \%$ of Millennials searches
for information from at least four different sources before purchasing from a new brand (Costa, 2015). Moreover, Millennials are considered to be experts in the newest products which makes them huge influencers on their household purchases. Millennials check their mobile phones about 43 times a day and, therefore, demand content to be synchronized between all channels (Knobler, 2015). Moreover, 69\% of Millennials visit retail sites and shop while using their smartphone (Mendonça, 2016) and sixty percent use mobile apps for grocery coupons or discounts, significantly higher than any other generation (Acosta, 2018). Nevertheless, 43\% of individuals under 30 years old still prefer to shop at physical stores (Hipersuper, 2011). This generation also shows a great interest for financial incentives (Persaud \& Azhar, 2012) and a greater risk acceptance (Sultan, Rohm, \& Gao, 2009), mainly because of their vast experience with the internet (Park \& Yang, 2006; Jayawardhena et al., 2009).

Millennials portrait shopping habits that are congruent with mobile marketing (Persaud \& Azhar, 2012) and, therefore, have a higher perceived value of its benefits, being more likely to respond to mobile marketing messages and trust in mobile contexts (Park \& Yang, 2006; Persaud \& Azhar, 2012). Perceived value (i.e., "consumer's overall assessment of the benefits of a product or service based on perceptions about what is received relative to what is given up") (Zeithaml, 1988) is the most important predictor of Millennials' intention to use mcoupons according to Persaud \& Azhar (2012). Rosenbloom (2009) found evidence that sending marketing messages through mobile phone had a negative impact on customers. On the other hand, Smith (2012) came to the conclusion that Millennials enjoy receiving coupons digitally, being the percentage of the discount the most important attribute found in a coupon for this generation (Spiekermann, Rothensee, \& Klafft, 2011).

### 2.3 Brand Equity

Brand, according to the definition given by the American Marketing Association, and that Kotler et al. (2013) refers to, is "a name, term, design, symbol, or any other feature that identifies the seller's goods or services as distinct from those of other sellers". Regarding brand equity, there is no consensus on one single definition, but the most trusted one was given by Aaker (1991), as "a set of assets and liabilities linked to a brand, its name and symbol, that adds to or subtracts from the value provided by a product or a service to a firm and/or to that firm's customers". Some researchers consider brands one of the most valuable assets a firm possesses.

There are several benefits for brands that come with a high brand equity, such as high consumer preference, purchase intention, purchase loyalty and even higher stock returns (D. A. Aaker \& Jacobson, 1994; Cobb et al., 1995). It can also affect long-term cash flows and future profits (Srivastava \& Shocker, 1991); consumer perceptions of product quality (Dodds et al.,
1991); stock prices (Simon \& Sullivan, 1993); emphasis on competitive advantage (Bharadwaj et al., 1993); mergers and acquisitions (Mahajan et al., 1994); market share (Agarwal \& Rao, 1996); and resilience to product-harm crisis (Dawar \& Pillutla, 2000).

From a consumer's point of view, a high brand equity enhances consumer's utility from the product/brand and it increases the product's credibility, reduces its perceived risk and customer's need to think before purchase the product (Erdem \& Swait, 1998).

Measuring brand equity is critical to guide and measure marketing decisions. The way it is measured varies from author to author, but the most recognized one is Aaker's (1991 \& 1996) conceptualizations of Consumer-Based Brand Equity, consisting on the following five dimensions: brand awareness (i.e. if consumers recognize or recall the brand), loyalty towards the brand, perceived quality, brand associations and market behaviour. Although the majority of the studies only focus on cognitive dimensions, Aaker (1991) includes an affective/emotional dimension by including attachment in the brand loyalty dimension.

From all the above dimensions mentioned, this paper will give an extra attention to Loyalty, Perceived Quality and Brand Associations.
$\mathbf{H}_{1}$ : The integration of Real Time Promotions enhances Pingo Doce's Brand Equity.

### 2.3.1 Loyalty

It appears to exist some disagreement over the concept of store loyalty - whether it is a measure of the number of store visits and quantity purchased or if it is the consumer's willingness to shop again in that store (do Vale et al., 2016). However, previous literature seems to agree on the factors that influence store loyalty, such as atmospherics, price, service quality, merchandising, private labels, loyalty programs and time pressure (Ghosh et al., 2010; Guéguen \& Petr, 2000; Maggioni, 2016; Martos-Partal \& González-Benito, 2013; Mattila \& Wirtz, 2001; Meyer-Waarden, 2015; Pan \& Zinkhan, 2006; Sethuraman \& Gielens, 2014; do Vale et al., 2016), while others add store image, physical facilities and technology to the list (Ghosh et al., 2010; Padhye \& Sangvikar, 2016), as well as, economic and hedonic benefits and thus critical patronage factors (Maggioni, 2016; Martos-Partal \& González-Benito, 2013; do Vale et al., 2016).

Store loyalty is also described as the presence of store attributes that are perceived as important for a given person (Mesquita \& Lara, 2007). Yet, it is important to understand how consumers perceive the importance of an attribute when measuring store loyalty and also
acknowledge that one single attribute is not sufficient by itself (Maruyama \& Wu, 2014). All these factors can represent satisfaction, which is proven to be an important attribute when determining store loyalty (Bloemer \& Lemmink, 1992).
"Millennials can be the most loyal customers, provided they are treated right and their needs are met" (Gurău, 2012; Schawbel, 2015). Customer Loyalty is "consumer's expression of a preference for a company as well as the intention to continue to purchase from it and to increase business with it in the future" (Kandampully et al., 2015). There are two types of loyalty, attitudinal and behaviour loyalty, whereas the first one is related to the way consumers feel and think about a brand (Malthouse \& Mulhern, 2007), the latter is the tendency individuals have to revisit the same store (Ailawadi, Pauwels, \& Steenkamp, 2008) and repeatedly buy there (Malthouse \& Mulhern, 2007) and operationalized as state dependence (van Heerde et al., 2008), which is observable in almost $75 \%$ of consumers (Rhee \& Bell, 2002). This happens due to the high costs most customers incur in by switching stores, being distance one of those costs (Bell, Ho, \& Tang, 1998). However, contrary to previous generations, Millennials are more likely to shop at different stores in order to get the best deals (low retailer loyalty) but, on the other hand, they seem to be loyal to manufacturer brands (Parment, 2013). Nonetheless, $85 \%$ of shoppers stick to the same set of stores, even if they visit others to take advantage of some complementarity goods (Gijsbrechts, Campo, \& Nisol, 2008) and, typically, have a higher affiliation to one main store (Rhee \& Bell, 2002).

Customer loyalty highly contributes for the improvement of a company's economic and competitive position (Kuo, Hu, \& Yang, 2013) and, when the competition is fierce, is when it is crucial to have that competitive advantage (Dick \& Basu, 1994). According to Reichheld \& Schefter (2000), a $5 \%$ increase in customer loyalty may be translated into a $30 \%$ increase in profitability, which means that customer's loyalty increases profits, since loyal consumers are more willing to pay higher prices. According to Liu \& Yang (2009), immediate promotions and discounts are part of a short-term loyalty program and are not focusing on long-term loyalty. So, in order to develop and sustain a long-term relationship with the customer, mobile marketing messages will need to be relevant, personalised and interactive (Achadinha, Jama, \& Nel, 2014).

### 2.4 Sales promotions

In the food industry, a large part of the retailer's budget is allocated to sales promotions (Low \& Mohr, 2000). Retailers see promotions as a way to attract consumers to the stores, once they can take advantage of their impulse buying behaviour and increasing value for money (Peattie \& Peattie, 1993). Promotions have an impact on how much, in what and when
consumers spend their money, being an attempt for companies to guide decision-making (Gupta, 1988). Sales promotions are nothing more than extra incentives, that can be monetary (price discounts, coupon, etc.) or non-monetary (premium, samples, contests and sweepstakes), to buy something (Buil, de Chernatony, \& Martínez, 2013). It allows manufacturers and retailers to differentiate their products from competitors (Kahn \& McAlister, 1997) while creating a favourable brand image in consumers' minds (Matteson, 1993) that will eventually translate in an increase in consumers' spending, since it stimulates unplanned behaviour (Abratt \& Goodey, 1990). Huang \& Sarigöllü (2012) proofed that it exists a positive correlation between promotions and brand awareness in consumer packaged goods.

Sales promotions have a positive impact on consumer's satisfaction with the retail store (Kashif \& Abdul Rehman, 2014). According to the framework developed by (Chandon et al., 2000) promotions provide utilitarian benefits, such as savings, access to better quality products at a lower price, convenience, decrease in consumer's search and decision costs, and hedonic benefits, like entertainment, exploration and increased self-esteem, being value expression both utilitarian and hedonic. However, monetary promotions have a more positive response when used in utilitarian products (Chandon et al., 2000).

Furthermore, it is common practice when one retailer incurs in sales promotions the others follow its behaviour, starting a "snowball" effect, in order to avoid losing market share and competitive advantage (Lal, 1990). In Portugal, 70 percent of consumers' purchases included at least one item with a price discount (Cristósomo, 2016) and 40 percent only chose a certain brand if it had a discount (Silva, 2016). So, it is crucial to understand the impact of in-store promotions on consumer awareness and how it affects the shopping experience, since customers' final purchase decision is made in the store (Keller, 2003).

### 2.4.1 Coupons

In 2016, the United States issued 307 billion coupons and only 2.2 billion were redeemed (Jones, 2017). From those coupons, 90.1 percent were distributed through freestanding inserts (FSIs) in newspapers. Although print couponing allows for a widespread distribution, companies incur in high costs and miss targeting effectiveness (Jung, Lee, \& Korea, 2010). With the emergence of new technologies, it is possible to perfect those parameters by allowing consumers to have their coupons in their smartphones. There are approximately 6.8 billion mobile phone subscribers in the entire globe, the equivalent to $96 \%$ of the world's population (mobiThinking, 2014). According to Anderson (2015), 45 percent of Americans have tablet computers and 68 percent have smartphones, in which they spend, on average, 4.7 hours per day (Bedgood, 2016).

In the U.S., 86 percent of people uses coupons to plan their shopping list (Carter, 2017), 31 percent of consumers choose a brand based on coupons they brought from home and 29 percent based on loyalty card discounts (IRi, 2016). The main reasons for consumers in the U.S. to use coupons are: "Because it allows me to buy the product I always use at a better price" ( 84 percent), "Because I get something for free" ( 57 percent), "Because I want to try a different product than usual at a better price" ( 40 percent), "Because otherwise I would not be able to afford the respective product/service" ( 27 percent), "Because I do not want the coupon to expire" (21 percent) and "Because I enjoy collecting coupons" ( 20 percent) (Statista, 2016).

On the other hand, the three main barriers to the usage of coupons pointed out by American consumers in 2016 were: "Coupons often expire before I have a chance to use them" ( 63 percent), "Cannot find coupons for the products that I want to buy" ( 63 percent) and "It takes too much time to find coupons" ( 63 percent) (Jones, 2017). According to the survey (Inmar, 2016) 46 percent of consumers would like that all coupons were digital and 62 percent wish coupons were sent to their mobile phone for products that they normally buy. In a different survey (Statista, 2016), 47 percent of respondents stated that they have saved mobile coupons for food on their smartphones or tablets.

Interestingly, within price promotions, consumers seem to prefer coupons rather than discounts (Chen et al., 1998). Coupons allow companies to do price discrimination, whereby deal-savvy consumers (Lichtenstein et al., 1990) or those willing and able to use coupons (Narasimhan, 1984) ultimately pay less for a given product than those who do not use them. Also, coupons increase incremental sales, this is, sales that would not have occurred without a coupon (Bawa \& Shoemaker, 1989; Leclerc \& Little, 1997).

### 2.4.1.1 M-Coupons

Mobile coupons are electronic tickets transmitted to smartphones that can be sent to consumers in a given time, context and location (Gao et al., 2013) and can be targeted, interactive and personalized (Hanley \& Boostrom Jr, 2011) and usually offer price discounts that must be redeemed before an expiration date. M-coupons allow consumers to easily organize, store, retrieve and redeem them (Banerjee \& Yancey, 2010), although some customers rise some concerns about their privacy (Park \& Yang, 2006), spam and misuse of personal information (Bauer et al., 2005), security, extra charges (Muk, 2012) and excess messaging (Newell \& Meier, 2007).

Usually, the redemption time for m-coupons is considerably shorter than for traditional coupons (Danaher et al., 2015). Previous literature has shown that traditional coupon features, like face value, still heavily contributes to m-coupon effectiveness, being snack food coupons
the most redeemed (Danaher et al., 2015). The same study found that m-coupons might allow stores to offer smaller discounts (lower face value) to consumers if the store is near them and the timing is right, meaning that m-coupons are all about time and place. Also, m-coupons are redeemed after 16 hours maximum, contrary to traditional coupons that are usually stored and redeemed later.

M-couponing also allows for a less visible redemption method, minimizing consumers' concerns regarding the social costs of coupon redemption (Kim \& Yi, 2016). Approximately one-ninth of people with a mobile phone demonstrate some willingness to respond to mcoupons. Given the huge number of mobile phone users, one-ninth is a worthwhile segment size to pursue.

### 2.4.2 Coupon Redemption

Coupon promotion effectiveness, depends on several factors like the willingness by the consumers to use the coupons (Guimond, Kim, \& Laroche, 2001). However, the strongest indicator is the extent to which someone is deal prone or a brand switcher (Chakraborty \& Cole, 1991). Another major factor is the attractiveness of the coupon offering (Swaminathan \& Bawa, 2005). Increased redemption has been linked to: coupon face value (Reibstein \& Traver, 1982), ease of redemption (Chakraborty \& Cole, 1991), short promotional periods (Lee \& Yeu, 2010), type of coupon or delivery vehicle, and whether the coupon is for a preferred brand or not (Bawa et al., 1997).

