

Factors influencing the consumer's intention to use digital restaurant coupons

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Abstract

Digital coupons have become an important sales promotion tool for retailers. Despite the attractiveness of this new marketing tool, digital coupons are accompanied with low redemption rates. Distributing the right digital coupon to the right consumer is of critical importance. The aim of the present study was to examine the effects of two types of coupon promotions on redemption intention, and to establish to what degree the effect may be moderated by individual consumer characteristics. To collect data an experimental survey was used, wherein two design elements were manipulated (specifically comparing monetary and non-monetary coupons). In total, 181 respondents were exposed to one of the two digital coupon types. The obtained data is analyzed using AN(C)OVA. The results confirm that the variable coupon proneness is positively related to coupon redemption intention. Further, the findings revealed that redemption intention is not significantly different when consumers were receiving a monetary coupon or a non-monetary coupon. This research is one of the first to include both monetary and non-monetary coupons. Future studies can use the developed framework to test the impact of other design elements or promotion types.

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1. Introduction

1.1. Practical relevance

In recent years, coupons have become one of the most important sales promotion tools (Yakasai & Jusoh, 2015). “A coupon refers to a ticket or document that can redeem a financial discount or rebate on the purchase of a product” (Wang et al., 2015, p. 339; Raghurir, 2004). Coupons are a form of sales promotional tool, used to induce consumer purchase behavior (Fong et al., 2021). As consumer markets nowadays are highly competitive, companies put more effort into advertising and promotion activities (Jung & Lee, 2010). Therefore, retailers are using tools to increase consumer demand (Lin et al., 2015). Coupon promotion is used across industries, especially in the restaurant industry (Fong et al., 2021). Restaurants use coupons as promotional tool to increase sales volume, attract new customers, and enhance competitiveness in the highly competitive market (Fong et al., 2021). Giving coupons to customers is a good way to encourage product trials and repurchases (Li et al., 2020). Companies use coupons as marketing strategy directed towards current and potential customers (Achadinha et al., 2014). Further, coupons are used to implement price discrimination and market segmentation (Li et al., 2020). If coupons are implemented effectively they can significantly influence consumer behavior and improve firm performance in sales (Li et al., 2020).

There has been a growth in the variety of coupon deals in the past decades (Pandey & Maheshwari, 2017). Along with technological advances, digital coupons have emerged which are distributed electronically (Barat & Ye, 2015). Digital coupons are defined as similar to the traditional coupon, but in electronic format instead of printed (Achadinha et al., 2014). Digital coupons offer advantages over paper coupons for both companies and consumers (Nayal & Pandey, 2020). Namely, these coupons can be directly given to the target customer in a cost-efficient way (Nayal et al., 2021; Fortin, 2000). Further, consumers can access the digital coupons anywhere and at any time making the coupon very convenient (Nayal et al., 2021; Danaher et al., 2015). As the Internet is widely used, digital coupon distribution is becoming more popular (Jung & Lee, 2010).

Coupons can be broadly classified into monetary and non-monetary coupons (Barat & Ye, 2015). Monetary coupons offer price reductions, while non-monetary coupons offer extras such as free gifts. Price discounts are the most common form of sales promotions used by companies. However, this type of coupon promotion is costly, because it generates lower revenue when customers use the coupon (Fong et al., 2021; Raghurir, 2004). The use of

premiums as promotional tool is increasing, which may imply that these are an appropriate alternative (Palazon & Delgado-Ballester, 2009).

Despite the benefits, coupons can create inefficiencies in marketing if the coupons are sent to large segments with only few consumers responding (Lalwani & Wang, 2019). The companies' profits may be decreased, if the coupon could not reach the right consumers (Ren et al., 2021; Reimers and Xie, 2019). Further, digital coupons are accompanied with low redemption rates (Nayal & Pandey, 2020). Therefore, marketers are continuously attempting to identify consumers who are more or less likely to respond to coupon promotions (Lalwani & Wang, 2019). Moreover, different consumers vary in their preferences for coupons in terms of their type (Ren et al., 2021). Distributing the right type of (digital) coupons to the right consumers is of critical importance (Ren et al., 2021). To design effective coupon promotions managers need to understand how different consumers respond to coupon characteristics such as their type (Jung & Lee, 2010).

1.2. Academic relevance

Extensive research has investigated coupon promotion (Myung et al., 2007). The topic of coupons has been investigated from different perspectives (Barat & Ye, 2015; Chatterjee et al., 2000; Cheema et al., 2002; Heilman, 2002; Chiou-Wei & Inman, 2008). With the emergence of new technology, digital coupons are gaining attention (Im & Ha, 2015). Many studies investigating coupon usage focused on the technical elements (Im & Ha, 2015), approaching coupon usage as a technical acceptance problem (Im & Ha, 2015). These studies argue how mobile promotions may differ from traditional promotions, and have identified factors (e.g., convenience, easy-of-use etc.) (Im & Ha, 2015) that may impact the effects of mobile promotions (Park et al., 2018). In marketing research, much literature focuses on consumer segmentation (Ren et al., 2021; Lalwani & Wang, 2019). Accordingly, researchers have investigated the importance of consumer characteristics such as demographic variables (Im & Ha, 2015; e.g. Harmon and Hill, 2003) and psychological variables (Im & Ha, 2015; e.g. Shimp and Kavas, 1984; Vermeir and van Kenhove, 2005) influencing the purchase intention and usage of coupons. However, more studies are needed on digital coupon redemption intention (Nayal & Pandey, 2020), in order to develop more effective coupon strategies (Ren et al., 2021). Studies have reported that low redemption rates of digital coupons are problematic and need more research attention (Nayal & Pandey, 2020; Danaher et al., 2015). As coupon redemption rates are important drivers of increasing sales, profits and

market performance (Dickinger & Kleijnen, 2008; Leone & Srinivasan, 1997; Raghurir, 2004), this research examines consumers' intention to redeem coupon.

While existing studies focus on the effects of monetary promotions in the digital environment, little research considers non-monetary promotions despite their popular use in practice (Park et al., 2018). Previous research has found that redemption intention varies among individual consumers (Fong et al., 2021; Chiou-Wei and Inman, 2008; Scheinbaum et al., 2020). An important question is whether consumers react the same way towards monetary coupons as they do to non-monetary coupons (Jung & Lee, 2010b). Therefore, examining consumer characteristics is important in order for practitioners to effectively identify the target group at which the coupon is aimed (Myung et al., 2007). Further, little information is available about the moderating role of consumer characteristics in behavior towards digital coupons (Dickinger & Kleijnen, 2008). Specifically, more research is needed on individual characteristics such as coupon proneness, value consciousness and price consciousness (Swaminathan & Bawa, 2005). Furthermore, previous research rarely focuses on the effectiveness of price discounts as well as premiums (Palazon & Delgado-Ballester, 2009). Research incorporating both the different coupon types through experimental designs will further our understanding (Im & Ha, 2015). Therefore, the purpose of this paper is to fill the literature gap by comparing and determining what type of coupon is most effective for consumers with different characteristics.

1.3. Research question and contribution

This study attempts to examine and compare coupon redemption intention for both monetary and non-monetary digital coupons. The consumer characteristics will be taken into account as moderating effects that could explain differences in the direct effects of the coupon type. Therefore, the following research question has been developed:

How do monetary and non-monetary coupons influence the coupon redemption intention, and how is this effect moderated by consumer characteristics?

In this paper a conceptual model is introduced and tested. In this research, two types of digital coupons are investigated, namely monetary coupons (price discounts) and non-monetary coupons (premiums). The results obtained provide insights into which type of coupon promotion (price discounts versus premiums) is most effective and under what

conditions. Specifically, it answers the question whether consumers react the same to monetary coupons as they do to non-monetary coupons.

This research aims to make both empirical and conceptual contributions. Empirically, this study is focused on the restaurant industry during the COVID-19 crisis in the Netherlands. This paper extends the coupon literature, by investigating coupon redemption intention from the consumer perspective. Conceptually, this study takes two types of coupons into account and the relationship with coupon redemption intention. Further, it emphasizes the moderating role of consumer characteristics that affect the coupon redemption intention. The results will show the extent to which the effectiveness of coupon types is conditioned upon certain consumer characteristics. Therefore, it enables the retail manager in the restaurant industry to design a more effective marketing strategy based on their target consumers, resulting in more efficient investments (Barat & Ye, 2015). More precisely, the findings provide insights into how retailers may approach consumers with coupons (Im & Ha, 2015).

1.4. Outline

The remainder of this thesis is organized as follows. Chapter 2 provides an overview of relevant literature on the topic of coupon promotion, explaining the key concepts and theories used. Based on the literature review, the conceptual model and hypotheses are presented. Chapter 3 describes the methodology of the research and the data used in the empirical study. Chapter 4 discusses the findings of the study. Lastly, this paper concludes with a discussion of the limitations and implications for practice and future research in Chapter 5.

2. Theoretical Background

This chapter provides knowledge on coupon promotions. Firstly, background information is given about the coupon and coupon use in general. Secondly, the digital coupon and its use will be discussed. Thirdly, theories are shortly discussed describing the construct of coupon redemption intention. Next, coupon characteristics and consumer characteristics are described. Additionally, hypotheses are presented, which are developed in order to address the research question. Furthermore, the conceptual model is developed which visualizes the relationships between the variables influencing the coupon redemption intention.