Consumer responses to promotions are also dependent on variables such as time pressure, occupation, and the cost of holding on to inventory (since consumers might not need in that exact moment what they are purchasing but, rather, want to take advantage of the economic gain associated for a limited time) (Henderson, 1994). Furthermore, the time and effort required to reach the retailer's store, influences consumers' likelihood of going there to redeem a coupon (Dickinger \& Kleijnen, 2008). Research has found a negative relationship between distance to the redemption location and redemption rate of coupons (Chiou-Wei \& Inman, 2008).

Numerous prior studies have shown that the propensity to redeem a coupon is higher for people who have redeemed before (Swaminathan \& Bawa, 2005). Bawa \& Shoemaker (1987) also found that consumers who are most likely to redeem coupons are those who are most likely to buy the brand in the first place. Prior research also shows that coupon redemption behaviour varies with the product category, which might be due to category characteristics, such as average price level, purchase frequency, coupon availability, and brand loyalty (Bawa \& Shoemaker, 1987). Coupon redemption also depends of the shopping motivation (hedonic vs.
utilitarian), product type (hedonic vs. utilitarian) and access convenience (close vs. far) (Khajehzadeh et al., 2014). Previous literature show that when the retailer offers a hedonic product, consumers' shopping motivation matters more, whereas when the retailer offers a utilitarian product, consumers' location dominates their redemption intentions (Khajehzadeh et. al., 2015).

Regarding m-coupons, consumers are more likely to redeem them if they are closer to the store. The day of the week is also relevant, with Monday and Thursday having the highest redemption rates, as well as mornings compared with other times of the day. Danaher et al. (2015) also found that the order effect has an impact on coupon redemption, whereby the first coupon received is the most likely to be redeemed.

For these reasons, researchers have seen consumers as utility maximizers who intentionally redeem coupons (Bagozzi, Baumgartner, \& Yi, 1992; Chandon, 1995; Mittal, 1994).

### 2.4.3 Coupon Prone Consumer Segment

It is crucial for Marketers to know which consumers are more prone to respond to their couponing efforts, so they can better target them (Argo \& Main, 2008; Mittal, 1994).

Regulatory focus theory states that people can be promotion-focused, pursuing ideals, desires and maximal outcomes, or prevention-focused, pursuing obligations, duties and satisficing levels of achievement (Higgins, 1997). When shopping, consumers have either hedonic (seek more enjoyment and pleasure in hunting for new items than merely buying prespecified products (Roy Dholakia, 1999)) or utilitarian (plan to accomplish their shopping tasks in an efficient and timely manner and then return to their routine activities) motivations (Kaltcheva \& Weitz, 2006). Utilitarian shoppers respond more positively to offers when redemption allows them to stay with their focal shopping motivations, contrary to hedonic shoppers that will respond favourably to offers even if they do not relate to their focal shopping goal (Khajehzadeh et al., 2015).

A stream of researchers identifies deal-prone consumers based on their demographic and psychographic traits and measure it by the frequency of purchases made (Blattberg et al., 1978). Older literature, characterized the profile of a typical coupon user as a household with higher than average income, several family members, and a stay at home female head with higher than average education (Teel et al., 1980; Narasimhan, 1984). Regarding the age of consumers who are more prone to coupon usage, previous literature did not found a consensus on the age interval, since it might vary depending on the product (Levedahl, 1988).

Lichtenstein et al., (1990 and 1995), looked beyond mere traits and defined deal proneness as "a general proneness to respond to promotions because they are in deal form", being deal proneness a psychological propensity to buy, not the actual purchase of goods on promotion (DelVecchio, 2005). Deal prone consumers worry about the costs of holding on to inventory and carefully compare the benefits with the costs when buying on promotions (R. C. Blattberg et al., 1981). Furthermore, deal prone consumers value the transaction utility rather than the acquisition utility associated with buying on deal (Lichtenstein, Netemeyer, \& Burton, 1990; Ramaswamy \& Srinivasan, 1998). They also seem to be concerned with immediate savings, reacting positively to promotional tools based on price reductions (R.C. Blattberg \& Neslin, 1990). Redeemers of low-value coupons tend to be highly coupon-prone consumers (Bawa \& Shoemaker), and are more attracted by in-store price discounts because they are in the form of a deal rather than simply offering a lower price (Lichtenstein et al., 1995).

Active deal-prone consumers are more sensitive to promotions, process more information outside the store environment (used in the decision making process) and conduct an intensive search to locate specific promotions (Schneider \& Currim, 1991). Consumers who are likely to react to promotions are more likely to be impulsive and less likely to use a shopping list (Lichtenstein et al., 1990). Previous literature considered impulsive buying behaviour as a buyer personality trait (Beatty \& Ferrell, 1998; Verplanken \& Herabadi, 2001), and characterized "impulsive buyers as "more likely to experience spontaneous buying stimuli; their shopping lists are more open and receptive to sudden, unexpected buying ideas" (Rook \& Fisher, 1995).

Deal proneness might also be used as a heuristic to simplify decisions, since high-prone consumers consider an offer attractive just by being in discount (Alford \& Biswas, 2002). According to DelVecchio (2005), high deal-prone consumers process the information along the peripheral route, while low deal-prone consumers process along the central route, that is why the presence of a deal is a sufficient condition to purchase. For this type of consumers, finding a lower price causes them to feel proud, smart, and competent (Lichtenstein et al., 1990; Völckner, 2008). Also, for deal-prone consumers, the hedonic aspects of promotions (i.e., shopping enjoyment and impulsiveness) are more salient than the economic benefits (i.e., absolute and relative savings) (Ailawadi et al., 2001).

Quality consciousness, brand loyalty, shopping enjoyment, price consciousness, and retailer loyalty are some characteristics that should be taken into account when analysing consumer's willingness to use coupons. Although deal proneness has been associated with low levels of loyalty (since they are looking for deals), recent research found that retailer loyalty is associated with a high level of deal proneness (Anic \& Radas, 2006).
$\mathbf{H}_{2}$ : The demographic profile of the consumers who would be interested in receiving this type of promotions differ from those who would not.

### 2.4.4 Face Value

The amount of the discount, also known as the "face value", is one of the most important characteristics in a coupon that contributes to its redemption (Bawa \& Shoemaker, 1987; Reibstein \& Traver, 1982). Obviously, the higher it is, the greater the likelihood of being redeemed. There are three major types of coupon face value (cents-off, percentage-off and reduced price) (Yin \& Dubinsky, 2004) but, for this particular study, only percentage-off and cents-off discounts will be addressed.

Ultimately, consumers have to decide when to stop their search for the best price and, a perfectly rational consumer should "continue to search until the expected gain from another search is less than its cost" (Stigler, 1987), by balancing the amount of money saved from an extra trip with the costs of that search (e.g., time and transportation). But traditional economic theory states that rational consumers should care about the absolute amount of money they will save when deciding where to buy (Stigler, 1987). However, it has been recognized by innumerable authors that consumer decisions are not always rational, which also applies to price decisions (Russell \& Thaler, 1985; Simon, 1953, 1986; Tversky \& Kahneman, 1974, 1987).

Kahneman \& Tversky (1984 and 1981), found that even when the total savings are the same, consumers are willing to make an extra trip to a further store just because the percentage discount is higher. In order to support those findings, Darke \& Freedman (1993) replicated this study using a computer simulation, and found that participants were sensitive to the amount of money saved, but also to the percentage of the discount, meaning that some value is placed on the percentage discount itself (Thaler, 1985).

Although it was expected that people know the existing market prices, previous studies suggest that consumers are inaccurate when estimating the price they pay for goods (Dickson \& Sawyer, 1990). Most consumers use the size of the percentage discount as a heuristic cue to help decide whether a better price was likely to be found elsewhere, specifically if the percentage discount is very high (e.g., $70 \%$ off the base price) it is possible to assume that this is the best price, making consumers stop their search (Darke \& Freedman, 1995). But, consumers only relied on this cue when the initial base price of the item was low. For items that
were relatively expensive, search was continued despite of the existence of a high percentage discount, due to the potential costs of missing a better price (Darke \& Freedman, 1995).

Cents-off coupons, contrary to percentage-off discounts, provide consumers with the explicit savings realized from the coupon and do not require consumers to calculate the savings, decreasing consumers' cognitive efforts. Consequently, consumers may interpret the value of a cents-off coupon differently from a percentage-off coupon and thus prefer the former to the latter. For new and no price information products, consumers are likely to have difficulty evaluating the actual face value of percentage-off coupons (Chakraborty \& Cole, 1991).

Nevertheless, a low (vs. no) price discount can lower purchase propensity of low-priced products when purchases are nonessential and purchase volume is small (Grewal, Monroe, \& Krishnan, 1998). However, this boomerang effect reverses when purchase volume is larger or when the purchase is essential (Cai, Bagchi, \& Gauri, 2016).

Chen et al. (1998) found that the relative attractiveness of a discount promotion is determined not only by the absolute amount of the savings, but also by the price of the product. When it is a high-priced product, consumers value more explicit promotions, so cents-off coupons should be used, since consumers believe it is a better deal than the equivalent percentage off discount. On the other hand, for a low-priced product, the percentage off discount seemed more attractive than the equivalent amount in cents-off (Yin \& Dubinsky, 2004)

Therefore, the following hypothesis was developed:
$\mathbf{H}_{3}$ : Consumers are more likely to redeem a m-coupon for low-priced products in percentage-off and for high-priced products in cents-off.

### 2.4.5 Expiration Date

The expiration date of a coupon has proved to be crucial for its redemption, with over 99 percent of coupons having a fix expiration date (Krishna \& Zhang, 1999). A considerably amount of previous studies has tried to determine how a coupon's expiration date might affect its effectiveness (Trump, 2016) and how time pressure can be used as a competitive marketing strategy (Krishna \& Zhang, 1999).

Coupons can have a short expiration date or a longer duration. Short-duration coupons translate into faster sales and long-duration coupons into higher total sales (Food \& Beverage Marketing, 1991). Short coupon duration is also linked to higher sales for consumerpreferred firms (Krishna \& Zhang, 1999). Large market share firms tend to give short-duration
coupons, because they have few new buyers to attract, that probably have bought the product even if it was not with a promotion, while small market share firms usually give long-duration coupons, in order to attract more customers (Krishna \& Zhang, 1999). This means that expiration dates might be used as a strategic variable to change the mix of buyers of a certain firm (Krishna \& Zhang, 1999).

Inman and McAlister (1994) found that coupons are more likely to be redeem shortly after being dispensed and just before they expire. Hence, when a coupon's expiration date approaches, consumers develop a psychological "coupon redemption pressure" associated with the expiration date (Inman \& McAlister, 1994). Consequently, manufacturers have been decreasing the duration of their coupons over time (Krishna \& Zhang, 1999), although consumers feel like most coupons expire too quickly (Inmar, 2016).

### 2.5 Limited Time Offers

Time-limited offers are based on a psychological principle called scarcity (Cialdini, 2009) and generally refer to offers which last for only the immediate period of negotiation in which the customer is advised that the price will not be available at a later date (Ahmetoglu et al., 2014). Individuals tend to assign more value to opportunities/items when they are (or are becoming) less available, because things that are difficult to obtain are typically more valuable (Lynn, 1989), and the availability of an item can serve as a short-cut cue to its quality. Also, people are more motivated by the thought of losing something than by the thought of gaining something of equal value, and the threat of potentially losing something plays a very powerful role in decision-making (Tversky \& Kahneman, 1981).

Lynn (1991) found a strong and reliable positive relationship between scarcity and value perceptions. Other studies also found that time pressure or time constraints can increase consumers' perceptions of value (Vermeir \& Van Kenhove, 2005), and driving their choice to high quality/low risk brands (Nowlis, 1995). Inman et al., (1997) concluded that imposing a restriction (e.g. time limit) on a product, consistently increased the choice probability and the perceived deal value for the product. However, this only happened when the discount was high (either $20 \%$ or $50 \%$ ). When the discount was low ( $5 \%$ ), restrictions were rated lower in value and produced lower purchase intentions than no restriction condition, meaning that, discount level (whether high or low) can moderate the effect of restrictions.

Swain et al. (2014) found that shorter time limits create a greater sense of urgency, thereby leading to higher purchase intentions. To conclude, limited time offers trigger feelings
of scarcity and consumers are more likely to overestimate the product quality, or the value of the deal. It also lowers consumers intentions to search, and increases their willingness to buy.

### 2.6 Real Time Promotions

"The ability to observe real time behaviour - from delivery of promotion to purchase is being heralded as the "data nirvana" for marketers and retailers using the mobile channel" (Salz, 2013). Mobile has revolutionized the retail landscape, giving retailers unprecedented opportunities to target consumers by their geolocation data and then send them push notifications with coupons, promotions or other targeted offers, providing immediate relevancy and value to customers (Bedgood, 2016). Since smartphones are a personal item, it can trigger an immediate response from consumers as a response to advertising (Danaher et al., 2015).

According to a survey conducted by Accenture (2016), consumers use their smartphones a great deal when shopping and desire to receive real-time promotions from retailers on their smartphone device and want the ability to credit coupons and discounts automatically. According to Jones (2017), "instant redeemable coupons" were the most preferred method of coupon redemption by consumers. Nevertheless, only $7 \%$ of retailers worldwide offer that (eMarketer, 2016).

Also, previous literature shows that unexpected situational factors have a major influence on food purchase decisions and that the majority of supermarket purchases are unplanned (Närhinen et al., 2000). Hui et al. (2013) demonstrated that sending promotions via mobile phone to consumers in-store increased their unplanned purchases.

Also, a study conducted by beacon platform Swirl (2014) found that 73 percent of shoppers who received a beacon-triggered message on their smartphone said it increased their likelihood of making a purchase during a store visit, and 61 percent said the message would make them visit the store more often, while 30 percent of shoppers redeemed beacon-triggered offers at the point of purchase.

### 2.7 Impulsive Purchase Behaviour

Since impulsive buying behaviour can be categorized as unplanned but unplanned buying cannot always be categorized as an impulsive purchase (Kollat \& Willett, 1969), the present study will focus on analysing only the impulsive purchase behaviour.

Impulsiveness is considered both a basic human trait and a general consumer characteristic (Rook and Fisher, 1995), that is triggered inside a store. A promotional stimulus, can generate a sudden and spontaneous urge to purchase a given product. Some consumers are more impulsive buyers than others and respond affirmatively and immediately to their buying
impulses (Vohs \& Faber, 2007). Impulsive behaviour should receive increased attention since, among purchases resulting from in-store decision making (unplanned and impulsive), impulsive purchases are the ones having a heavier impact on retailers' profits (Baumeister, 2002).

There are several drivers of impulsive purchases, such as, money and time availability, consumers' age, the purpose of the shopping trip and consumers' own buying impulsiveness trait (Stern, 1962). Amos and colleagues (2014) divided these factors into three categories: dispositional - "chronic characteristics that reside with the individual" and do not differ much across situations -, situational - "external factors influencing the impulsive purchases" -, and demographic factors. The dispositional category is composed of consumers' Impulsive Buying Trait (Rook and Fisher, 1995), psychographic traits as personality and lifestyle, consumers' need for touch and shopping enjoyment (Mohan et al., 2013). The situational category might be composed by a marketing stimulus, a specific store product assortment or shopping' time and/or financial constraint, being social influence the most relevant factor triggering impulsive purchases (Rook and Fisher, 1995). Affective states (e.g. mood) and hedonic purchasing motives (hedonic vs. utilitarian involvement) were also shown to have an impact on impulsive purchases (Figure 1) (Vohs and Faber, 2007). Regarding demographic factors, gender (Vohs and Faber, 2007), age, ethnicity and income (Mohan et al., 2013) have shown to influence shoppers' impulsive buying behaviour.

Amos and colleagues (2013) proved that externalities (situational factors) and individual traits (dispositional factors) have the greatest influence on impulsive purchases, being IBT (Impulsive Buying Trait) the principal factor driving impulse buying behaviour. Sociodemographic factors were proven to be least related to impulse buying. The factors that prove to inhibit this behaviour were shoppers' price consciousness, self-control and monitoring.


Figure 1: Antecedents of impulse buying (Amos et al., 2009)

By using a push mobile marketing strategy with an attractive m-coupon to consumer's cell phone, retailers' aim that the coupon triggers impulse purchase behaviours (Leppäniemi \& Karjaluoto, 2005), since mobile promotions with unplanned categories that are farther from a consumer's planned purchase path can increase unplanned in-store spending (Hui et al., 2013).

In conclusion, there are clear opportunities to research further the introduction of Real Time Promotions in the supermarket sector and to analyse its effects on coupon conversion, impulsive buying behaviour and retailer's brand equity.


Figure 2: Conceptual Framework

## Chapter 3: Methodology and Data Collection

The present methodology section was developed to gather primary data to help confirming the hypothesis developed previously. In order to allow a deeper understanding of the hypothesis outlined, qualitative and quantitative data was collected.

### 3.1 Sample of study

This dissertation aims to examine the effect of Real Time Promotions on coupon redemption and retailer's brand equity. Hence, the population of interest are individuals who go to the supermarket and know Pingo Doce, since this study is applied to this specific retailer.

### 3.2 Qualitative Data

In order to understand the underlying reasons and motivations for the collected answers, seven in-depth interviews were conducted. Qualitative data allows to better interpret the quantitative results and uncovers subconscious information that is not observable through a simple questionnaire ( N. Malhotra \& Birks, 2007a). The interviewees were both male and female (three male and four female) aged between 21 and 75 years old to ensure a greater variety of opinions. All the participants selected usually go to the supermarket and know Pingo Doce (Appendix C for In-deph Interviews General Guidelines).

### 3.3 Quantitative Data

In terms of quantitative research, an online survey was conducted to gather insights on consumers' perceptions and equity towards Pingo Doce, their acceptance to promotions and coupons and also to measure their willingness to use Real Time Promotions in the form of digital coupons. There are several advantages in using online surveys, such as, its low cost, the speed on collecting answers and the large number of representative cases, enabling the author to generalise the results to the population (N. Malhotra \& Birks, 2007b). A clear disadvantage is the impossibility to clarify certain answers and the fact that the survey is not answered in a controlled environment, which allows respondents to quit the survey before finishing it or answering to the questions randomly.

The survey was pre-tested by 10 individuals to ensure all questions were clear and easy to answer, and to make sure no further adjustments were needed. The survey was composed by 6 sections: 1. Screening Question, 2. Shopping Habits, 3. Brand Equity and Perceptions about Pingo Doce, 4. Coupons Manipulation, 5. Brand Equity and Perceptions about Pingo Doce after introducing Real Time Promotions, and 5. Demographic Questions. The survey was made
available on the $12^{\text {th }}$ of May and closed on May $18^{\text {th }}$. A total of 465 responses were collected, among which 151 were incomplete, and 12 were answered by respondents that never went groceries shopping, making a total of 302 valid answers.

### 3.4 Measures

The survey started with a screening question to ensure all respondents have gone, at least once, to the supermarket, so that their opinion is meaningful to the present study. The second section, was aimed at analysing consumer's shopping habits, namely their coupon usage and the attributes consumers valued the most when choosing a store in a 5-point Likert scale (e.g., "Proximity", $1=$ not at all important; $5=$ extremely important). Consumer's awareness about Pingo Doce was also tested. In the third section, consumers were asked about how well they know Pingo Doce in a scale from 0 (not at all) to 100 (extremely well). They were also asked to indicate their perceptions about Pingo Doce's attributes in a 5 -point Semantic Differential Scale (e.g. Cheap - Expensive) and to state their level of agreement with several statements about coupons, consumers' shopping behaviour and Pingo Doce, in order to observe Brand Equity on a 7-point Likert scale (e.g., "I trust Pingo Doce", $1=$ strongly agree; 7=strongly disagree). The scale was inspired by previous literature and adapted to fit in a supermarket context. Consumers' preferred retailer was also asked.

In the fourth section, the possible introduction of Real Time Promotions was tested by starting to ask if consumers would be interested in receiving this type of promotions and whether they would go more often to Pingo Doce for that reason. After that, four coupons (from a total of 12 coupons), one for each product (bread, meat, cookies and shampoo) were randomized and attributed to each respondent. The coupons had two different price levels - high (meat and shampoo) and low (bread and cookies) - and six discount levels - percentage-off $(10 \%, 25 \%$ and $50 \%)$ and cents-off ( $0,25 €, 0,50 €$ and $1 €$ ) (see figure 3 ). Respondents were told to imagine they received the coupons while entering the store and did not need any of those products, in order to see if they would still use them anyway. They had to indicate their willingness to redeem each coupon by selecting one of the boxes ( $1=$ extremely unlikely; 5=extremely likely).

In the fifth section, the question about Pingo Doce's perceptions (from the previous section) was repeated in order to assess if consumers' brand equity had changed as well as their overall perception of Pingo Doce and their willingness to go there if Real Time Promotions existed. Lastly, Demographics were collected in the sixth and final section, in order to profile the sample of study.


Figure 3: Coupons

## Chapter 4: Results Analysis

### 4.1 Survey Data Description

The general sample is composed of 302 individuals who completed the survey and belong to the target population. The great majority of respondents were Portuguese (96.4\%) women ( $69.2 \%$ ) and had between 18 and 24 years old ( $59.9 \%$ ). Most respondents were single ( $73.5 \%$ ) and still lived with their parents ( $53.3 \%$ ). Regarding education, the majority of respondents had a bachelor degree ( $48 \%$ ) and a high school diploma ( $30.8 \%$ ). Most of them were students (52.7\%) or were already employed (32.1\%). Lastly, the average monthly household income was almost evenly distributed, but the interval with the highest percentage was $501 €-1500 €$ with $20.9 \%$, although the majority of respondents preferred not to disclose that information (22.2\%).

### 4.2 Shopping Behaviour Characterization

Regarding Shopping Habits, most respondents go to the supermarket alone (45\%) either twice a week ( $37,6 \%$ ) or once a week ( $29 \%$ ). Specially to Pingo Doce, most consumers go once a month ( $29.8 \%$ ), but a large percentage also goes once a week ( $23.2 \%$ ). The preferred retailer of the majority of respondents is Pingo Doce (38,7\%) followed by Continente (37,7\%) and Lidl (9,6\%).

The majority of respondents buy, most of times, products in promotion (50,7\%) and, according to consumers' perceptions, Continente has the best promotions $(44,4 \%)$ followed by Pingo Doce $(39,1 \%)$. Consumers use their mobile phone at the supermarket mainly to do nothing related with groceries shopping (54\%), consult the shopping list ( $48,7 \%$ ) and check for the available coupons ( $24,2 \%$ ).

The majority of respondents use coupons sometimes ( $38,4 \%$ ), and 66,6 percent prefer to receive them electronically through the retailer's app ( $31,8 \%$ ). Although $90 \%$ of individuals answered that the main reason they use coupons is because it allows them to buy the product they always buy at a better price $(90,1 \%)$, an interesting $7 \%$ claims that one of the reasons is because they do not want the coupon to expire. Regarding the reasons that prevent them to use coupons, the most cited were "Cannot find coupons for the products that I want to buy" $(66,2 \%)$ and "Coupons often expire before I have a chance to use them" $(53,5 \%)$. It was also possible to see that the percentage of the discount is not the most important attribute for consumers but rather its expiration date and the ease of redemption.

Most people would be extremely interested or very interested in receiving Real Time Promotions ( $68,6 \%$ ) and $74,2 \%$ would go more often to Pingo Doce if they have these
promotions (Graph 1). Also, $54.3 \%$ of consumers who usually go to another retailer said they would definitely or maybe start going to Pingo Doce if it had Real Time Promotions and 24.5\%, who consider Pingo Doce their favourite retailer, would enjoy it even more if it had these promotions, making a total of $78.8 \%$ of people who would value this new way of interacting with the brand.


Figure 4: "Willingness to go more often to Pingo Doce if it had Real Time Promotions"

### 4.3 In-depth Interviews

In order to see if there is a potential opportunity for introducing Real Time Promotions in the Portuguese market, namely in Pingo Doce's stores, besides analyzing previous research and implementing a survey, some exploratory research involving potential target consumers has been conducted in order to help designing the survey.

## Shopping Behaviour

The participants above 30 years old go to the supermarket at least once a week and usually alone, while younger interviewees tend to go fewer times and with their parents. Interviewees stated that they usually buy products in promotion regardless of its category, although, some of them said that they do not look if the product is on promotion or not. In order to redeem a coupon, respondents said that the percentage should be attractive and the products must be interesting (this is, a product they already use to buy or a product they never bought but would like to try). However, some respondents stated that for low-priced products, small percentage discounts are irrelevant and if they really need the product they would take it even if it is not in promotion. Nevertheless, some respondents said that they would wait until the product is on promotion if they do not need it urgently. Interviewees tend to use coupons and some actively look for them while others just use the coupons they already have. The preferred
method to receive the coupons was through the retailer's app and the reasons stated were "Because it is more convenient and easier to use" and "I do not need to worry if I forget them because I know where to find them".

Some participants use their mobile phone at the supermarket, either to check the coupons available or to see the shopping list, except for older generations. They believe that technology is and will became even more important at the supermarket, since a great part of our activities are becoming digital, and supermarkets have to adapt to the new trends. They said, "it can facilitate the access to information and transform a boring activity into something fun". Continente was the unanimous choice when asked about which supermarket had the best promotions and/or promotional strategy. Nevertheless, Pingo Doce was pointed as being their favourite retailer due to the freshness of their products, the quality of the private label and the location of their stores. While some prefer their bigger stores because of the wide assortment, others prefer the smaller ones since they do not spend much time and can do all the shopping quicker. Respondents also stated that Pingo Doce is not as technologically advanced as Continente.

## Topic Introduction - Real Time Promotions

Interviewees were very interested in these promotions and some said that maybe, even if the discount is not so attractive, they would redeem the coupon anyway because "it is a waste not to use it". They also said that it feels like the promotions are exclusive for them which makes them feel special and increases their likelihood of redemption. Participants said that Portuguese retailers should implement Real Time Promotions in their stores because "it is convenient and exciting to see which coupons we will get in every visit". When asked, interviewees did not state a specific product category that could be more suitable for these promotions and said that they would like to receive a maximum of five coupons per visit. Finally, some interviewees said they would feel pressured to redeem the coupons because they want to take advantage of the promotion while others said they would not feel pressured once they would only redeem the coupon if they like or need the product.