2.1. Coupons defined

According to Lichtenstein et al. (1990, p54) “coupons give consumers opportunities to obtain promoted products at reduced prices.” More generally, a coupon is defined as a certificate that entitles consumers to an incentive to buy a product or service (Jung & Lee, 2010a). Important in this definition is that it indicates multiple forms of coupons and multiple benefits offered by the coupon. From the consumer’s viewpoint, the primary benefit of coupon use is receiving desired goods and services at reduced prices (Clark et al., 2013). However, coupons can also be used to deliver combination offers, free samples or other types of promotions (Schultz et al. 1998). This study regards a coupon as a certificate entitling a kind of benefit to induce consumers to buy a product or service.

Coupons are used by marketers mainly for three purposes (Clark et al., 2013): to attract new customers to a certain product category, to stimulate current users to switch brands, and to encourage repeat purchases (Clark et al., 2013). Thus, marketers use coupons as marketing tool directed towards current and potential customers (Achadinha et al., 2014). Furthermore, coupons are used to implement price discrimination and market segmentation (Li et al., 2020). Coupons are very powerful promotional tools as they provide discounts to a selective segment of price-sensitive consumers, without changing the customers perception of the products’ shelf price (Ward & Davis, 1978). Moreover, coupons have been considered as a tool for advertising because the end result is immediate and easy to track, thus increasing promotion effectiveness (Clark et al., 2013).

2.2. Digital coupons

Recent technological developments have changed coupon formats from traditional to digital (Nayal et al., 2021; Fortin, 2000). Generally, coupons are classified by the method of

distribution. Traditional coupons are printed on paper and distributed through newspapers or magazines (Nayal et al., 2021; Kang, Hahn, Fortin, Hyun, & Eom, 2006). Digital coupons are mobile coupons or electronic coupons, distributed via online media (e.g. the internet) (Im & Ha, 2015). Digital coupons offer many benefits over the traditional coupons.

For the retailer the digital coupon is relatively quick, easy and inexpensive to distribute as compared to the paper coupon (Yakasai & Jusoh, 2015). Namely, the online medium reduces the costs of development (e.g., no printing costs), distribution and database creation. Further, less time is needed to create and distribute online coupons. Moreover, digital coupons are targeted to a certain group of consumers, who tend to be more interested in the product. Therefore, the digital coupon is accompanied with low production costs and high return on investment (Muk, 2012). For the consumer, digital coupons are beneficial because these are more convenient to receive and more easy to use than paper coupons (Muk, 2012). The digital coupons can be distributed through different digital means to the customer, such as SMS and MMS or via mobile websites (Muk, 2012). The online medium increases the availability of the digital coupons compared to the paper coupons. Consumers can access websites and search, download (Jung & Lee, 2010), and redeem coupons anytime and anywhere (Nayal & Pandey, 2020). Digital coupons require less time and effort to search, sort and organize coupons, thus consumers will be more likely to redeem the coupon (Fortin, 2000). However, still digital coupons are accompanied with low redemption rates (Nayal & Pandey, 2020).

2.3. Consumer redemption intention

The factors that influence the redemption of coupons can be grouped into coupon and consumer characteristics (Danaher et al., 2015). As such, most studies on coupon redemption behavior can be divided along two streams (Chen & Lu, 2011). The first stream focuses on coupon characteristics, such as face value and expiration date, influencing the coupon redemption rate (Danaher et al., 2015). Furthermore, most previous research mainly focused on variables influencing the redemption of traditional coupons (Nayal et al., 2021). These studies provide insights into factors that determine coupon attractiveness, which is positively related to coupon redemption intention (Chen & Lu, 2011).

However, the consumer's intention towards coupons is also dependent on individual characteristics. Therefore, the second stream focuses on consumer characteristics influencing

the coupon redemption intention. Investigating consumer characteristics will broaden understanding of this phenomenon coupons (Im & Ha, 2015).

The barrier that digital coupons are encountered with is the lack of acceptance (Achadinha et al., 2014). While many studies have investigated the potential of digital coupons, little is known about the consumer's intention to redeem such coupons (Nayal et al., 2021). Studying coupon redemption intention is important for understanding purchase behavior (Swaminathan & Bawa, 2005). Redemption intention has been widely used as a proxy variable to measure purchase behavior (Barat & Ye, 2015). Many studies have applied the theory of reasoned action (TRA) (Fishbein & Ajzen, 1975), to explain consumers' behavioral intention of coupons (Yakasai & Jusoh, 2015). Previous studies also have used the theory of planned behavior (TPB) (Ajzen, 1985), to explain the intentions to use print, electronic, and mobile coupons (Gonzalez, 2016). When consumers receive digital coupons they evaluate these and then develop an intention to redeem or reject the digital coupon ((Fong et al., 2021). Redemption intention is used in this study, in order to provide knowledge to managers on how consumers respond to coupon characteristics.

2.4. Coupon characteristics

2.4.1. Monetary versus non-monetary

Coupons differ from one another in type of benefits offered to the consumer, such as percentage-off, cents-off, free samples, buy-one-get-one free, etc. (Pandey & Maheshwari, 2017). The coupons provide a reduction in price or other motivations as incentives for consumers to purchase (Yakasai & Jusoh, 2015). Broadly, a distinction is being made between monetary and non-monetary coupons (Barat & Ye, 2015). Monetary coupons contain a price reduction when consumers purchase the product or service (Jung & Lee, 2010). Non-monetary coupons or non-price coupons provide premiums such as free gifts (Park et al., 2018). Price discounts are the most common form of sales promotion (Palazon & Delgado-Ballester, 2009). As stated earlier, monetary promotions are costly because they generate lower revenue. Therefore, premiums are increasingly used as promotional strategy (Palazon & Delgado-Ballester, 2009). This increasing use may indicate the effectiveness of non-monetary coupons. The coupons may attract different consumers, with different characteristics (Fong et al., 2021). By examining both types of coupon, practitioners can effectively identify the target group for their coupon in which monetary savings and choice of non-monetary incentives co-exist (Fong et al., 2021). Companies can provide personalized digital coupons, in order to

better meet consumers preferences and promote them to increase purchases (Ren et al., 2021). Eventually, this improves the redemption rates of digital coupons and effective promotions. Therefore, it is necessary to differentiate digital coupon usage characteristics for different consumer segments (Ren et al., 2021).

Previous research confirmed that the manner in which sales promotions are framed affects the consumer's evaluation of the deal. Non-monetary promotions are perceived as "extra gains," while monetary promotions are perceived as "reduced losses" (Campbell & Diamond, 1989). For this reason, studies have argued that the use of monetary coupons is more effective than non-monetary (Palazon & Delgado-Ballester, 2009). Further, Fong et al. (2020) have stated that non-monetary coupons can motivate purchases but they are not as effective as monetary coupons. The current study aims to investigate this claim. Therefore, the following hypothesis is developed:

H1: The mean redemption intention is higher for monetary than for non-monetary digital coupons.

2.5. Consumer characteristics

Different consumers may vary in their preference for type of benefits offered by the coupon (Ren et al., 2021). Previous research has identified several motivations behind coupon use, such as psychological and economic benefits (Lee & Choeh, 2021). The coupons may attract different consumers, with different characteristics (Fong et al., 2021). Consumer characteristics refer to person-related factors that have been divided into demographic variables and personality variables (Liu et al., 2015). Personality refers to the individual feelings and emotions that are adjusted to conform to the events, people, and situations in their lives (Liu et al., 2015). Personality is a stable characteristic that explains a person's behavior (Liu et al., 2015). Many studies on coupon redemption focus on consumer demographics to show who uses coupons (Dickinger & Kleijnen, 2008). Demographic variables include personal characteristics such as age, gender, education, and income. However, demographic variables are argued to be poor predictors of consumer behavior and especially for coupon redemption (Dickinger & Kleijnen, 2008). Although this research includes demographic variables (as control variables), it focuses on non-demographic consumer characteristics called motivation variables.

In coupon use research, coupon proneness and price consciousness are considered as main motivation traits associated with coupon use behavior (Liu et al., 2015). Firstly, coupon proneness is argued to be a factor strengthening the purchase intention (Zheng et al., 2017). Previous studies have considered coupon proneness in the context of traditional coupons. However, little research has been devoted to investigating the influence of coupon proneness in the digital coupon context (Chen & Lu, 2011). Secondly, price consciousness has been identified as a highly relevant factor determining individual differences in buying behavior (Fong et al., 2021). The role of price consciousness on consumer responses has been widely investigated in the sales promotion literature (Fong et al., 2021). Previous research has confirmed that high and low price-conscious consumers differ in their response to different marketing stimuli (Fong et al., 2021). However, its moderating role on different coupon types has gained little attention (Fong et al., 2021). Lastly, Lichtenstein, Netemeyer, and Burton (1990) make an early important contribution to the literature, as they distinguish between coupon-proneness and value-consciousness. These constructs are distinct determinants and need to be included both in coupon redemption intention and behavior (Lichtenstein et al., 1990). The increased ability of marketers to target coupons at specific segments enhances the importance of understanding the differences between coupon proneness, price consciousness, and value consciousness on the coupon usage intention (Lichtenstein et al., 1990). However, research on coupon proneness, price consciousness, and value consciousness in the digital context is rather scarce (Zheng et al., 2017).