### 4.4 Hypothesis Analysis

Before proceeding to the actual analysis, the Cronbach's Alpha was computed, in order to verify the constructs' validity and reliability (Malhotra, 2010). Since all values are above 0.75 , the Cronbach's Alpha is considered acceptable to continue this investigation.

| Brand Equity elements | N of items | Cronbach's Alpha |
| :--- | :---: | :---: |
| Loyalty | 6 | 0.912 |
| Perceived Quality | 5 | 0.896 |
| Brand Associations | 4 | 0.764 |

Table 1 - Cronbach's Alpha

### 4.4.1 Hypothesis 1

$\mathbf{H}_{1}$ : The integration of Real Time Promotions enhances Pingo Doce's Brand Equity.

In order to analyse if a change in Brand Equity has occurred, the same statements were shown before and after respondents had the knowledge of the possibility of Pingo Doce introducing Real Time Promotions in their stores. It is noticeable a general increase in satisfaction (in this case, a decrease in the mean) when comparing the two means with a Paired Sample T-Test, which means that the simple idea of having this type of promotions changes the perception people have about Pingo Doce, for the better. Only three statements were not statistically significant ( p -value $>0.05$ ), while in the others we reject the null hypothesis that the means are equal.

|  | Please state your level of agreement with following statements about Pingo Doce (1=Strongly Agree; 7=Stronsly Disagree). | $\begin{gathered} \text { Q19 - Brand } \\ \text { Equity (Before } \\ \text { RTP) } \end{gathered}$ | $\begin{gathered} \text { Q37 - Brand } \\ \text { Equity (After } \\ \text { RTP) } \end{gathered}$ | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Statements: | Mean | Mean | P -value | Statistically Different? |
| $\begin{aligned} & \frac{z}{\mathrm{~N}} \\ & \frac{3}{3} \end{aligned}$ | I love Pingo Doce | 3.67 | 3.07 | 0.000 | YES |
|  | I would recommend Pingo Doce to my friends | 3.03 | 2.74 | 0.000 | YES |
|  | I say nice things about Pingo Doce | 3.09 | 2.70 | 0.000 | YES |
|  | I trust Pingo Doce | 2.89 | 2.89 | 0.951 | NO |
|  | Even if competitors' stores were more conveniently located, I would still go to a Pingo Doce store | 4.91 | 3.85 | 0.000 | YES |
|  | Pingo Doce really cares about me | 4.15 | 3.65 | 0.000 | YES |
| $\begin{aligned} & \text { 믈 } \\ & \frac{z}{3} \\ & \frac{3}{3} \\ & \frac{3}{0} \end{aligned}$ | Pingo Doce store image is very good | 3.34 | 3.12 | 0.000 | YES |
|  | The service quality is extremely high | 3.48 | 3.19 | 0.000 | YES |
|  | Pingo Doce's private label is very good | 2.95 | 2.89 | 0.286 | NO |
|  | Pingo Doce has a good price/quality relationship | 2.80 | 2.79 | 0.896 | NO |
|  | Pingo Doce's products have high quality | 2.96 | 2.85 | 0.000 | YES |
|  | Pingo Doce has the lowest prices | 3.58 | 3.31 | 0.000 | YES |
|  | Pingo Doce has a lot of promotions and discounts | 3.24 | 2.84 | 0.000 | YES |
|  | Pingo Doce's promotions are better than competitors | 4.08 | 3.47 | 0.000 | YES |
|  | Pingo Doce is technologically more advanced than competitors | 4.57 | 3.37 | 0.000 | YES |

Table 2 - Brand Equity

### 4.4.2 Hypothesis 2

$\mathbf{H}_{2}$ : The demographic profile of the consumers who would be interested in receiving this type of promotions differ from those who would not.

In order to test the hypothesis proposed, eight ANOVA tests were conducted, where the dependent variable was consumers' interest in receiving this type of promotions and the independent variables were the demographic measures. Some of the parameters, namely Age, Nationality, Marital Status, Education and Occupation were recoded into different variables in order to better aggregate some of the answers.

Regarding Gender, there is no significant difference between the two groups, since we do not reject the null hypothesis that the means are equal (Brown-Forsythe $F(1,152)=3.113$, $p$ value $=0.08>0.05$ ), meaning that Gender does not have an impact on consumers' interest in receiving these promotions. Regarding Age, we reject Ho (F $(5,296)=5.997$, pvalue $=0.00<0.05$ ), which allow us to assume that Age has an impact on consumers' interest in receiving RTP. As we can observe, younger generations, mainly between 18 to 24 years old $(\mathrm{M}=1.85)$, are the most interested in receiving these promotions, while older respondents ( $>55$ ) are the least interested ( $\mathrm{M}=3.05$ ).

On the other hand, we do not reject the null hypothesis between Portuguese and other nationalities (Brown-Forsythe $\mathrm{F}(1,10)=2.335$, p -value $=0.156>0.05$ ), which means that Nationality does not define whether consumers might or might not be interested in receiving these promotions. When it comes to Marital Status, we reject that the means are equal $(F(2,299)=6.012$, $p$-value $=0.003<0.05)$. Single consumers are the most interested in receiving Real Time Promotions ( $\mathrm{M}=1.93$ ) and divorced/separated respondents are the least interested (mean=2.53). For Family Aggregate, we also reject the null hypothesis (Brown-Forsythe $\mathrm{F}(4,129)=3.585$, p-value $=0.008<0.05)$, meaning that Family Aggregate is statistically significant. Respondents who live with their parents are the ones with a bigger interest for these promotions (mean $=1.82$ ), and consumers who live alone $(\mathrm{M}=2.39)$ are the least interested.
Regarding Education, we do not reject the null hypothesis that the means are equal (BrownForsythe $\mathrm{F}(2,160)=1.386$, p -value $=0.253>0.05$ ), which indicates that education does not play a major role in the interest to receive these promotions.

Regarding Occupation, we reject $\mathrm{Ho}(\mathrm{F}(4,297)=3.983$, p-value $=0.004<0.05)$, meaning that it influences whether consumers enjoy or not receiving these promotions. Students and Unemployed consumers $(\mathrm{M}=1.86)$ are the ones most interested in receiving these promotions, while Retired respondents $(\mathrm{M}=3.00)$ are the less interested. Income does not influence the
interest in receiving Real Time Promotions, since we cannot reject the null hypothesis that the means are equal (Brown-Forsythe $F(7,221)=1.064$, $p$-value $=0.387>0.05$ ). (See Table 3).

| Demographics |  | N | Mean (1=extremely interested; 5=not interested at all) | Std. Deviation | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | Male | 93 | 2.24 | 1.219 | 3.113* | 0.080* |
|  | Female | 209 | 1.98 | 1.024 |  |  |
| Age | <18 | 11 | 2.09 | 1.221 | 5.997 | 0.000 |
|  | 18-24 | 181 | 1.85 | . 977 |  |  |
|  | 25-34 | 32 | 2.16 | 1.081 |  |  |
|  | 35-44 | 30 | 2.27 | 1.081 |  |  |
|  | 45-54 | 27 | 2.37 | 1.214 |  |  |
|  | >55 | 21 | 3.05 | 1.244 |  |  |
| Nationality | Portuguese | 291 | 2.03 | 1.069 | 2.335* | 0.156* |
|  | Other | 11 | 2.73 | 1.489 |  |  |
| Marital Status | Married | 61 | 2.38 | 1.186 | 6.012 | 0.003 |
|  | Divorced/Separated | 19 | 2.53 | 1.219 |  |  |
|  | Single | 222 | 1.93 | 1.029 |  |  |
| Family Aggregate | Alone | 46 | 2.39 | 1.220 | 3.585* | 0.008* |
|  | With parents | 161 | 1.82 | . 914 |  |  |
|  | With girlfriend/boyfriend/ wife/husband | 38 | 2.29 | 1.250 |  |  |
|  | With your children | 16 | 2.25 | 1.183 |  |  |
|  | With your spouse and children | 41 | 2.34 | 1.217 |  |  |
| Education | High school graduate or less | 101 | 1.93 | 1.022 | 1.386* | 0.253* |
|  | Bachelor degree | 145 | 2.08 | 1.028 |  |  |
|  | Master degree or more | 56 | 2.25 | 1.338 |  |  |
| Occupation | Student | 159 | 1.86 | . 951 | 3.983 | 0.004 |
|  | Employed | 98 | 2.29 | 1.193 |  |  |
|  | Unemployed | 7 | 1.86 | 1.215 |  |  |
|  | Working student | 31 | 2.19 | 1.223 |  |  |
|  | Retired | 7 | 3.00 | 1.000 |  |  |
| Income | < 500€ | 25 | 1.60 | . 816 | 1.064* | 0.387* |
|  | 501-1500€ | 63 | 2.19 | 1.268 |  |  |
|  | 1501-2000€ | 36 | 2.08 | 1.025 |  |  |
|  | 2001-2500€ | 30 | 1.90 | . 845 |  |  |
|  | 2501-3000€ | 20 | 2.30 | 1.261 |  |  |
|  | 3001-4000€ | 29 | 2.10 | 1.145 |  |  |
|  | >4000€ | 32 | 2.13 | 1.040 |  |  |
|  | Prefer not to disclose | 67 | 2.04 | 1.079 |  |  |

Table 3 - ANOVA for Hypothesis 2
*Levene's p-value is lower than 0.05 , so we cannot look at the ANOVA's table, but instead to the Brown-Forsythe test.

Looking at the LSD table (Appendix L), it is noticeable the main differences between the groups. Statistically significant mean differences are flagged with an asterisk (*). For example, there is a bigger difference in the willingness to redeem RTP between respondents aged less than 18 years old and older than 55 (mean score of 0.957 points less), the ones aged between 18 and 24 years old and the ones aged more than 35 years old, the ones aged from 25 to 34 with the ones older than 55 (mean score of 0.891 points less), the ones aged from 35 to 54 with the ones between 18 to 24 years old and with the ones older than 55 . Consumers with more than 55 differ from all groups. Regarding Marital Status, the main differences are between Married and Single (mean score of 0.445 points higher) and Single and Divorced/Separated consumers (mean score of 0.594 points less).

Concerning Family Aggregate, consumers who live alone have a bigger difference with the ones who live with their parents (mean score of 0.571 points higher), meaning that, consumers who live with parents are the most willing to receive RTP while the ones who lives alone are the least interested. For consumers who live with their parents, their willingness to receive RTP differs the most with consumers who live alone, with their girlfriend/boyfriend/wife/husband (mean score of 0.470 points less) and with their spouse and children (mean score of 0.522 points less). Who lives with children does not differ significantly of any group and who live with their spouse and children differ the most with who lives with parents (mean score of 0.522 points higher).

Regarding Occupation, Students differ in the interest to receive RTP the most with employed (mean score of 0.424 points less) and retired consumers (mean score of 1.138 points less). Employed consumers differ the most from students; unemployed consumers from retired consumers (mean score of 1.143 points less) and working students do not differ from any specific group.

| Demographics | Profile of consumers <br> who are most interested <br> in receiveing RTP | Profile of consumers <br> who are least interested <br> in receiving RTP |
| :--- | :---: | :---: |
| Gender | Not relevant | Not relevant |
| Age | $18-24$ | $>55$ |
| Nationality | Not relevant | Not relevant |
| Marital Status | Single | Divorced/Separated |
| Family Aggregate | Live with parents | Live alone |
| Education | Not relevant | Not relevant |
| Occupation | Students | Retired |
| Income | Not relevant | Not relevant |

Table 4 - Profile of the consumers who are the most and the least interested in receiving RTP

### 4.4.3 Hypothesis 3

$\mathbf{H}_{3}$ : Consumers are more likely to redeem a m-coupon for low-priced products in percentage-off and for high-priced products in cents-off.

In order to properly answer to this question, four ANOVA tests, one for each coupon category (Bread, Cookies, Meat and Shampoo), were performed. Regarding Bread, we cannot reject the null hypothesis $(\mathrm{F}(2,299)=2.339$, p -value $=0.098)$, meaning that there is no statistical difference between coupon percentage and coupon redemption. Concerning the Meat coupon, we reject the null hypothesis $(\mathrm{F}(2,299)=11.592$, p -value $=0.000)$, which indicates that the coupon percentage for meat influences whether consumers redeem or not the coupon. We also reject the null hypothesis for the Cookies $(\mathrm{F}(2,299)=4.280$, p -value $=0.015$ ) and Shampoo coupons (Brown-Forsythe $\mathrm{F}(2,293)=12.626$, p -value $=0.000$ ), meaning that coupon percentage influences coupon redemption.

Looking at the table below, we can observe that the probability of redemption increases with the amount of the discount, except for the Bread coupon, which is not statistically significant.

We can also observe that consumers are more likely to redeem the coupons in percentage-off for low-priced products $\left(\mathrm{M}_{\text {Bread }(\%)}=3.12\right.$ vs. $\left.\mathrm{M}_{\text {Cookies }(\epsilon)}=2.95\right)$ and, again, in percentage-off for high-priced products $\left(\mathrm{M}_{\text {Meat }(\%)}=3.45\right.$ vs. $\left.\mathrm{M}_{\text {Shampoo( }()}=2.75\right)$. We can also observe that consumers do not just redeem the coupons for the most expensive items (Meat and Shampoo) but also the coupons for everyday products (Bread and Cookies).

In conclusion, consumers are more likely to redeem a coupon in percentage-off despite it is a low or high-priced product.


Table 5 - ANOVA for Hypothesis 3
*Levene's test is $<0.05$, so we cannot look at the ANOVA's table, but instead to the Brown-Forsythe test.

## Chapter 5: Conclusion and Further Research

### 5.1 Conclusions

The first hypothesis was that the integration of Real Time Promotions positively impacted Pingo Doce's Brand Equity. After conducting the necessary statistical analysis, it was found that, in fact, brand equity was enhanced, so $\mathrm{H}_{1}$ was accepted. This means that implementing Real Time Promotions will bring Pingo Doce several benefits such as a higher consumer preference, purchase intention, purchase loyalty and consumer perceptions of product quality that might, for instance, increase market share.

Findings were also consistent with the second hypothesis formulated that proposed that the demographic profile of the consumers who would be interested in receiving this type of promotions differ from those who would not. In general, consumers who would prefer to receive these promotions are mainly students aged less than 18 to 34 years old, which is precisely younger generations, like Generation Z and Millennials, who portrait shopping habits that are congruent with mobile marketing and have a higher perceived value of its benefits, being more likely to respond to mobile marketing messages and trust in mobile contexts (Park \& Yang, 2006; Persaud \& Azhar, 2012) as seen on the literature. On the other hand, older consumers, aged above 55 years old and retired people demonstrate less desire to receive RTP. Single consumers who live with their parents, contrary to divorced/separated people who live alone, are more willing to receive these promotions which, again, is consistent with previous literature, since consumers that portrait those characteristics tend to be younger. Gender, Nationality, Education and Income showed not to be relevant when analysing consumer's willingness to receive RTP, although this might be due to the lack of respondents' diversity. These insights give Marketers some guidance to whom they should direct their communication strategy upon the implementation of Real Time Promotions that, in this case, is to young adults (18-24 years old).

From the literature review, it was expected that consumers were more likely to redeem a m-coupon for low-priced products in percentage-off and for high-priced products in centsoff. Although it is true for low-priced products, the same is not true for high-priced products, that are also most likely to be redeemed in percentage-off. This may be justified by the fact that in the supermarket prices are not high enough, but rather relatively low. Also, the discounts were not equivalent so perhaps comparing the $10 \%$ Bread coupon with the $0,25 €$ Cookies coupon could have biased the results. The same could have happened for the rest of the coupons.

Regarding the survey, an interesting 7\% claimed that one of the reasons they use coupons is because they do not want them to expire, meaning that people are "afraid" of losing
a good deal opportunity, which is great for retailers if they implement RTP, since limited-time offers can stoke that sense of urgency and that impulse to purchase. Younger respondents also stated that Pingo Doce is not as technologically advanced as Continente, and with these instant promotions, Pingo Doce could change that perception.

Despite the fact that there is a lot of interest in using coupons, $53.5 \%$ of the respondents let them expire before they have a chance to use them. This can be explained by the fact that the face value of the coupon may not be good enough to compensate for the costs of going to the store; consumers do not like the products in the coupons; they forget about it or just did not had the time to use them. So, with the implementation of RTP, some of these reasons cease to exist, which eventually will lead to an increase in the redemption rate of the coupons.

Although this technology (Bluetooth, NFC and GPS) already exists for several years, it is not very seen, at least in the Portuguese market. A possible reason for this might be the fact that consumers that are able and willing to use this technology (younger Millennials and Generation $Z$ ) only now are starting to go to the supermarket, meaning that this might be the right time to market.

### 5.2 Limitations and Future Research

There are several limitations that should be outlined. First, a Field Experiment should have been done in order to verify if the conclusions reached in the online survey matched with a real shopping environment. That would allow us to have a greater external validity and more natural responses, since it was only assessed coupon redemption intentions and not actual behaviour. Second, the responses collected in the survey might not be sufficiently representative of all the population being the demographic dimension biased, since there is a higher percentage of single female respondents aged between 18 to 24 years old. So, for future research, a larger and more representative sample of the Portuguese population should be analysed.

Third, there is a downside of doing an online survey, which is not being able to control for the environment, which might allow respondents to answer to the questions randomly. Also, since coupon scenarios utilized in this research are limited in terms of product type, product price, and the amount of the discount, further research is needed for the generalizability of findings. It would be also interesting to compare the redemption rate for coupons of well-known brands versus private label products and between current buyers of the brand and non-buyers.

Regarding the redemption rate of the coupons, although it is not low, it could be higher. As we have seen on the literature review, coupon redemption effectiveness depends on several factors like the willingness by the consumers to use the coupons (Guimond et al., 2001), whether someone is deal prone or a brand switcher (Chakraborty \& Cole, 1991), the attractiveness of the coupon offering (Swaminathan \& Bawa, 2005), and so on. In this case, respondents might not have liked the products that were on the coupons manipulated in the survey, which might have biased the responses and, the fact that it was asked consumers to state their willingness to redeem the coupons imagining they did not need any of the products, might have influenced redemption. Also, the product itself might have influenced the hypothesis outcome, since it was not compared directly the Bread coupon in percentage-off with the Bread coupon in cents-off but with Cookies. And bread is a product that is more likely to be redeemed by a greater number of consumers and a greater number of times than cookies. The same may have happened between meat and shampoo.

Regarding Future Research, the benefits of electronic coupons can be investigated more in-depth as a method to reduce the negative social consequences of coupon redemption, since it is less visual to others. Furthermore, it could be worthwhile to manipulate impression management and visibility by varying the scenario, such as whether one is shopping alone or with friends. Real Time Promotions might also allow retailers to offer m-coupons with a lower
face value without decreasing its redemption rate, since consumers do not incur in travel costs to take advantage of these promotions, given that the coupons are delivered in the store and have a short expiration date, helping signalling time urgency. Nevertheless, further research should be done. This dissertation also provides practical implications for ways to facilitate coupon redemption. Compared with traditional paper coupons, electronic coupons are regarded as being less visible to others. Thus, by providing electronic coupons, managers can relieve consumers' concerns regarding the social costs of coupon redemption (Kim and Yi, 2016). However, marketers should understand potential privacy concerns resulting from the collection of customers' location information necessary for such technologies to operate. In order to alleviate privacy concerns, retailers should, where possible, use permission-based pull mobile marketing strategies, such that customers opt-in only when they wish to receive the offers (Dennis et al., 2009). So, further research on these topics should be done.

Also, it would be worthwhile to see if promotion-focused people will have a higher interest and adhesion to RTP than prevention-focused consumers. Since utilitarian shoppers respond more positively to offers when redemption allows them to stay with their focal shopping motivations (according to the literature review), they can have higher redemption rates for products they need and that are more tailored to them. On the other hand, hedonic shoppers might respond more favourably to offers even if they do not relate to their focal shopping goal, which makes them more susceptible to redeem RTP and incur in unplanned shopping, since they take pleasure in hunting for new items than merely buying pre-specified products.

Further research should also be conducted for personalized promotions. By using the loyalty card, it is possible to gather sufficient knowledge about customers' shopping patterns, namely their baskets, which can be used to provide personalized discounts to each individual. By doing that, manufacturers can take advantage of being shielded from competitive retaliations due to their exclusive sponsor arrangements. So, it would be interesting to test for personalized coupons, since consumers are demanding a unique customer experience and retailers must adapt by using customer-centric strategies over mass-market strategies. In the survey, $66,2 \%$ of respondents stated that they cannot find coupons for the products that they want to buy, so personalized coupons would solve that. Also, interviewees said that the products offered in the coupons must be interesting for them, this is, it must be a product they already use to buy or a product they never bought but would like to try. So, personalized coupons would give consumers these exclusive promotions on products they like or might like.

It would be also interesting to explore if sending a notification with a coupon to consumers when they show interest in a given product (if they spend a lot of time in the same
aisle - through location-based beacon technology) would increase coupon redemption. This would represent micro-marketing at the finest level and leverage retailer's loyalty.

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## Appendix

Appendix A - Questionnaire Guidelines
*Há uma opção no canto superior direito para alterar o idioma do questionário, caso necessite*

Dear participant,
Thank you very much to take the time to answer this survey as part of my Master Thesis for Católica Lisbon. The study is about Real Time Promotions. The survey takes a maximum of $\mathbf{1 0}$ minutes to complete. There are no right or wrong answers, so it is extremely important to answer honestly to all the questions. The survey is anonymous and all your answers are strictly confidential and will be used for study purpose only.

A $\mathbf{2 5 €}$ voucher in FNAC will be drawn. Just insert your email at the end of the survey if you want to have a chance to win!

Thank you very much for your collaboration!
Sofia Mimoso

1. How often do you go to the supermarket?

- Everyday
- Twice a week
- Once a week
- Every two weeks
- Once a month
- Never

2. With whom do you usually go to the supermarket?

- Alone
- With friends
- With parents
- With girlfriend/boyfriend/wife/husband
- With children

3. How often do you buy products in promotion?

- Always
- Most of the time
- About half the time
- Sometimes
- Never

4. How often do you use coupons at the supermarket?

- Always
- Most of the time
- About half the time
- Sometimes
- Never

5. In which form do you prefer to receive your coupons?

- Printed coupons
- Electronic coupons

6 . How do you prefer to receive your coupons?

- E-mail
- Mail box
- Mobile message
- Newspaper/Magazine
- Retailer's App
- Other

7. How often do you use your mobile phone at the supermarket?

- Always
- Most of the time
- About half the time
- Sometimes
- Never
7.1. What for? (you can choose more than one answer)
- Consult the shopping list
- Search for product's information
- Compare prices
- Search for better deals
- Check for the available coupons
- Nothing related with grocery shopping
- Other

8. Please rank the most important characteristics in a coupon for you by dragging the answers in your preferred order (where 1 is the most important and 5 is the least important).

- Long expiration date (1)
- The product itself (2)
- It's a promotion! (3)
- Ease of redemption (4)
- Percentage of the discount (5)

9. What are the main reasons for you to use coupons? (You can pick more than one answer)

- "Because it allows me to buy the product I always use at a better price"
- "Because I get something for free"
- "Because I want to try a different product than usual at a better price"
- "Because otherwise I would not be able to afford the respective product/service"
- "Because I do not want the coupon to expire"
- "Because I enjoy collecting coupons"
- "Other"

10. What are the main reasons that prevent you from using coupons? (You can pick more than one answer)

- "Coupons often expire before I have a chance to use them"
- "Cannot find coupons for the products that I want to buy"
- "It takes too much time to find coupons"
- "I don't understand how they work"
- "I don't like to be seen by others using a coupon"
- Other

11. Classify the following attributes according to how important they are for you when choosing a store ( $1=$ Not at all important; $5=$ Extremely important ).

## Proximity

Price
Product Quality
Service
Atmosphere
Private Label
Loyalty Programs (card and advantages associated)
Technologically Advanced
Store Image

| 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- |
| o | o | o | o | o |
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Sales Promotions
Wide Assortment
Available Parking
12. When thinking about supermarkets, what are the first three that come to your mind?

First:
Second:
Third:
13. Please select, in your opinion, which supermarket has the best promotions.

- Pingo Doce
- Continente
- Minipreço
- Intermarché
- Lidl
- Jumbo
- Outro

14. Think of everything you have heard, seen or experienced. How well do you know Pingo Doce? ( 0 - "Not at all"; 100 - "Extremely well")

15. How often do you go to Pingo Doce?

- Everyday
- Twice a week
- Once a week
- Every two weeks
- Once a month
- Never

16. Please indicate how you perceive the following attributes of Pingo Doce. Pingo Doce is...

17. Please state your level of agreement with the following statements.

|  | Neither <br> agree |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Strongly <br> agree | Agree | Somewhat <br> agree | Somewhat <br> disagree | Strongly <br> disagree | Disagree <br> disagree |  |
| I use coupons to <br> plan my shopping <br> list | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| I choose a brand <br> based on the <br> coupons I have | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


|  | Strongly agree | Agree | Somewhat agree | Neither agree nor disagree | Somewhat disagree | Disagree | Strongly disagree |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I tend to redeem coupons near the expiration date | o | o | o | o | o | o | o |
| Using coupons makes me feel smart | o | o | o | o | o | o | o |
| Using coupons makes me feel "cheap" | o | o | o | o | o | o | o |
| Pingo Doce should have coupons | o | o | o | o | o | o | o |
| I shop at different stores to take advantage of other promotions | o | o | o | o | o | o | o |
| Products that are on promotion have lower quality | o | o | o | o | o | o | o |
| Most of the times I buy the brand that is on deal | o | o | o | o | o | o | o |
| I feel observed when redeeming a coupon | o | o | o | o | o | o | o |

18. Please state your level of agreement with the following statements.

|  | Neither <br> agree |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Strongly <br> agree | Agree | Somewhat <br> agree | nisagree <br> disagrat | Somewhat <br> disagree | Strongly <br> Disagree <br> disagree |  |
| I am an impulsive <br> person | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| I plan ahead what I <br> am going to buy | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| I care more about <br> others than myself | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Shopping is fun | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| I usually buy <br> things that weren't | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


|  | Strongly agree | Agree | Somewhat agree | Neither agree nor disagree | Somewhat disagree | Disagree | Strongly disagree |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| on my shopping list |  |  |  |  |  |  |  |
| I care about what others think about me | o | o | o | o | o | o | o |
| I like to work in a team | o | o | o | o | o | o | o |
| I buy as much products on deal as I can | o | o | o | o | o | o | o |
| The cheapest products are usually my choice | o | o | o | o | o | o | o |
| Please answer: "Neither agree nor disagree" | o | o | o | o | o | o | o |
| I identify myself with Pingo Doce | o | o | o | o | o | o | o |
| I have Pingo <br> Doce's loyalty card | o | o | o | o | o | o | o |
| 19. Please state your level of agreement with the following statements about Pingo Doce. |  |  |  |  |  |  |  |
|  | Strongly agree | Agree | Somewhat agree | Neither agree nor disagree | Somewhat disagree | Disagree | Strongly disagree |
| I love Pingo Doce | o | o | o | o | o | o | o |
| I would recommend Pingo Doce to my friends | o | o | o | o | o | o | o |
| I say nice things about Pingo Doce | o | o | o | o | o | o | o |
| I trust Pingo Doce | o | o | o | o | o | o | o |
| I consider myself to be loyal to Pingo Doce | o | o | o | o | o | o | o |
| Pingo Doce is the supermarket I go the most to | o | o | o | o | o | o | o |

Neither
agree
Strongly Somewhat nor Somewhat Strongly agree Agree agree disagree disagree Disagree disagree
Even if
competitors' stores were more conveniently located, I would still go to a Pingo Doce store

Pingo Doce store image is very good The service quality is extremely high

Pingo Doce's private label is very good

Pingo Doce's products have high quality
Pingo Doce has a good price/quality relationship
Pingo Doce has the lowest prices
Pingo Doce has a wide assortment offer

Pingo Doce has a lot of promotions and discounts

Pingo Doce's promotions are better than competitors
Pingo Doce really cares about me

I have a Pingo
Doce store next to me

Pingo Doce is technologically more advanced than competitors

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20. What is your preferred retailer?