2.5.1. Coupon proneness

Coupon proneness is defined as “an increased propensity to respond to a purchase offer, because the coupon form of the purchase offer positively affects purchase evaluations” (Lichtenstein et al., 1990, p. 56). It refers to the psychological characteristics of individuals (Liu et al., 2015), where coupon-prone consumers enjoy collecting coupons. Consumers vary in terms of proneness towards usage of coupons (Fong et al., 2021). Coupon prone consumers are more curious than non-coupon prone consumers about coupon offers (Swaminathan & Bawa, 2005). When coupon-prone consumers use coupons, good feelings are derived from the redemption process (Lichtenstein et al., 1990). The pleasure derived from coupons is what triggers these consumers (Zheng et al., 2017). Therefore, coupon-prone consumers are responding more emotionally to coupons (Gonzalez, 2016). Unlike value conscious

consumers, the coupon-prone consumer shows a tendency to enjoy using coupons itself more than evaluating its economic benefits (Guimond et al., 2001; Lichtenstein et al., 1990).

Studies have shown that coupon-prone consumers are not only sensitive to price or monetary benefits, but also to psychological benefits (Gonzalez, 2016). Moreover, Zheng et al. (2017) argued that coupon-prone consumers are primarily influenced by psychological satisfaction. As coupon-prone consumers are less motivated by the economic incentive (Lichtenstein et al., 1990), they rather seek positive emotions (e.g. shopping enjoyment) (Garretson & Burton, 2003; Jin et al., 2003), and they might prefer non-monetary coupons. Therefore, the following hypothesis is developed:

H2: A higher consumers' coupon proneness leads to a higher redemption intention for non-monetary coupons than for monetary coupons.

2.5.2. Value consciousness

Value consciousness is defined as “a concern for paying low prices, subject to some quality constraint” (Lichtenstein et al., 1990, p. 56). It is a customer-related characteristic, which can be used to segment customers (Itani et al., 2019). Value-conscious consumers are not always coupon prone and use coupons only when they enhance the value proposition of the offer. Customers who are more value-conscious are more knowledgeable, and are equally concerned about price and quality (Itani et al., 2019; Delgado-Ballester et al., 2014). Value consciousness positively affects involvement and knowledge, to trade off the product and its price (Lichtenstein et al., 1990). Due to high involvement, these customers expend more effort before they make their judgments. First they check multiple options and differentiate between the options, in order to assure the maximized value of their purchase (Itani et al., 2019). Therefore, value consciousness affects customers' mode of information processing and determines the way a decision is made (Itani et al., 2019; DelgadoBallester et al., 2014).

Value-conscious users are primarily influenced by the economic gain (Zheng et al., 2017). They assess multiple options and differentiate between them to maximize value. These consumers are seeking “value for money.” Monetary coupon has the advantage for the consumer that it is easier to calculate the amount of savings (Barat & Ye, 2015). Therefore, the following hypothesis is developed:

H3: A higher consumers' value consciousness leads to a higher redemption intention for monetary coupons than for non-monetary coupons.

2.5.3. *Price consciousness*

Price consciousness has been defined as “the degree to which consumers focus on paying low prices” (Fong et al., 2021). It refers to consumers’ tendency towards paying a low price (Fong et al., 2021). Price-conscious consumers aim for paying lower prices, therefore favor high coupon face value (Fong et al., 2021). These consumers are engaged with the price, thus they deeply process and favor price-related information (Alford & Biswas, 2002). Therefore, they will consistently choose to pay a lower price when the amount saved is sufficiently large to compensate their effort (Lee & Choeh, 2021). In order to obtain the best price, they engage in higher levels of information search (Fong et al., 2021; Van Doorn and Verhoef, 2015). This information search makes the consumer conscious about the economic benefits earned from the coupon (Fong et al., 2021). This has been linked to the price discrimination strategy (Im & Ha, 2015).

In other words, monetary coupons are used to price discriminate between consumers (Swaminathan & Bawa, 2005) by providing price reductions to those consumers who are willing to search and redeem the coupons (Im & Ha, 2015). Coupons which offer a financial discount may attract consumers who are mainly interested in price deals. According to Fong et al. (2021) price-conscious consumers are sensitive to monetary saving, they will form a positive attitude towards to coupon promotion, and eventually their intention is higher. Therefore, the following hypothesis is developed:

H4: A higher consumers’ price consciousness leads to a higher redemption intention for monetary coupons than for non-monetary coupons.

2.6. Conceptual model and hypotheses

The existing theories and previous literature review resulted in the development of the conceptual model. The constructs are developed mostly based on the research by Lichtenstein et al. (1990). The model focuses on examining moderating consumer characteristics and helps to better understand the customer and underlying motivations. The relationship between the variables and the consumer’s redemption intention is presented in Figure 1.

This study aims to investigate the consumers’ intention to redeem digital coupons. Therefore, the consumer’s redemption intention toward the coupon is characterized as the main dependent variable. The independent variable is defined as the type of coupon, namely monetary or non-monetary. The consumer characteristics are operationalized using three

constructs (Barat & Ye, 2015), namely value consciousness, coupon proneness, and price consciousness, moderating the effects of coupon type on redemption intention.

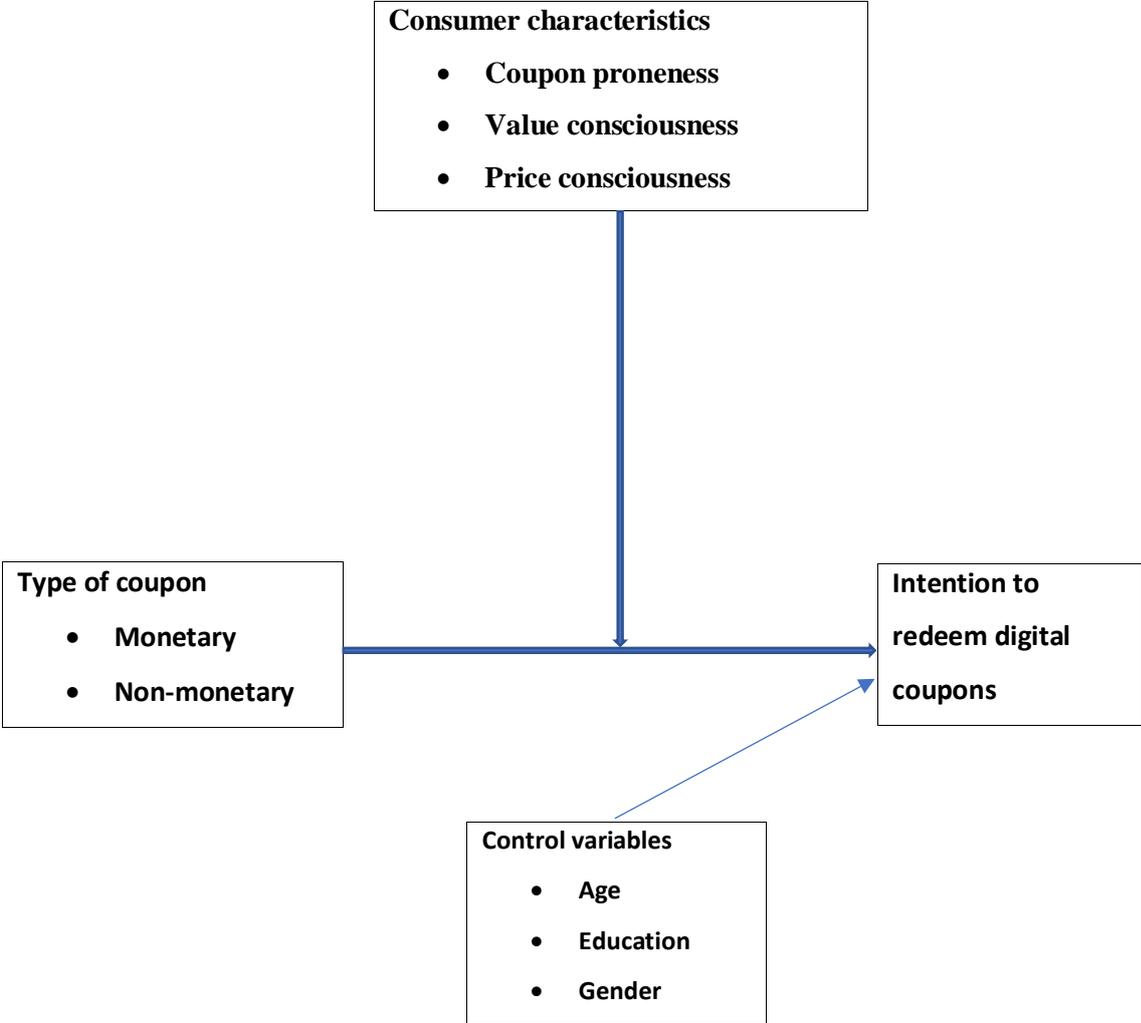


Figure 1: Conceptual Model with hypothesized relations

The conceptual research model proposes that the consumers’ intention to redeem digital coupon is affected by the following constructs directly or indirectly: type of coupon, coupon proneness, value consciousness and price consciousness. Finally, several control variables are included which may independently influence coupon redemption intention.

3. Method

In this chapter the methodology of this research will be explained. First, the research design is described. Next, the data collection and sampling are discussed. Subsequently, the experiment and measurements are described. In addition, the procedure and data analysis are addressed. Finally, the research ethics are presented.

3.1. Research design

The present study focuses on two types of coupons and the consumers' intention to redeem coupons, demonstrated for the case of restaurants in the Netherlands. Moreover, the aim is to measure the influence of moderating consumer characteristics on the relationship between coupon type and coupon redemption intention. To test the hypothesized relationships formulated in the previous chapter, a quantitative study has been conducted. Quantitative studies use numerical information for the determination of relationships between independent and dependent variables, in order to obtain scientific insights (Field, 2013).

The research aims to answer the research question: "*How do monetary and non-monetary coupons influence the coupon redemption intention, and how is this effect moderated by consumer characteristics?*" In order to address the research question, an experimental survey study was conducted. This method is applied since the objectives of the research require standardized information from a large sample and a manipulation of the independent variable. Therefore, it facilitates the causal interpretation of the results and it enables the researcher to isolate the factor, to assess the (causal) effect of independent variables on dependent variables.

The experimental survey was developed based on the literature review, in order to measure the extent to which certain variables influenced the consumers' redemption intention. A between-subjects experimental design has been employed, to compare differences between the groups. An experiment is a suitable way to manipulate the different coupon types, and to study the influence of the moderating variables. The digital coupon type was the stimulus, which was manipulated at two levels, i.e., monetary (price discount) and non-monetary (free gift). The coupon was designed and distributed specifically for this study. This was done to ensure that results were reliable and valid.

3.2. Data collection and Sampling

Data was collected using an online questionnaire carried out in the Netherlands in April and May 2021. The full questionnaire is included in Appendix B. During a period of two weeks the data has been collected. Firstly, a pilot study was conducted among 10 respondents to ensure clarity and understandability of the questions. Distribution of the questionnaire was online, namely through social media (e.g., Facebook and WhatsApp) and e-mail. Online distribution is an efficient way to reach the population and appropriate for the topic digital coupons. Further, it can reach a large sample thus facilitating the reliability of the results (Hair et al., 2014).

The aim was to conduct the survey with at least 171 Dutch respondents. Using G*Power, a statistical tool, the required sample size was calculated (Erdfelder, Faul & Buchner, 1996). Adopting a moderate effect size (f) of 0.25, a significance level of $\alpha = 0.05$, a power level of 0.90, and two groups ($df=1$), the required sample size was estimated at 171. The target population was all individuals living in the Netherlands. To select participants a convenience sampling technique has been employed, in which participants were chosen by accessibility. The aim was to obtain an equal distribution in terms of age and gender, thus 50% female and 50% male. Since online distribution may more easily access younger people, respondents above the age of 40 were asked to spread the survey among their connections, using the snowball sampling technique. The snowball sampling started with 40 respondents, who were asked to send the survey to at least one person. This way about 80 respondents above the age of 40 could be reached, which is approximately half of the required sample size. The other half of the sample was contacted via online media such as Facebook.

3.3. Manipulating the experimental variable

The type of coupon was based on monetary or non-monetary benefits, and was manipulated in such way that the respondent only received one of them. Therefore, the independent variable was non-metrically scaled, namely categorical. These coupons have been especially designed for the current study. Figure 2 shows the monetary coupon containing a five euro discount, which could be redeemed on a purchase with a minimum spending of 20 euros. Figure 3 shows the non-monetary coupon, which contains a free dessert of choice with the purchase of a main course. The conditions of the campaign are the same for both coupons, as well as the graphical layout of the coupon.



Figure 2: Monetary coupon



Figure 3: Non-monetary coupon

3.4. Measuring the constructs

The 32 survey items used in this study have been adapted from existing literature. The instruments had been used and validated in previous literature. For the context of this study the instruments have been modified. The variables in the measurement model have been measured on a 7-point Likert-scale, ranging from 1 (Strongly disagree) to 7 (Strongly agree). The constructs in this study included redemption intention, coupon proneness, value consciousness and price consciousness. The dependent variable redemption intention was metrically scaled, and adapted from Chen and Lu (2011). The items to measure coupon proneness and value consciousness were adapted from Lichtenstein et al. (1990), using multi-item scales. Price consciousness was adapted from Alford and Biswas (2002). Table 1 shows the items used per variable, the full operationalization is stated in Appendix A. The conceptual model also included control variables, which provided some knowledge about the background of the respondents. The control variables included demographic information, namely age, education, gender and income.

Table 1: Items per variable

Construct	Adapted item
<i>Value consciousness</i>	Vc1: I am very concerned about low prices, but I am equally concerned about product quality.
	Vc2: When shopping in the supermarket, I compare the prices of different brands.
	Vc3: When purchasing a product, I always try to maximize the quality I get for the money I spend.
	Vc4: When I buy products, I like to be sure that I am getting my money's worth.
	Vc5: I generally shop around for lower prices on products, but they still must meet certain quality requirements before I will buy them.
	Vc6: When I shop, I usually compare the "price per ounce" information for brands I normally buy.
	Vc7: I always check prices at the store to be sure I get the best value for the money I spend.
<i>Price consciousness</i>	Pc1: I am willing to go to extra effort to find lower prices.
	Pc2: I will shop at more than one store to take advantage of low prices.
	Pc3: I would always shop at more than one store to find low prices.
	Pc4: The money saved by finding lower prices is usually worth the time and effort.
	Pc5: The time it takes to find lower prices is usually worth the effort.
<i>Coupon proneness</i>	Cp1: Redeeming digital coupons makes me feel good.
	Cp2: I enjoy looking at this digital coupon (deal) to see its content.
	Cp3: When I use digital coupons, I feel that I am getting a good deal.
	Cp4: I enjoy using digital coupons, regardless of the amount I save by doing so.
	Cp5: I have favorite restaurants, but most of the time I buy the brand I have a digital coupon for.
	Cp6: I am more likely to buy at restaurants, for which I have this digital coupon.
	Cp7: Digital coupons have caused me to buy products I normally would not buy.
	Cp8: Beyond the money I save, redeeming digital coupons give me a sense of joy.
<i>Intention to redeem coupons</i>	Int1: I plan to use the digital coupon above.
	Int2: I plan to get more information about digital coupons.
	Int3: Next time I go to a restaurant, I will check if the restaurant offers a digital coupon.
	Int4: I expect to use a digital coupon in the future, if they are offered to me by the restaurant.
	Int5: I will intend to use digital coupons in the future, if they are offered to me by the restaurant.

3.5. Procedure

For creating and conducting the experimental survey the tool Qualtrics was used. Qualtrics is a software program designed for online surveys. The first page of the survey provided an introduction, and the research ethics were explained. At the beginning, respondents were

asked about earlier experiences with coupons. Next, the survey contained four sets of questions representing the constructs of the research model. The items of the research were phrased into statements and translated into Dutch to facilitate better understanding. Respondents were asked to indicate the degree to which they agreed or disagreed on a 7-point Likert-type scale. Firstly, nine questions were asked representing value consciousness, subsequently five questions were asked representing price consciousness. The individuals within the sample were randomly assigned to the two groups, and then exposed to only one coupon type. This procedure assured that the groups were equal in sample size, which was required for adequate interpretation of the results. After exposure to the experimental treatment the participants were presented eight questions about coupon proneness. Thereafter, five statements requested the respondent's intention to redeem the coupon. The last set contained four questions concerning the respondent's socio-demographic details. The survey ended with a page which confirmed the submission of the answers and thanked respondents for their participation.

3.6. Data analysis

The data gathered from the experiment was transferred into the software program SPSS for further analysis. First, the questionnaires were checked for completeness and descriptive statistics were obtained. Thereafter, a reliability and validity analysis were conducted.

The research model was tested using AN(C)OVA technique, specifically using a fixed factor for the coupon manipulation and the moderators as covariates. The model was analyzed both without the covariates and with them included, in order to compare the differences. The ANO(C)VA technique is a suitable way to test for statistically significant differences between groups and to estimate the moderating relationships in the model. The respondents were randomly assigned to two groups, which were the two categories of the independent variable. The research model meets the ANOVA requirements as it contains at least one categorical independent variable and a metrically scaled dependent variable (Hair et al., 2014).

3.7. Ethics

The survey introduction consisted of a short introduction to explain the object of the study. Moreover, this emphasized that the data obtained from the respondents would be completely anonymous and only be used for the purpose of this research. This ensured confidentiality and

protection of privacy. Participation was voluntarily and respondents could stop the survey at any time. The introduction also included some contact information to ensure the respondents had the option to ask for withdrawal of their answers. After the introduction the respondents were asked to give permission to use their answers for this study. Moreover, the respondents were given contact information of the researcher, allowing them to ask questions about the results.

4. Results

This chapter shows the results of the experimental survey study. Firstly, the descriptive statistics are presented. Next, the reliability and validity of the constructs are discussed. Lastly, the AN(C)OVA analysis is presented together with the hypothesis testing and additional analysis.