- Pingo Doce
- Continente
- Jumbo
- Lidl
- Intermarché
- Minipreço
- Outro

21. 

Imagine you are at Pingo Doce store and as soon as you enter the store you receive a notification on your mobile phone with a few coupons that are only available that day and only for that shopping trip (this is, when you leave the store, the coupons are no longer available).
22. Would you be interested in receiving this type of promotions?

- Extremely interested
- Very interested
- Moderately interested
- Slightly interested
- Not interested at all

23. Would you go more often to Pingo Doce if they had these Real Time Promotions?

- Extremely likely
- Somewhat likely
- Neither likely nor unlikely
- Somewhat unlikely
- Extremely unlikely

24. 

Let's suppose that these are the coupons you received, and you didn't need to buy any of the products (bread, meat, cookies nor shampoo). How likely are you to redeem the following coupons?

Randomized (randomly assign one bread coupon)
25. Coupon: $10 \%$ discount in any bread

Extremely Somewhat Neither likely nor unlikely unlikely unlikely Somewhat likely Extremely likely o o
o
o
o
26. Coupon: $25 \%$ discount in any bread

| Extremely | Somewhat | Neither likely nor |  |  |
| :---: | :---: | :---: | :---: | :---: |
| unlikely | unlikely | unlikely | Somewhat likely | Extremely likely |
| o | o | o | 0 | $o$ |

27. Coupon: $50 \%$ discount in any bread

| Extremely | Somewhat | Neither likely nor |  |  |
| :---: | :---: | :---: | :---: | :---: |
| unlikely | unlikely | unlikely | Somewhat likely | Extremely likely |
| 0 | $o$ | $o$ | 0 | 0 |

Randomized (randomly assign one meat coupon)
28. Coupon: $10 \%$ discount in any meat

| Extremely | Somewhat | Neither likely nor |  |  |
| :---: | :---: | :---: | :---: | :---: |
| unlikely | unlikely | unlikely | Somewhat likely | Extremely likely |
| o | o | 0 | 0 | 0 |

29. Coupon: $25 \%$ discount in any meat

| Extremely | Somewhat | Neither likely nor |  |  |
| :---: | :---: | :---: | :---: | :---: |
| unlikely | unlikely | unlikely | Somewhat likely | Extremely likely |
| 0 | $o$ | $o$ | 0 | 0 |

30. Coupon: $50 \%$ discount in any meat

| Extremely | Somewhat | Neither likely nor |  |  |
| :---: | :---: | :---: | :---: | :---: |
| unlikely | unlikely | unlikely | Somewhat likely | Extremely likely |
| o | $o$ | $o$ | 0 | $o$ |

Randomized (randomly assign one cookie coupon)
31. Coupon: $0.25 €$ in any cookies

| Extremely | Somewhat | Neither likely nor |  |  |
| :---: | :---: | :---: | :---: | :---: |
| unlikely | unlikely | unlikely | Somewhat likely | Extremely likely |
| 0 | $o$ | $o$ | $o$ | 0 |

32. Coupon: $0.50 €$ in any cookies

| Extremely | Somewhat | Neither likely nor |  |  |
| :---: | :---: | :---: | :---: | :---: |
| unlikely | unlikely | unlikely | Somewhat likely | Extremely likely |
| 0 | $o$ | 0 | 0 | 0 |

33. Coupon: $1 €$ in any cookies

| Extremely | Somewhat | Neither likely nor |  |  |
| :---: | :---: | :---: | :---: | :---: |
| unlikely | unlikely | unlikely | Somewhat likely | Extremely likely |
| 0 | 0 | 0 | 0 | 0 |

Randomized (randomly assign one shampoo coupon)
34. Coupon: $0.25 €$ in any shampoo

| Extremely | Somewhat | Neither likely nor |  |  |
| :---: | :---: | :---: | :---: | :---: |
| unlikely | unlikely | unlikely | Somewhat likely | Extremely likely |
| 0 | $o$ | $o$ | 0 | 0 |

35. Coupon: $0.5 €$ in any shampoo

| Extremely | Somewhat | Neither likely nor |  |  |
| :---: | :---: | :---: | :---: | :---: |
| unlikely | unlikely | unlikely | Somewhat likely | Extremely likely |
| 0 | $o$ | $o$ | 0 | 0 |

36. Coupon: $1 €$ in any shampoo

| Extremely | Somewhat | Neither likely nor |  |  |
| :---: | :---: | :---: | :---: | :---: |
| unlikely | unlikely | unlikely | Somewhat likely | Extremely likely |
| 0 | 0 | 0 | 0 | 0 |

37. Having in mind this new feature of Pingo Doce's stores - Real Time Promotions (as soon as you enter the store you receive a notification on your mobile phone with some coupons to be used only during that shopping trip) - please state your level of agreement with the following statements about Pingo Doce.

|  | Strongly agree | Agree | Somewhat agree | Neither agree nor disagree | Somewhat disagree | Disagree | Strongly disagree |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I love Pingo Doce | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| I would recommend Pingo Doce to my friends | 0 | 0 | 0 | 0 | O | 0 | 0 |
| I would say nice things about Pingo Doce | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| I trust Pingo Doce | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Even if competitors' stores were more conveniently | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


|  | Strongly agree | Agree | Somewhat agree | Neither agree nor disagree | Somewhat disagree | Disagree | Strongly disagree |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| located, I would still go to a Pingo Doce store |  |  |  |  |  |  |  |
| Pingo Doce's store image is very good | 0 | 0 | 0 | 0 | O | 0 | O |
| The service quality is extremely high | 0 | 0 | 0 | 0 | 0 | O | O |
| Pingo Doce private label is very good | 0 | 0 | 0 | 0 | 0 | O | O |
| Pingo Doce's products have high quality | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pingo Doce has a good price/quality relationship | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pingo Doce has the lowest prices | 0 | 0 | 0 | 0 | 0 | O | O |
| Pingo Doce has a lot of promotions and discounts | 0 | 0 | 0 | 0 | 0 | O | 0 |
| Pingo Doce's promotions are better than competitors | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pingo Doce really cares about me | 0 | 0 | 0 | 0 | 0 | O | O |
| Pingo Doce is technologically more advanced than competitors | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| My overall impression of Pingo Doce has improved | 0 | O | 0 | 0 | O | O | O |

38. Would you start going to Pingo Doce, instead of your preferred retailer, if they had these Real Time Promotions?

- Yes, definitely
- Maybe
- No, I would still prefer to go to my favourite one
- Pingo Doce is already my preferred supermarket and I would enjoy it even more if it had Real Time Promotions
- Pingo Doce is already my preferred supermarket and these Real Time Promotions would not change anything
- Pingo Doce is already my preferred supermarket but I do not like these Real Time Promotions

39. 

## Demographics:

40. Gender

- Male
- Female

41. Age

- Under 18
- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- Over 65

42. Nationality

- Portuguese
- German
- French
- Italian
- Other

43. Marital Status

- Married
- Widowed
- Divorced
- Separated
- Single

44. Family Aggregate (do you live...)

- Alone
- With parents
- With girlfriend/boyfriend/wife/husband
- With your children
- With your spouse and children

45. Education (highest level completed)

- Secondary school
- High school graduate
- Bachelor degree
- Master degree
- Doctorate
- Other

46. Occupation

- Student
- Employed
- Unemployed
- Working student
- Retired
- Part-time job

47. Monthly household income

- < $500 €$
- 501-1500€
- 1501-2000€
- 2001-2500€
- 2501-3000€
- 3001-4000€
- >4000€
- Prefer not to disclose

48. Did you have any technical problem during the survey?

- No
- Yes $\qquad$

49. E-mail

We thank you for your time spent taking this survey. Your response has been recorded.

## Appendix B - In-depth Interviews General Guidelines

## I. Introduction

"Thank you for participating in this interview. This interview is about Real Time Promotions and I would like to hear your opinion about this topic. There are no right or wrong answers and all responses will remain anonymous."

## II. Interviewees Demographics

- Gender
- Age
- Marital Status
- Education
- Occupation


## III. Shopping Habits ( $\mathbf{2 5}$ minutes)

- How often do you go to the supermarket?
- With whom do you usually go?
- Do you usually buy products in promotion? What kind of products?
- What are the characteristics that a coupon must have in order for you to redeem it?
- Do you tend to redeem coupons for the products you already know or do you use them to try new ones?
- Would you wait for the product you want until it is on promotion?
- Do you usually use coupons? If no, why not?
- Do you actively look for coupons?
- How do you prefer to receive your coupons? Why?
- Do you use your mobile phone at the supermarket? What for?
- Do you think that technology is important when you are at the supermarket? Why?
- For you, which supermarket has the best promotions and/or promotional strategy? What do you think of their promotions?
- What is your preferred retailer? Why?
- What do you think about Pingo Doce?


## IV. Topic Presentation - Real Time Promotions (20 minutes)

"The idea is the following: as soon as you enter the store you receive a notification on your mobile phone with a few coupons that are only available that day and only for that shopping trip (this is, when you leave the store, the coupons are no longer available). And, every time you enter the store you have new coupons available for you to use."

1. What do you think about these promotions?
2. Do you think Portuguese retailers should implement this Real Time Promotions in their stores?
3. Would you use them? Why or why not?
4. For which products do you think they are more relevant?
5. How many coupons would you like to receive in every visit?
6. Do you think that because it is a Real Time Promotion you will feel somehow pressured to redeem the coupons because you are afraid of missing out on the discounts?

Appendix C - SPSS Output: Demographics Characterization

| Gender | Frequency | Valid Percentage |
| :---: | :---: | :---: |
| Male | 93 | $30,80 \%$ |
| Female | 209 | $69,20 \%$ |
| Total | 302 | $100 \%$ |



| Age | Frequency | Valid Percentage |
| :---: | :---: | :---: |
| Under 18 | 11 | $3,60 \%$ |
| $18-24$ | 181 | $59,90 \%$ |
| $25-34$ | 32 | $10,60 \%$ |
| $35-44$ | 30 | $9,90 \%$ |
| $45-54$ | 27 | $8,90 \%$ |
| $55-64$ | 16 | $5,30 \%$ |
| Over 65 | 5 | $1,70 \%$ |
| Total | 302 | $100 \%$ |




| Marital <br> Status | Frequency | Valid <br> Percentage |
| :---: | :---: | :---: |
| Married | 61 | $20,20 \%$ |
| Divorced | 15 | $5,00 \%$ |
| Separated | 4 | $1,30 \%$ |
| Single | 222 | $73,50 \%$ |
| Total | 302 | $100 \%$ |




| Occupation | Frequency | Valid Percentage |
| :---: | :---: | :---: |
| Student | 159 | $52,60 \%$ |
| Employed | 97 | $32,10 \%$ |
| Unemployed | 7 | $2,30 \%$ |
| Working Student | 31 | $10,30 \%$ |
| Retired | 7 | $2,30 \%$ |
| Part-time job | 1 | $0,30 \%$ |
| Total | 302 | $100 \%$ |



| Monthly Household Income | Frequency | Valid Percentage |
| :---: | :---: | :---: |
| $<500 €$ | 25 | $8,30 \%$ |
| $501-1500 €$ | 63 | $20,90 \%$ |
| $1501-2000 €$ | 36 | $11,90 \%$ |
| $2001-2500 €$ | 30 | $9,90 \%$ |
| $2501-3000 €$ | 20 | $6,60 \%$ |
| $3001-4000 €$ | 29 | $9,60 \%$ |
| $>4000 €$ | 32 | $10,60 \%$ |
| Prefer not to disclose | 67 | $22,20 \%$ |
| Total | 302 | $100 \%$ |



Appendix D - SPSS Output: Shopping Habits Characterization

| Shopping <br> Frequency | Frequency | Valid Percentage |
| :---: | :---: | :---: |
| Everyday | 30 | $9,60 \%$ |
| Twice a week | 118 | $37,60 \%$ |
| Once a week | 91 | $29 \%$ |
| Every two weeks | 40 | $12,70 \%$ |
| Once a month | 23 | $7,30 \%$ |
| Never | 12 | $3,80 \%$ |
| Total | 314 | $100 \%$ |



| With whom do you usually <br> go to the supermarket? | Frequency | Valid <br> Percentage |
| :---: | :---: | :---: |
| Alone | 136 | $45 \%$ |
| With friends | 18 | $6 \%$ |
| With parents | 96 | $31,80 \%$ |
| With girlfriend/boyfriend <br> /wife/husband | 44 | $14,60 \%$ |
| With children | 8 | $2,60 \%$ |
| Total | 302 | $100 \%$ |
| 等 |  |  |



| How often do you <br> buy products in <br> promotion? | Frequency | Valid <br> Percentage |
| :---: | :---: | :---: |
| Always | 43 | $14,20 \%$ |
| Most of the time | 153 | $50,70 \%$ |
| About half of the <br> time | 49 | $16,20 \%$ |
| Sometimes | 55 | $18,20 \%$ |
| Never | 2 | $0,70 \%$ |
| Total | 302 | $100 \%$ |



| How often do you <br> use your mobile <br> phone at the <br> supermarket? | Frequency | Valid <br> Percentage |
| :---: | :---: | :---: |
| Always | 63 | $20,90 \%$ |
| Most of the time | 86 | $28,50 \%$ |
| About half of the <br> time | 21 | $7 \%$ |
| Sometimes | 106 | $35,10 \%$ |
| Never | 26 | $8,60 \%$ |
| Total | 302 | $100 \%$ |



| What for? (you can choose more <br> than one answer) | Frequency | Percentage* <br> $(\mathbf{N}=446)$ | Valid Percentage <br> $(\mathbf{N}=302)$ |
| :---: | :---: | :---: | :---: |
| Consult the shopping list | 147 | $48.7 \%$ | $33 \%$ |
| Compare prices | 29 | $9.6 \%$ | $7 \%$ |
| Search for better deals | 21 | $7 \%$ | $5 \%$ |
| Check for the available coupons | 73 | $24.2 \%$ | $16 \%$ |
| Nothing related with grocery | 163 | $54 \%$ | $37 \%$ |
| shopping | 13 | $4.3 \%$ | $3 \%$ |
| Other | 446 | - | $100 \%$ |
| Total |  |  |  |

* The percentage of people who chose that reason.