4.1. Descriptive statistics

In total, 209 subjects participated in the experimental study. For data collection convenience sampling and snowball sampling were used, therefore no response rate was detected. Before starting the analysis, the dataset was checked for outliers and missing values. Using frequency tests in SPSS, the questionnaires were checked for completeness. Thereafter, 29 questionnaires were removed from the dataset, because these were not finished and contained too many missing values. The 29 questionnaires had to be eliminated to increase accuracy of the information. The resulting sample contained four missing values, far below 10% of the observations which is the critical level (Field, 2013). Furthermore, skewness and kurtosis were observed in order to check whether the independent variables were normally distributed. All variables showed values between -3 and +3. Therefore, the dataset is accepted for further analysis (Field, 2013).

The resulting sample of 180 respondents consisted of 124 (68.9%) women and 54 (30.0%) men. The average age of the participants was about 38 years, the minimum age was 18 and the maximum was 76 years. The total distribution of the age of the respondents is shown in Figure 4. Most respondents had a high education level, 82 (45.6%) of the respondents were higher professionally educated (HBO), and 45 (25.0%) had obtained a university degree (WO). The remaining 29.4% of the respondents had secondary vocational education or lower. Lastly, 72 respondents (40%) identified with the lowest income category (€0-€2000 per month). The demographic statistics are included in Appendix C.

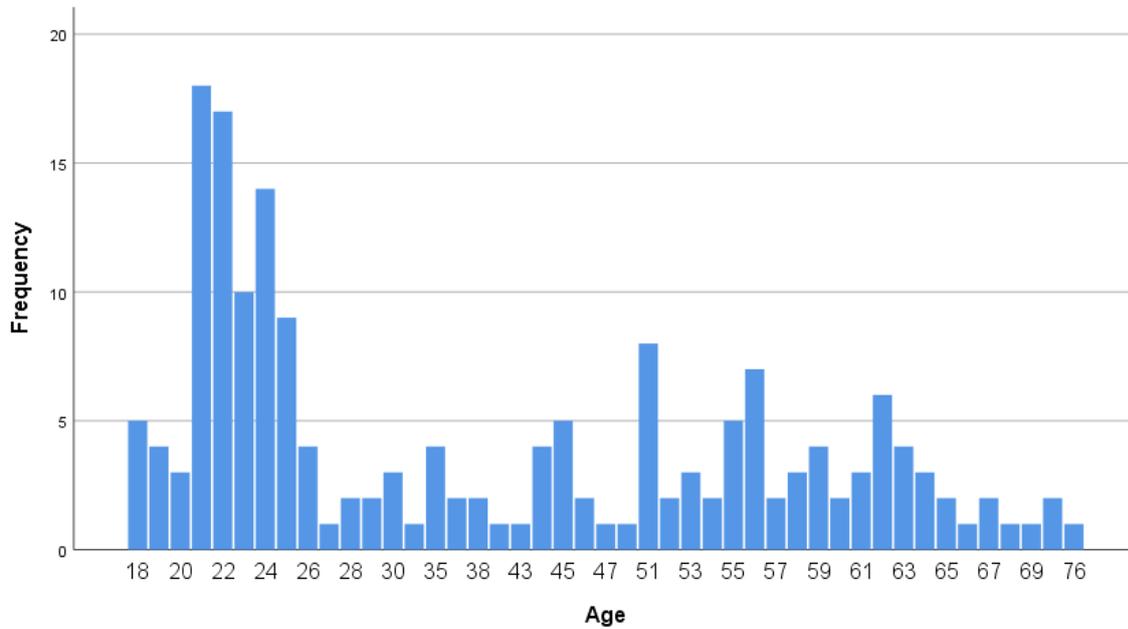


Figure 4: Age sample statistics

Regarding the respondent’s digital restaurant coupon use, 45.6% of the respondents reported never have used such a coupon. Comparatively, 49.5% respondents never used a physical restaurant coupon. Subsequently, 16.7% only once used a digital restaurant coupon and 15.0% only once used a physical restaurant coupon. The group that has used a coupon two till five times is somewhat bigger, for digital restaurant coupons 23.3% and for physical restaurant coupons 28.9%. The smallest percentage were the respondents who used a restaurant coupon more than five times, for digital 14.4% and for physical 6.7% of the respondents.

Table 2: Use of restaurant coupons

	Digital	Physical
	Percent	Percent
Never	45.6	49.4
1 time	16.7	15.0
2-5 times	23.3	28.9
More than 5 times	14.4	6.7
Total	100.0	100.0

4.2. Construct reliability and validity

Before examining the hypotheses, the reliability and validity of the constructs were examined. In this study there were four constructs, based on multiple items extracted from prior research. Reliability analysis was performed to test the reliability of the scales of each of the four constructs. In order to check the internal consistency of the items of each construct, the Cronbach’s alpha was computed. Internal consistency stands for how closely related the items

are as group and represent the latent construct. Good internal consistency is confirmed when the Cronbach's alpha values are above 0.7. The constructs Value Consciousness (Cronbach's alpha=.775), Price Consciousness (Cronbach's alpha=.898), Coupon Proneness (Cronbach's alpha=.867), and Intention (Cronbach's alpha=.865), all had sufficiently reliable scales.

In order to determine discriminant validity and convergent validity, a series of factor analyses was performed. Specifically, factor analysis was performed to ensure that the items loaded on the construct as expected. Principal component analysis was conducted as extraction method. To verify the sampling adequacy for the analysis, the Kaiser-Meyer-Olkin measure and the Bartlett's test of sphericity were used. The KMO value above the threshold of .5 and a significant Bartlett's tests of sphericity confirms the appropriateness of factor analysis (Field, 2013).

Firstly, a factor analysis was conducted on the total 32 items. The KMO value was .87 and the Bartlett's tests of sphericity was significant (see Appendix D). As rotation method the orthogonal rotation (varimax) was used. To get an impression of which items might be problematic, the communalities after extraction were examined. When communality values are above the threshold of 0.5, the variables have enough explanatory power (Hair et al., 2014). To determine the number of factors in the data the eigenvalues, explained variances and the scree plots were examined. The factor analysis extracted six factors with eigenvalues over Kaiser's criterion of 1 which together explained 68.0% of the variance. However, it should have showed four factors, as this study only has four constructs.

Secondly, multiple factor analyses were conducted on the individual constructs. The first construct examined was value consciousness. The KMO (.794) and Bartlett's test of sphericity (significant at $p < 0.000$) both showed sufficient values. The factor analysis for value consciousness extracted two factors with eigenvalues above 1, which together explained 60.4% of the variance. The communality table showed that only the first item of value consciousness Vc1 had a low value of .494, which was below the threshold of .5 (Hair et al., 2014). This item did not correlate much with the other items, therefore Vc1 was deleted. After deletion both thresholds for factor analysis were still met (KMO=.792 and a significant Bartlett's test at $p < 0.000$). Even so the factor analysis extracted two factors, however the communalities did not have any values lower than the threshold of .5. The two items Vc3 and Vc4 are loading on the other factor, which means that value consciousness had two dimensions. This can be explained by the fact that these items are more specific about buying products while the other items are about buying behavior in general. Nevertheless, the two

items Vc3 and Vc4 are important for the construct value consciousness thus were retained in the dataset.

The second construct for the factor analysis was price consciousness. The thresholds for factor analysis were met as the KMO (.809) and Bartlett's test (significant at $p < 0.000$) showed sufficient values. The communality table showed values all above the threshold of .05. Further, only one factor was extracted with explained 71.5% of the variance.

In the third factor analysis the construct coupon proneness was examined. Again, factor analysis was appropriate as KMO (.847) and Bartlett's test (significant at $p < 0.000$) were sufficient. There were two factors extracted with eigenvalues above 1 which together explained 66.56% of the variance. Further, the analysis showed that two items loaded on both factors. The item Cp7 was deleted due to double loading and relatively low communality value (.555). Thereafter the factor analysis still extracted two factors which explained 70.7% of the variance. Even then Cp5 showed double loadings, thus this item was also deleted. The third factor analysis for coupon proneness extracted one factor, which explained 60.8% of the variance.

Lastly, a factor analysis was conducted on the construct of redemption intention. The values for the threshold of KMO (.764) and Bartlett's test (significant at $p < 0.000$) for factor analysis were satisfactory. All communality values after extraction were above the limit of .5 and only one factor was extracted which explained 65.3% of the variance. In sum, only the items Vc1, Cp5 and Cp7 were deleted from the dataset. After the reliability and factor analyses the mean scores were computed for each of the four constructs.

Table 3: Reliability analysis per scale

Scale	Original Number of items	Cronbach's alpha	Number of items deleted	Cronbach's alpha after deletion
Value consciousness	7	.775	1	.787
Price consciousness	5	.898	0	.898
Coupon proneness	8	.867	2	.869
Intention	5	.865	0	.865

4.3. Anova analysis

4.3.1. Assumptions

The hypotheses were tested by conducting AN(C)OVA analysis for the dependent variable. Before starting the analysis, the assumptions were checked. First, as described in Chapter 3 the research model contained an independent variables of categorical measurement level. Besides, the dependent variable was metrically scaled. Second, the sample size was 180

which is above the calculated minimum of 171 observations. Further, in this experiment the groups contained 85 and 95 respondents, respectively, which was above the ANCOVA minimum required sample size of 30 respondents per group. In addition, the design of the experiment ensured random sampling of the respondents.

The skewness and kurtosis of variables were examined to test for the normality of sampling distribution of means. The values had to be between the thresholds of -3 and +3 (Hair et al., 2014). There were no extreme values and the assumption of normality was met. To test for equal variances (homogeneity) across groups, Levene's test was examined for each analysis. If Levene's test was non-significant, equal variances across groups were assumed (Hair et al., 2014).

4.3.2. Hypothesis testing

In order to test the first hypothesis (H1) an AN(C)OVA analysis was conducted (see Appendix E). The dependent variable in the analysis was Intention. The fixed factor was coupon type, which is a categorical independent variable with two levels (monetary versus non-monetary). In addition, to test hypotheses H2, H3 and H4 ANCOVA analysis was conducted (see Appendix E), in order to test for interaction effects between coupon and the consumer characteristics on intention. The covariates were continuous independent variables, i.e., Value consciousness, Price consciousness and Coupon Proneness. These three variables were the moderating variables in the conceptual model. For the significance tests a confidence interval of 95% was used, thus hypotheses were rejected when the p -value was lower than .05.

H1: The mean redemption intention is higher for monetary than for non-monetary digital coupons.

The first test was used to examine whether there was a difference between the effect of monetary and non-monetary coupons on redemption intention. Specifically, it investigated the main effect that is the effect of coupon type on redemption intention.

In this study Levene's Test was not significant $F(1, 178)=.696, p=.405$, thus equal variances were assumed. The descriptive statistics revealed difference in the means of redemption intention between the monetary and non-monetary category. The average level of redemption intention was not significantly higher when a monetary coupon was received ($M=3.97, SD=1.22$) than when a non-monetary coupon was received ($M=3.93, SD=1.33$) (Appendix E). Therefore, H1 was not confirmed.

H2: A higher consumers' coupon proneness leads to a higher redemption intention for non-monetary coupons than for monetary coupons.

By conducting an ANCOVA analysis the effects of the moderating variable(s) were examined. The construct coupon proneness appeared to be important for the redemption intention. The tests of between-subjects effects (Appendix E) revealed that there was a significant interaction effect. The interaction effect between Coupon and Coupon Proneness was significant at $p < .05$ ($F(1, 172) = 77.819, p = .000$). The Partial Eta Squared value of .475 indicated a moderate effect size, according to Cohen. This means that the interaction Coupon*Coupon Proneness explained 47.5% of the variance in the dependent variable redemption intention. Remarkably, the interaction effect held for both types of coupons. The parameter estimates table (Appendix E) shows that there was a significant effect for coupon type 1 as well as for type 2. The effect size was higher for the non-monetary coupon than for the monetary coupon (.364 > .250). Therefore, H2 was confirmed.

H3: A higher consumers' value consciousness, leads to a higher redemption intention for monetary coupons than for non-monetary coupons.

The tests of between-subjects effects (Appendix E) revealed that there was no significant interaction effect between the construct Value Consciousness and Coupon on the redemption intention ($F(1, 172) = .319, p = .727$). Therefore, H3 was not confirmed.

H4: A higher consumers' price consciousness leads to a higher redemption intention for monetary coupons than for non-monetary coupons.

The test of between-subjects effects (Appendix E) also showed no interaction with the construct Price Consciousness and redemption intention ($F(1, 172) = 2.295, p = .104$). Therefore, H4 was not confirmed.

Table 4: Effects of personal motivations on the coupon redemption

Scale	F	Sig.	η^2
Coupon	.082	.775	.011
Coupon * Value consciousness	.319	.727	.004
Coupon * Price consciousness	2.295	.104	.026
Coupon * Coupon Proneness	77.819	.000	.475

4.3.3. *Additional analysis*

The last ANCOVA included the control variables gender, age, education and income as covariates. The results revealed that the demographic variables did not have any significant effects. Further, the variables did not significantly change the motivational effects on coupon redemption (see Table 5).

Table 5: Effects of demographic variables on the coupon redemption

Control variable	F	Sig.	η^2
Gender	.084	.772	.001
Age	.241	.624	.001
Education	.047	.828	.000
Income	.664	.416	.004

5. Discussion and Conclusion

In this final chapter the findings of the research will be discussed. Firstly, a conclusion is stated based on the results of the previous chapter and the main research question will be answered. Thereafter, practical and theoretical implications are presented. Lastly, the limitations of the study are addressed, and future research directions are discussed.

5.1. Discussion

Digital coupons have become an important sales promotion tool to attract customers and improve performance in sales, especially for the restaurant industry. If accepted by consumers, digital coupons can be beneficial to businesses and consumers. To influence consumer behavior, coupons need to be implemented effectively. The aim of the present study was to investigate the effects of two types of coupon promotions on consumers' redemption intention, and to examine influences of moderating consumer characteristics. A quantitative study was conducted and to collect data an experimental survey was carried out.

Firstly, out of 181 respondents 45.6% of the respondents reported to never have used a digital restaurant coupon. This indicates that digital coupons are accompanied with low redemption rates, as stated by previous research. Further, it indicates the need to investigate coupon use to gain knowledge in order to stimulate coupon redemption.

The findings drawn from the experimental study, indicate that redemption intention was approximately equal for each of the coupon types the respondents had received. Namely, as there was no significant difference found between the groups in redemption intention, the main hypothesis was not confirmed. Thus, the redemption intention was not significantly higher for monetary than for non-monetary digital coupons. This is inconsistent with previous studies arguing that monetary incentives are more effective than non-monetary incentives (Fong et al., 2021). In the other hand, this finding is in line with the increasing use of premiums and effectiveness of non-monetary coupons (Palazon & Delgado-Ballester, 2009).

The results show that coupon proneness positively and significantly influences the redemption intention. Furthermore, the results suggest that individuals with higher coupon proneness will have higher intentions to redeem non-monetary than monetary digital coupons. Coupon prone consumers enjoy collecting coupons, and the results reveal that they enjoy non-monetary more than monetary digital coupons. This finding confirmed that coupon proneness is an important strengthening factor on redemption intention (Zheng et al., 2017) in the digital coupon context.

In addition, the interaction effects of value consciousness and price consciousness on redemption were not significant. These moderating variables had very limited effects. Thus, the hypotheses claiming that higher value consciousness or higher price consciousness leads to a higher redemption intention for monetary than for non-monetary coupons was not confirmed. These findings were unexpected as these variables have been widely investigated and many studies found significant results. According to Lichtenstein et al. (1990), both coupon-proneness and value-consciousness need to be included in coupon redemption intention. However, this research may indicate that this claim is outdated and consumer behavior has changed. The importance of value consciousness in coupon redemption intention can be questioned. Furthermore, the effect of price consciousness was almost significant. The items of price consciousness were about taking effort to find lower prices. The limited effect of price consciousness on redemption intention for the monetary coupon, could have occurred because the coupon is interpreted differently than intended. The given discount could be too low in order for price conscious consumers to find the coupon attractive and have intention to redeem it.

5.2. Practical implications

The research findings of this study have various implications for managers aiming to stimulate digital coupon redemption, thus the effectiveness of coupon promotions. The results will assist managers to gain understanding of the impact of the consumer characteristics in the implementation of an appropriate couponing marketing strategy (Achadinha et al., 2014). Based on the results, recommendations for managers are given.

Although, price discounts are the most common form of sales promotion these are very costly. As discussed, the current examination show that the consumers' redemption intention does not significantly differ after receiving a monetary or non-monetary digital coupon. As the theory explains, monetary coupons are mostly more expensive as the certificate generates lower revenue. Therefore, managers are recommended to use non-monetary coupons as promotional tool which provide premiums such as free gifts.

In order to meet consumers preferences and promote purchases, companies can provide personalized digital coupons. The findings of this research indicate that coupon prone consumers show the highest coupon redemption intention compared to other consumer characteristics. This effect is the strongest for non-monetary coupons, which means that

coupon prone consumers do not redeem coupons for economic benefit but more for the experience. Specifically, these consumers enjoy using the coupon because good feelings are derived from the redemption process. Therefore, managers are recommended to emphasize enjoyment or pleasure of the coupon. The graphical design of the coupon should be enjoyable or fun from the consumers viewpoint, rather than commercial. In addition, the textual content should emphasize the feeling of getting a good deal.

5.3. Theoretical implications

This study has proposed a framework for digital coupon redemption intention that contributes to the marketing literature on coupons in several ways.

Extending previous research, the effect of two types of digital restaurant coupons on the redemption intention was tested. Studies had stated that digital coupons are accompanied with problematic low redemption rates and need more research attention. In line with previous research, this study found low redemption rates for digital coupons. Many studies approach coupon usage as a technical acceptance problem, little research focused on segmentation and consumer characteristics. This research focused on motivational variables influencing the coupon redemption intention. Further, this study is one of the first to investigate both monetary and non-monetary digital coupons. Remarkably, this study found that despite their common use monetary coupons are not more effective than non-monetary coupons, as the redemption intention does not differ. This is consistent with researchers arguing the upcoming effectiveness of non-monetary coupons.