Appendix E - SPSS Output: Coupon Usage

| Coupons Usage | Frequency | Valid <br> Percentage |
| :---: | :---: | :---: |
| Always | 29 | $9,60 \%$ |
| Most of the time | 75 | $24,80 \%$ |
| About half of the time | 19 | $6,30 \%$ |
| Sometimes | 116 | $38,40 \%$ |
| Never | 63 | $20,90 \%$ |
| Total | 302 | $100 \%$ |



| In which form do <br> you prefer to <br> receive your <br> coupons? | Frequency | Valid <br> Percentage |
| :---: | :---: | :---: |
| Printed coupons | 101 | $33,40 \%$ |
| Electronic coupons | 201 | $66,60 \%$ |
| Total | 302 | $100 \%$ |


| How do you prefer to <br> receive your <br> coupons? | Frequency | Valid <br> Percentage |
| :---: | :---: | :---: |
| E-mail | 60 | $19,90 \%$ |
| Mail box | 63 | $20,90 \%$ |
| Mobile message | 70 | $23,20 \%$ |
| Newspaper/Magazine <br> Retailer's App | 8 | $2,60 \%$ |
| Other | 96 | $31,80 \%$ |
| Total | 302 | $1,70 \%$ |
|  |  | $100 \%$ |


$\left.$| What are the main reasons for you to use coupons? <br> (You can pick more than one answer) | Frequency | Percentage** |
| :---: | :---: | :---: | :---: |
| (N=491) |  |  | | Valid |
| :---: |
| Percentage |
| (N=302) | \right\rvert\,


| What are the main reasons that prevent you from using coupons? (You can pick more than one answer) | Frequency | $\begin{aligned} & \text { Percentage* } \\ & \text { (N=432) } \end{aligned}$ | Valid Percentage $(\mathrm{N}=302)$ |
| :---: | :---: | :---: | :---: |
| "Coupons often expire before I have a chance to use them" | 161 | 53.5\% | 37\% |
| "Cannot find coupons for the products that I want to buy" | 200 | 66.2\% | 46\% |
| "It takes too much time to find coupons" | 41 | 13.6\% | 9\% |
| "I don't understand how they work" | 12 | 4\% | 3\% |
| "I don't like to be seen by others using a coupon" | 3 | 1\% | 1\% |
| "Other" | 15 | 5\% | 3\% |
| Total | 432 | - | 100\% |


| Importance of coupon <br> characteristics (1=most important; <br> 5=least important) | N | Minimum | Maximum | Mean | Std. <br> Deviation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of the discount | 302 | 1 | 5 | 2.17 | 0,961 |
| Long expiration date | 302 | 1 | 5 | 3.77 | 1,182 |
| The product itself | 302 | 1 | 5 | 1.91 | 1,163 |
| It's a promotion! | 302 | 1 | 5 | 3.46 | 1,443 |
| Ease of redemption | 302 | 1 | 5 | 3.69 | 1,042 |

Appendix F - SPSS Output: Retailer's Analysis

| Preferred Retailer | Frequency | Valid <br> Percentage |
| :---: | :---: | :---: |
| Pingo Doce | 117 | $38,70 \%$ |
| Continente | 114 | $37,70 \%$ |
| Jumbo | 19 | $6,30 \%$ |
| Minipreço | 3 | $1 \%$ |
| Lidl | 29 | $9,60 \%$ |
| Intermarché | 1 | $0,30 \%$ |
| Outro | 19 | $6,30 \%$ |
| Total | 302 | $100 \%$ |



| In your opinion, <br> which supermarket <br> has the best <br> promotions? | Frequency | Valid <br> Percentage |
| :---: | :---: | :---: |
| Pingo Doce | 118 | $39,10 \%$ |
| Continente | 134 | $44,40 \%$ |
| Jumbo | 10 | $3,30 \%$ |
| Minipreço | 11 | $3,60 \%$ |
| Lidl | 24 | $7,90 \%$ |
| Outro | 5 | $1,70 \%$ |
| Total | 302 | $100 \%$ |



| How often do <br> you go to Pingo <br> Doce? | Frequency | Valid <br> Percentage |
| :---: | :---: | :---: |
| Everyday | 11 | $3,60 \%$ |
| Twice a week | 53 | $17,50 \%$ |
| Once a week | 70 | $23,20 \%$ |
| Every two <br> weeks | 49 | $16,20 \%$ |
| Once a month | 90 | $29,80 \%$ |
| Never | 29 | $9,60 \%$ |
| Total | 302 | $100 \%$ |



|  | 5 |  | 3 |  |
| :---: | :---: | :---: | :---: | :---: |
| Supermarket | First | Second | Third | Score* |
| Continente | 123 | 119 | 29 | 1001 |
| Pingo Doce | 120 | 94 | 39 | 921 |
| Lidl | 15 | 31 | 100 | 268 |
| Jumbo | 17 | 16 | 53 | 186 |
| Minipreço | 2 | 10 | 36 | 76 |
| Intermarché | 3 | 6 | 8 | 41 |
| El Corte Inglês | 5 | 2 | 5 | 36 |
| Aldi | 1 | 7 | 7 | 33 |
| Auchan | 1 | 3 | 1 | 15 |
| Eleclerc | 2 | 1 | 1 | 14 |
| Outros | 3 | 2 | 7 | 28 |
| Nulo | 10 | 11 | 16 | 99 |
| Total | 302 | 302 | 302 | 2718 |

* Overall score to measure awareness: if being the first supermarket to be recalled is worth 5 points, the second 3 and the third 1 point.

| Pingo Doce is... | N | Minimum | Maximum | Mean | Std. <br> Deviation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| _..cheap...expensive | 302 | 1 | 5 | 2.72 | 0.876 |
| ...dishonest...honest <br> _..an unsuccessful brand...a <br> successful brand | 302 | 1 | 5 | 3.51 | 1.043 |
| ...for people with lower <br> income...for people with higher <br> income | 302 | 1 | 5 | 3.99 | 1.115 |
| ...not good value for money...good <br> value for money | 302 | 1 | 5 | 2.78 | 0.725 |
| ...not sophisticated...sophisticated | 302 | 1 | 5 | 3.70 | 0.917 |
| ...traditional...modern | 302 | 1 | 5 | 3.13 | 0.888 |
| ...boring...exciting | 302 | 1 | 5 | 2.88 | 0.865 |
| ..for people with lower level of <br> education...for people with higher <br> level of education | 302 | 1 | 5 | 2.88 | 0.622 |
| ...for younger people...for older <br> people | 302 | 1 | 5 | 3.06 | 0.672 |

Appendix G - SPSS Output: Coupon Manipulation

| Coupon: $10 \%$ <br> discount in any <br> bread | Frequency | Valid <br> Percentage |
| :---: | :---: | :---: |
| Extremely unlikely | 15 | $14,60 \%$ |
| Somewhat unlikely | 30 | $29,10 \%$ |
| Neither likely nor <br> unlikely | 16 | $15,50 \%$ |
| Somewhat likely | 35 | $34 \%$ |
| Extremely likely | 7 | $6,80 \%$ |
| Total | 103 | $100 \%$ |



| Coupon: $25 \%$ <br> discount in any <br> bread | Frequency | Valid <br> Percentage |
| :---: | :---: | :---: |
| Extremely unlikely | 13 | $12,70 \%$ |
| Somewhat unlikely | 23 | $22,50 \%$ |
| Neither likely nor <br> unlikely | 9 | $8,80 \%$ |
| Somewhat likely | 39 | $38,20 \%$ |
| Extremely likely | 18 | $17,60 \%$ |
| Total | 102 | $100 \%$ |



| Coupon: $50 \%$ discount <br> in any bread | Frequency | Valid <br> Percentage |
| :---: | :---: | :---: |
| Extremely unlikely | 13 | $13,40 \%$ |
| Somewhat unlikely | 23 | $23,70 \%$ |
| Neither likely nor <br> unlikely | 8 | $8,20 \%$ |
| Somewhat likely | 37 | $38,10 \%$ |
| Extremely likely | 16 | $16,50 \%$ |
| Total | 97 | $100 \%$ |



| Coupon: $10 \%$ discount <br> in any meat | Frequency | Valid Percent |
| :---: | :---: | :---: |
| Extremely unlikely | 17 | $16,80 \%$ |
| Somewhat unlikely | 24 | $23,80 \%$ |
| Neither likely nor <br> unlikely | 15 | $14,90 \%$ |
| Somewhat likely | 36 | $35,60 \%$ |
| Extremely likely | 9 | $8,90 \%$ |
| Total | 101 | $100 \%$ |



| Coupon: 25\% discount <br> in any meat | Frequency | Valid Percentage |
| :---: | :---: | :---: |
| Extremely unlikely | 8 | $8 \%$ |
| Somewhat unlikely | 9 | $9 \%$ |
| Neither likely nor <br> unlikely | 12 | $12 \%$ |
| Somewhat likely | 5 | $50 \%$ |
| Extremely likely | 21 | $21 \%$ |
| Total | 100 | $100 \%$ |
| Coupon: 50\% discount | Frequency | Valid Percentage |
| in any meat | 11 | $10,90 \%$ |
| Extremely unlikely | 8 | $7,90 \%$ |
| Somewhat unlikely | 14 | $13,90 \%$ |
| Neither likely nor | 34 |  |
| unlikely | 34 | $33,70 \%$ |
| Somewhat likely | 34 | $33,70 \%$ |
| Extremely likely | 101 | $100 \%$ |
| Total |  |  |




| Coupon: $0.25 €$ in any <br> cookies | Frequency | Valid Percentage |
| :---: | :---: | :---: |
| Extremely unlikely | 22 | $22,90 \%$ |
| Somewhat unlikely | 32 | $33,30 \%$ |
| Neither likely nor <br> unlikely | 8 | $8,30 \%$ |
| Somewhat likely | 27 | $28,10 \%$ |
| Extremely likely | 7 | $7,30 \%$ |
| Total | 96 | $100 \%$ |



| Coupon: $0.50 €$ in any <br> cookies | Frequency | Valid Percentage |
| :---: | :---: | :---: |
| Extremely unlikely | 14 | $13,30 \%$ |
| Somewhat unlikely | 28 | $26,70 \%$ |
| Neither likely nor | 15 | $14,30 \%$ |
| unlikely | 35 | $33,30 \%$ |
| Somewhat likely | 13 | $12,40 \%$ |
| Extremely likely | 105 | $100 \%$ |
| Total |  |  |



| Coupon: $\mathbf{1 €}$ in any <br> cookies | Frequency | Valid <br> Percentage |
| :---: | :---: | :---: |
| Extremely unlikely | 13 | $12,90 \%$ |
| Somewhat unlikely | 24 | $23,80 \%$ |
| Neither likely nor <br> unlikely | 16 | $15,80 \%$ |
| Somewhat likely | 31 | $30,70 \%$ |
| Extremely likely | 17 | $16,80 \%$ |
| Total | 101 | $100 \%$ |



| Coupon: $0.25 €$ in any <br> shampoo | Frequency | Valid Percentage |
| :---: | :---: | :---: |
| Extremely unlikely | 25 | $24,30 \%$ |
| Somewhat unlikely | 48 | $46,60 \%$ |
| Neither likely nor <br> unlikely | 12 | $11,70 \%$ |
| Somewhat likely | 13 | $12,60 \%$ |
| Extremely likely | 5 | $4,90 \%$ |
| Total | 103 | $100 \%$ |




| Coupon: $1 €$ in any |
| :---: | :---: | :---: |
| shampoo | Frequency | Valid |
| :---: |
| Percentage |$|$