Secondly, this study focused on the moderating role of coupon proneness, value consciousness, and price consciousness in the digital coupon context. Little information was available about the moderating role of individual consumer characteristics on redemption intention. Therefore, this study contributes to the understanding of consumer characteristics influencing the coupon redemption. The majority of research on consumer characteristics investigates the role of coupon proneness. This study confirms the importance of coupon proneness as it showed a significant and positive effect on redemption intention.

5.4. Limitations and future research directions

While this study has established moderating relationships among the variables, it is not without limitations. Several limitations are discussed below, which gives rise to opportunities for future research.

Firstly, the data of this study were collected using the convenience sampling technique. Further, the survey was spread in the Netherlands. Therefore, the data is not generalizable to other nationalities. Besides, the sample overrepresents women which may cause generalizability problems to genders. A larger sample is more useful in order to accommodate the generalization of results. Besides, cultural aspects could play a role in developing perceptions toward the digital coupon. Replicating the study in other countries would be interesting to validate the findings. Future research could include more males in the sample and respondents of multiple nationalities, to investigate whether the findings differ.

Secondly, this research investigated two types of coupons. The monetary saving was manipulated by saving five euro (at minimum spending of 20 euro), the non-monetary coupon contained a free sample (namely a dessert of choice). However, a distinction could be made between high and low monetary value for which the results could differ. In addition, different non-monetary coupon designs (e.g., buy one get one free or sweepstakes) could provide different results. Future research could examine additional discount levels, and multiple non-monetary coupons.

Thirdly, only three psychological constructs were investigated as individual consumer characteristics moderating the consumers' intention to redeem digital coupons. This research focused on coupon proneness, value consciousness and price consciousness. Researchers are encouraged to add more variables (e.g., attitudinal loyalty, brand involvement or personal innovativeness), and investigate their influence in terms of consumers' redemption intention. Including more variables allows future researcher to develop a new and more comprehensive digital coupon redemption framework.

Lastly, this study focused on the consumer's behavioral intention, thus actual behavior or actual redemption was not measured. Insights into actual usage could help practitioners in order to effectively plan their strategies and predict the redemption rate. Future research could investigate the same factors on actual coupon usage.

5.5. Conclusion

This study focused on consumers' intentions to redeem the digital coupon. Based on previous research, this study provides empirical evidence on how individual differences and different types of coupons influence the redemption intention. This study contributes to gaining a better understanding of consumers digital coupons redemption by investigating coupon proneness, value consciousness and price consciousness. Specifically, this study examined two types of coupons and the moderating consumer characteristics.

This study investigated the research question: *How do monetary and non-monetary coupons influence the coupon redemption intention, and how is this effect moderated by consumer characteristics?* This study revealed that monetary and non-monetary digital coupons had an approximately equal effect on the redemption intention. Furthermore, the results show that coupon proneness is the most important consumer characteristic. Coupon proneness positively moderates the effect of monetary coupons on redemption intention.

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7. Appendices

Appendix A: Operationalization

Construct	Definition	Original measurement indicators (items)	Adapted measurement indicators (items)	Source
Coupon proneness	“an increased propensity to respond to a purchase offer, because the coupon form of the purchase offer positively affects purchase evaluations” (Lichtenstein et al., 1990, p. 56).	Redeeming e-coupons makes me feel good.	Redeeming digital coupons makes me feel good.	(Chen & Lu, 2011)
		I enjoy clipping e-coupons out of the newspaper.	I enjoy clicking on digital coupons to see its content.	
		When I use e-coupons, I feel that I am getting a good deal.	When I use digital coupons, I feel that I am getting a good deal.	
		I enjoy using e-coupons, regardless of the amount I save by doing so.	I enjoy using digital coupons, regardless of the amount I save by doing so.	
		I have favorite brands, but most of the time I buy the brand I have an e-coupon for.	I have favorite brands, but most of the time I buy the brand I have a digital coupon for.	
		I am more likely to buy brands for which I have e-coupon.	I am more likely to buy brands for which I have a digital coupon.	
		E-coupons have caused me to buy products I normally would not buy.	Digital coupons have caused me to buy products I normally would not buy.	
		Beyond the money I save, redeeming e-coupons gives me a sense of joy.	Beyond the money I save, redeeming digital coupons give me a sense of joy.	
Value Consciousness	“a concern for paying low prices, subject to some quality constraint” (Lichtenstein et al., 1990, p. 56).	I am very concerned about low prices, but I am equally concerned about product quality.	I am very concerned about low prices, but I am equally concerned about product quality.	(Lichtenstein et al., 1990)
		When grocery shopping, I compare the prices of different brands to be sure I get the best value for the money.	When shopping, I compare the prices of different brands to be sure I get the best value for the money.	
		When purchasing a product, I always try to maximize the quality I get for the money I spend.	When purchasing a product, I always try to maximize the quality I get for the money I spend.	
		When I buy products, I like to be sure that I am getting my money's worth.	When I buy products, I like to be sure that I am getting my money's worth.	

		I generally shop around for lower prices on products, but they still must meet certain quality requirements before I will buy them.	I generally shop around for lower prices on products, but they still must meet certain quality requirements before I will buy them.	
		When I shop, I usually compare the "price per ounce" information for brands I normally buy.	When I shop, I usually compare the "price per ounce" information for brands I normally buy.	
		I always check prices at the grocery store to be sure I get the best value for the money I spend.	I always check prices at the store to be sure I get the best value for the money I spend.	
Price consciousness	"the degree to which consumers focus on paying low prices" (Fong et al., 2021).	I am willing to go to extra effort to find lower prices.		(Alford & Biswas, 2002)
		I will shop at more than one store to take advantage of low prices		
		I would always shop at more than one store to find low prices.		
		The money saved by finding lower prices is usually worth the time and effort.		
		The time it takes to find lower prices is usually worth the effort.		
Redemption intention		I will search e-coupons on the internet for later usage.	I will search digital coupons on the internet for later usage.	(Chen & Lu, 2011)
		I will obtain e-coupons on the internet for later usage.	I will obtain digital coupons on the internet for later usage.	
		I will intend to download mobile coupons for later usage.	I will intend to download digital coupons for later usage.	
		I will intend to use e-coupons for later usage.	I will intend to use digital coupons for later usage.	
		I will intend to get more details about e-coupons.	I will intend to get more details about digital coupons.	
		I will intend to use e-coupons if they offered to me.	I will intend to use digital coupons if they offered to me.	

Appendix B: Experimental survey

Beste deelnemer,

Allereerst bedankt voor uw deelname aan dit onderzoek. Mijn naam is Sacha van der Molen en ik ben master studente Marketing aan de Radboud Universiteit in Nijmegen. Voor mijn afstudeerscriptie doe ik onderzoek naar de beleving van consumenten omtrent digitale voordeelcoupons. Het invullen van de vragenlijst duurt ongeveer 5 minuten. Het gaat om uw mening, daarom zijn er geen goede of foute antwoorden. Deelname aan dit onderzoek is geheel vrijwillig en kan op ieder moment beëindigd worden. Het onderzoek is geheel anoniem en de verkregen data zullen uitsluitend voor dit onderzoek worden gebruikt.

Nogmaals hartelijk dank voor uw deelname! Voor vragen of opmerkingen over het onderzoek kunt u contact met mij opnemen via het volgende e-mailadres: s.e.vandermolen@student.ru.nl

Met vriendelijke groet,

Sacha van der Molen

Door aan de enquête te beginnen, gaat u akkoord met het gebruik van uw anonieme antwoorden voor onderzoeksdoeleinden.

Heeft u al ervaringen met het gebruiken van digitale* coupons?

(*Digitale coupons zijn voordeelbonnen die elektronisch verkregen worden, bijvoorbeeld via de mail of via facebook)

- Ja (1)
- Nee (2)
- Weet ik niet (3)

Heeft u wel eens een digitale restaurantcoupon gebruikt?

- nooit (1)
- 1 keer (2)
- 2-5 keer (3)
- meer dan 5 keer (4)

Heeft u wel eens een fysieke* restaurantcoupon gebruikt? (*Fysieke coupons zijn voordeelbonnen die op papier verkregen worden, bijvoorbeeld uit de krant, een reclamefolder of een tijdschrift)

- nooit (1)
- 1 keer (2)
- 2-5 keer (3)
- meer dan 5 keer (4)

De volgende vragen gaan over uw algemene koopgedrag. Hierbij kunt u bijvoorbeeld denken aan het kopen van uw boodschappen of winkelen voor kleding. In welke mate bent u het eens of oneens met elk van onderstaande uitspraken?

Ik hecht erg aan lage prijzen, maar ik hecht evenzeer aan productkwaliteit.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

Wanneer ik winkel in de supermarkt vergelijk ik de prijzen van verschillende merken om zeker te zijn dat ik waar krijg voor mijn geld.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

Als ik een product koop probeer ik altijd de maximale kwaliteit te krijgen voor het geld dat ik besteed.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

Wanneer ik producten koop wil ik er zeker van zijn dat ik waar krijg voor mijn geld.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

In het algemeen kijk ik rond voor lagere prijzen van producten, maar ze moeten nog steeds aan bepaalde kwaliteitseisen voldoen voordat ik ze koop.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

Als ik winkel vergelijk ik meestal de prijs per eenheid (per stuk of per kilo) met de merken die ik normaal koop.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)

- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

Ik controleer altijd de prijzen in de supermarkt om zeker te zijn dat ik waar krijg voor het geld dat ik uitgeef.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

De volgende vragen gaan over uw algemene koopgedrag. Hierbij kunt u bijvoorbeeld denken aan het kopen van uw boodschappen of winkelen voor kleding. In welke mate bent u het eens of oneens met elk van onderstaande uitspraken?