Appendix H - SPSS Output: Real Time Promotions

| Would you be <br> interested in receiving <br> this type of <br> promotions? | Frequency | Valid <br> Percentage |
| :---: | :---: | :---: |
| Extremely interested | 118 | $39,10 \%$ |
| Very interested | 89 | $29,50 \%$ |
| Moderately interested | 66 | $21,90 \%$ |
| Slightly interested | 17 | $5,60 \%$ |
| Not interested at all | 12 | $4 \%$ |
| Total | 302 | $100 \%$ |



| Would you go more <br> often to Pingo Doce if <br> they had these Real Time <br> Promotions? | Frequency | Valid <br> Percentage |
| :---: | :---: | :---: |
| Extremely likely | 87 | $28,80 \%$ |
| Somewhat likely | 137 | $45,40 \%$ |
| Neither likely nor unlikely | 36 | $11,90 \%$ |
| Somewhat unlikely | 22 | $7,30 \%$ |
| Extremely unlikely | 20 | $6,60 \%$ |
| Total | 302 | $100 \%$ |



| Would you start going to Pingo Doce, instead of your preferred retailer, if they had these Real Time Promotions? | Frequency | Valid Percentage |
| :---: | :---: | :---: |
| Yes, definitely | 40 | 13,20\% |
| Maybe | 124 | 41,10\% |
| No, I would still prefer to go to my favourite one | 48 | 15,90\% |
| Pingo Doce is already my preferred supermarket and I would enjoy it even more if it had Real Time Promotions | 74 | 24,50\% |
| Pingo Doce is already my preferred supermarket and these Real Time Promotions would not change anything | 13 | 4,30\% |
| Pingo Doce is already my preferred supermarket but I do not like these Real Time Promotions | 3 | 1\% |
| Total | 302 | 100\% |

Appendix I - Attributes valued by consumers

| Attributes | N | Minimum | Maximum | Mean | Std. <br> Deviation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Proximity | 302 | 1 | 5 | 4.11 | 0,864 |
| Price | 302 | 2 | 5 | 4.09 | 0,802 |
| Product Quality | 302 | 2 | 5 | 4.24 | 0,676 |
| Service | 302 | 1 | 5 | 3.22 | 0,92 |
| Atmosphere | 302 | 1 | 5 | 3.24 | 0,927 |
| Private Label | 302 | 1 | 5 | 2.80 | 1,037 |
| Loyalty Programs (card and advantages | 302 | 1 | 5 | 2.87 | 1,051 |
| associated) | 302 | 1 | 5 | 2.77 | 1,027 |
| Technologically Advanced | 302 | 1 | 5 | 3.00 | 0,963 |
| Store Image | 302 | 1 | 5 | 3.74 | 0,943 |
| Sales Promotions | 302 | 1 | 5 | 4.08 | 0,825 |
| Wide Assortment | 302 | 1 | 5 | 3.57 | 1,307 |
| Available Parking |  |  |  |  |  |

Appendix J - Shopping Habits

| Shopping Habits (1=Strongly agree; <br> 7=Strongly disagree) | N | Minimum | Maximum | Mean | Std. Deviation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I use coupons to plan my shopping <br> list | 302 | 1 | 7 | 4.29 | 1.940 |
| I choose a brand based on the <br> coupons I have | 302 | 1 | 7 | 3.94 | 1.798 |
| I tend to redeem coupons near the <br> expiration date | 302 | 1 | 7 | 3.73 | 1.560 |
| Using coupons makes me feel smart | 302 | 1 | 7 | 4.24 | 1.809 |
| Using coupons makes me feel <br> "cheap" | 302 | 1 | 7 | 4.85 | 1.770 |
| Pingo Doce should have coupons | 302 | 1 | 7 | 2.50 | 1.473 |
| I shop at different stores to take <br> advantage of other promotions | 302 | 1 | 7 | 3.44 | 1.979 |
| Products that are on promotion have <br> lower quality | 302 | 1 | 7 | 5.58 | 1.423 |
| Most of the times I buy the brand <br> that is on deal | 302 | 1 | 7 | 3.01 | 1.578 |
| I feel observed when redeeming a <br> coupon | 302 | 1 | 7 | 6.03 | 1.364 |

Appendix K - Personality Traits

| Personality Traits (1=Strongly agree; 7=Strongly disagree) | N | Minimum | Maximum | Mean | Std. Deviation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I am an impulsive person | 302 | 1 | 7 | 4.31 | 1.730 |
| I plan ahead what I am going to buy | 302 | 1 | 7 | 2.86 | 1.391 |
| I care more about others than myself | 302 | 1 | 7 | 3.82 | 1.608 |
| Shopping is fun | 302 | 1 | 7 | 3.97 | 1.705 |
| I usually buy things that weren't on my shopping list | 302 | 1 | 7 | 2.86 | 1.359 |
| I care about what others think about me | 302 | 1 | 7 | 4.54 | 1.811 |
| I like to work in a team | 302 | 1 | 7 | 2.46 | 1.188 |
| I buy as much products on deal as I can | 302 | 1 | 7 | 3.64 | 1.783 |
| The cheapest products are usually my choice | 302 | 1 | 7 | 3.40 | 1.558 |
| Please answer: "Neither agree nor disagree" | 302 | 1 | 7 | 4.01 | 0.571 |
| I identify myself with Pingo Doce | 302 | 1 | 7 | 3.43 | 1.442 |
| I have Pingo Doce's loyalty card | 302 | 1 | 7 | 3.91 | 2.511 |

Appendix L - LSD Tables Hypothesis 3

| Age (Recoded) | Age (Recoded) | Mean Difference | Std. Error | Sig. | Lower Bound | Upper <br> Bound |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $<18$ | 18-24 | . 246 | . 326 | . 452 | -. 40 | . 89 |
|  | 25-34 | -. 065 | . 367 | . 859 | -. 79 | . 66 |
|  | 35-44 | -. 176 | . 370 | . 635 | -. 90 | . 55 |
|  | 45-54 | -. 279 | . 375 | . 457 | -1.02 | . 46 |
|  | $>55$ | -. $957{ }^{\circ}$ | . 391 | . 015 | -1.73 | -. 19 |
| 18-24 | <18 | -. 246 | . 326 | . 452 | -. 89 | . 40 |
|  | 25-34 | -. 311 | . 201 | . 123 | -. 71 | . 09 |
|  | 35-44 | -. $421^{\circ}$ | . 207 | . 043 | -. 83 | -. 01 |
|  | 45-54 | -. $525^{\circ}$ | . 216 | . 016 | -. 95 | -. 10 |
|  | $>55$ | -1.202 ${ }^{*}$ | . 242 | . 000 | -1.68 | -. 73 |
| 25-34 | <18 | . 065 | . 367 | . 859 | -. 66 | . 79 |
|  | 18-24 | . 311 | . 201 | . 123 | -. 09 | . 71 |
|  | 35-44 | -. 110 | . 267 | . 679 | -. 64 | . 41 |
|  | 45-54 | -. 214 | . 274 | . 435 | -. 75 | . 33 |
|  | $>55$ | -.891 ${ }^{\circ}$ | . 295 | . 003 | -1.47 | -. 31 |
| 35-44 | <18 | . 176 | . 370 | . 635 | -. 55 | . 90 |
|  | 18-24 | . $421{ }^{*}$ | . 207 | . 043 | . 01 | . 83 |
|  | 25-34 | . 110 | . 267 | . 679 | -. 41 | . 64 |
|  | 45-54 | -. 104 | . 278 | . 710 | -. 65 | . 44 |
|  | $>55$ | -.781 ${ }^{\circ}$ | . 299 | . 009 | -1.37 | -. 19 |
| 45-54 | <18 | . 279 | . 375 | . 457 | -. 46 | 1.02 |
|  | 18-24 | . $525{ }^{*}$ | . 216 | . 016 | . 10 | . 95 |
|  | 25-34 | . 214 | . 274 | . 435 | -. 33 | . 75 |
|  | 35-44 | . 104 | . 278 | . 710 | -. 44 | . 65 |
|  | $>55$ | -.677* | . 305 | . 027 | -1.28 | -. 08 |
| >55 | <18 | .957* | . 391 | . 015 | . 19 | 1.73 |
|  | 18-24 | $1.202^{*}$ | . 242 | . 000 | . 73 | 1.68 |
|  | 25-34 | . $891{ }^{*}$ | . 295 | . 003 | . 31 | 1.47 |
|  | 35-44 | . $781{ }^{*}$ | . 299 | . 009 | . 19 | 1.37 |
|  | 45-54 | . $677{ }^{*}$ | . 305 | . 027 | . 08 | 1.28 |


| Marital Status (Recoded) | Marital Status (Recoded) | Mean Difference | Std. Error | Sig. | 95\% Confidence Interval |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Lower <br> Bound | Upper <br> Bound |
| Married | Divorced/Separated | -. 149 | . 282 | . 597 | -. 70 | . 41 |
|  | Single | . $445^{*}$ | . 155 | . 004 | . 14 | . 75 |
| Divorced/Separated | Married | . 149 | . 282 | . 597 | -. 41 | . 70 |
|  | Single | . $594{ }^{\circ}$ | . 257 | . 021 | . 09 | 1.10 |
| Single | Married | -. $445^{\circ}$ | . 155 | . 004 | -. 75 | -. 14 |
|  | Divorced/Separated | -. $594{ }^{\circ}$ | . 257 | . 021 | -1.10 | -. 09 |


| Family Aggregate | Family Aggregate | Mean Difference | Std. Error | Sig. | 95\% Confidence Interval |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Lower Bound | Upper Bound |
| Alone | With parents | . $571{ }^{*}$ | . 179 | . 002 | . 22 | . 92 |
|  | With girlfriend/boyfriend /wife/husband | . 102 | . 234 | . 664 | -. 36 | . 56 |
|  | With your children | . 141 | . 310 | . 649 | -. 47 | . 75 |
|  | With your spouse and children | . 050 | . 229 | . 828 | -. 40 | . 50 |
| With parents | Alone | -. $571{ }^{\circ}$ | . 179 | . 002 | -. 92 | -. 22 |
|  | With girlfriend/boyfriend /wife/husband | -. $470^{\circ}$ | . 193 | . 015 | -. 85 | -. 09 |
|  | With your children | -. 430 | . 280 | . 126 | -. 98 | . 12 |
|  | With your spouse and children | -. $522{ }^{*}$ | . 187 | . 006 | -. 89 | -. 15 |
| With girlfriend/boyfrien d/wife/husband | Alone | -. 102 | . 234 | . 664 | -. 56 | . 36 |
|  | With parents | . $470{ }^{\circ}$ | . 193 | . 015 | . 09 | . 85 |
|  | With your children | . 039 | . 318 | . 901 | -. 59 | . 67 |
|  | With your spouse and children | -. 052 | . 240 | . 829 | -. 53 | . 42 |
| With your children | Alone | -. 141 | . 310 | . 649 | -. 75 | . 47 |
|  | With parents | . 430 | . 280 | . 126 | -. 12 | . 98 |
|  | With girlfriend/boyfriend /wife/husband | -. 039 | . 318 | . 901 | -. 67 | . 59 |
|  | With your spouse and children | -. 091 | . 315 | . 772 | -. 71 | . 53 |
| With your spouse and children | Alone | -. 050 | . 229 | . 828 | -. 50 | . 40 |
|  | With parents | . $522{ }^{\circ}$ | . 187 | . 006 | . 15 | . 89 |
|  | With <br> girlfriend/boyfriend <br> /wife/husband | . 052 | . 240 | . 829 | -. 42 | . 53 |
|  | With your children | . 091 | . 315 | . 772 | -. 53 | . 71 |


| Occupation (Recoded) | Occupation (Recoded) | Mean Difference | Std. Error | Sig. | 95\% Confidence Interval |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Lower Bound | Upper Bound |
| Student | Employed | -. $424^{*}$ | . 138 | . 002 | -. 69 | -. 15 |
|  | Unemployed | . 004 | . 414 | . 991 | -. 81 | . 82 |
|  | Working student | -. 332 | . 210 | . 116 | -. 75 | . 08 |
|  | Retired | $-1.138^{*}$ | . 414 | . 006 | -1.95 | -. 32 |
| Employed | Student | . $424{ }^{*}$ | . 138 | . 002 | . 15 | . 69 |
|  | Unemployed | . 429 | . 419 | . 307 | -. 40 | 1.25 |
|  | Working student | . 092 | . 221 | . 677 | -. 34 | . 53 |
|  | Retired | -. 714 | . 419 | . 089 | -1.54 | . 11 |
| Unemployed | Student | -. 004 | . 414 | . 991 | -. 82 | . 81 |
|  | Employed | -. 429 | . 419 | . 307 | -1.25 | . 40 |
|  | Working student | -. 336 | . 448 | . 453 | -1.22 | . 55 |
|  | Retired | $-1.143^{*}$ | . 572 | . 047 | -2.27 | -. 02 |
| Working student | Student | . 332 | . 210 | . 116 | -. 08 | . 75 |
|  | Employed | -. 092 | . 221 | . 677 | -. 53 | . 34 |
|  | Unemployed | . 336 | . 448 | . 453 | -. 55 | 1.22 |
|  | Retired | -. 806 | . 448 | . 073 | -1.69 | . 08 |
| Retired | Student | $1.138^{*}$ | . 414 | . 006 | . 32 | 1.95 |
|  | Employed | . 714 | . 419 | . 089 | -. 11 | 1.54 |
|  | Unemployed | $1.143^{*}$ | . 572 | . 047 | . 02 | 2.27 |
|  | Working student | . 806 | . 448 | . 073 | -. 08 | 1.69 |

*The mean difference is significant at the 0.05 level.