Ik ben bereid om meer moeite te doen om lage prijzen te vinden.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

Ik winkel bij meer dan één winkel om van lage prijzen te profiteren.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

Ik zou altijd winkelen bij meer dan één winkel om lage prijzen te vinden.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

Het bespaarde geld door het vinden van lagere prijzen is meestal de tijd en moeite waard.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)

- Oneens (6)
- Volledig oneens (7)

De tijd die nodig is om lagere prijzen te vinden is meestal de moeite waard.

- Volledig mee eens (1)
 - Mee eens (2)
 - Enigszins mee eens (3)
 - Neutraal (4)
 - Enigszins oneens (5)
 - Oneens (6)
 - Volledig oneens (7)
-

De volgende vragen gaan over uw beleving omtrent de digitale coupon. Digitale coupons zijn kortingsbonnen die elektronisch verkregen worden (bijvoorbeeld via de mail of via facebook). U ontvangt een coupon die hieronder staat weergegeven. Bekijk deze goed en beantwoord dan de vragen.

Afbeelding

In welke mate bent u het eens of oneens met elk van onderstaande uitspraken?

Het inwisselen van deze digitale coupon geeft mij een goed gevoel.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

Ik vind het leuk de inhoud (van de deal) van deze digitale coupon te bekijken.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

Wanneer ik deze digitale coupon gebruik voel ik dat ik een goede deal krijg.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

Ik vind het leuk om deze digitale coupon te gebruiken, ongeacht het bedrag dat ik hierdoor bespaar.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

Ik heb favoriete merken, maar meestal koop ik het merk waar ik een digitale coupon voor heb.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

Ik koop eerder de merken waarvoor ik deze digitale coupon heb (waarvoor deze coupon geldig is).

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

Deze digitale coupon zorgt ervoor dat ik producten koop die ik normaal niet zou kopen.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

Naast het geld dat ik bespaar, geeft het inwisselen van deze digitale coupon mij plezier.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

De volgende vragen gaan over uw beleving omtrent de digitale coupon. Digitale coupons zijn kortingsbonnen die elektronisch verkregen worden (bijvoorbeeld via de mail of via facebook). U ontvangt de coupon die hieronder staat weergegeven. Bekijk deze goed en beantwoord dan de vragen.

Afbeelding

In welke mate bent u het eens of oneens met elk van onderstaande uitspraken?

Ik ben van plan om bovenstaande digitale coupon te gebruiken.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

Ik ben van plan om meer informatie over digitale coupons te verkrijgen.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

De volgende keer als ik naar een restaurant ga, zal ik nagaan of het restaurant een digitale coupon aanbied.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

Ik verwacht een digitale coupon te gebruiken in de toekomst, als ze mij worden aangeboden door het restaurant.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)
- Volledig oneens (7)

Ik heb de intentie om een digitale coupon te gebruiken in de toekomst, als ze mij worden aangeboden door het restaurant.

- Volledig mee eens (1)
- Mee eens (2)
- Enigszins mee eens (3)
- Neutraal (4)
- Enigszins oneens (5)
- Oneens (6)

- Volledig oneens (7)
-

De laatste vragen gaan over uw persoonlijke achtergrond. Nogmaals het onderzoek is anoniem en de verkregen data worden uitsluiten voor dit onderzoek gebruikt.

Wat is uw geslacht?

- Vrouw (4)
- Man (5)
- Wil ik niet zeggen (6)

Wat is uw leeftijd in jaren?

Wat is uw hoogst afgeronde opleidingsniveau?

- Basisonderwijs (1)
 - Middelbare school (vmbo, havo, vwo) (2)
 - Middelbaar beroepsonderwijs (MBO) (3)
 - Hoger beroepsonderwijs (HBO) (4)
 - Wetenschappelijk onderwijs (WO) (5)
 - Anders, namelijk... (6) _____
-

Wat bedraagt uw bruto inkomen per maand?

- €0-€2000 (1)
 - €2001-€4000 (2)
 - €4001-€6000 (3)
 - €6001-€8000 (4)
 - €8000+ (5)
 - Deze informatie geef ik liever niet (6)
-



Gratis Dessert

Bij aankoop van één van onze hoofdgerechten, ontvangt u één gratis dessert naar keuze.

Actievoorwaarden: deze actie is niet geldig i.c.m andere acties en of kortingen. Deze bon is niet inwisselbaar voor contant geld of producten.

*Deze coupon is uitgegeven ten behoeve van onderzoek, daarom niet in te wisselen.



€5 Korting

Bij minimale besteding van €20 of meer, ontvangt u €5 korting.

Actievoorwaarden: deze actie is niet geldig i.c.m andere acties en of kortingen. Deze bon is niet inwisselbaar voor contant geld of producten.

*Deze coupon is uitgegeven ten behoeve van onderzoek, daarom niet in te wisselen.

Appendix C: Descriptive statistics

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	124	68,9	68,9	68,9
	Male	54	30,0	30,0	98,9
	Private	2	1,1	1,1	100,0
	Total	180	100,0	100,0	

Education					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Basisonderwijs	1	,6	,6	,6
	Middelbare school (vmbo, havo, vwo)	29	16,1	16,1	16,7
	Middelbaar beroepsonderwijs (MBO)	23	12,8	12,8	29,4
	Hoger beroepsonderwijs (HBO)	82	45,6	45,6	75,0
	Wetenschappelijk onderwijs (WO)	45	25,0	25,0	100,0
	Total	180	100,0	100,0	

Wat bedraag uw bruto inkomen per maand?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	€0-€2000	72	40,0	40,0	40,0
	€2001-€4000	43	23,9	23,9	63,9
	€4001-€6000	18	10,0	10,0	73,9
	€6001-€8000	10	5,6	5,6	79,4
	€8000+	6	3,3	3,3	82,8
	Deze informatie geef ik liever niet	31	17,2	17,2	100,0
	Total	180	100,0	100,0	

Earlier experience with digital coupons				
		Frequency	Percent	Cumulative Percent
Valid	Yes	135	75,0	75,0
	No	43	23,9	98,9
	Don't know	2	1,1	100,0
	Total	180	100,0	

Use of digital restaurantcoupon				
		Frequency	Percent	Cumulative Percent
Valid	Never	82	45,6	45,6
	1 time	30	16,7	62,2
	2-5 times	42	23,3	85,6
	More than 5 times	26	14,4	100,0
	Total	180	100,0	

Use of physical restaurantcoupon				
		Frequency	Percent	Cumulative Percent
Valid	Never	89	49,4	49,4
	1 time	27	15,0	64,4
	2-5 times	52	28,9	93,3
	More than 5 times	12	6,7	100,0
	Total	180	100,0	

Appendix D: Reliability and Factor analyses

Reliability Value consciousness

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,775	,772	7

Reliability Price consciousness

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,898	,899	5

Reliability coupon proneness

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,867	,867	8

Reliability redemption intention

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,865	,866	5

Factor analysis all constructs

KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	,876

Bartlett's Test of Sphericity	Approx. Chi-Square	2598,754
	df	300
	Sig.	,000

Factor analysis Value consciousness

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,794
Bartlett's Test of Sphericity	Approx. Chi-Square	328,808
	df	21
	Sig.	,000

Communalities		
	Initial	Extraction
Vc1	1,000	,494
Vc2	1,000	,549
Vc3	1,000	,623
Vc4	1,000	,707
Vc5	1,000	,525
Vc6	1,000	,655
Vc7	1,000	,676

Extraction Method: Principal Component Analysis.

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,067	43,821	43,821	3,067	43,821	43,821
2	1,162	16,594	60,415	1,162	16,594	60,415
3	,784	11,198	71,613			
4	,596	8,514	80,127			
5	,582	8,315	88,443			
6	,494	7,052	95,494			
7	,315	4,506	100,000			

Extraction Method: Principal Component Analysis.

Second factor analysis value consciousness (without Vc1)

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,792
Bartlett's Test of Sphericity	Approx. Chi-Square	301,999
	df	15

	Sig.	,000
--	------	------

Communalities		
	Initial	Extraction
Vc2	1,000	,613
Vc3	1,000	,678
Vc4	1,000	,766
Vc5	1,000	,561
Vc6	1,000	,706
Vc7	1,000	,658

Extraction Method: Principal Component Analysis.

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2,930	48,830	48,830	2,930	48,830	48,830	2,510	41,837	41,837
2	1,051	17,511	66,341	1,051	17,511	66,341	1,470	24,505	66,341
3	,616	10,269	76,610						
4	,577	9,618	86,229						
5	,492	8,192	94,421						
6	,335	5,579	100,000						

Extraction Method: Principal Component Analysis.

Component Matrix^a		
	Component	
	1	2
Vc6	,816	
Vc7	,801	
Vc2	,722	
Vc3	,638	,521
Vc4	,533	,694

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

Factor analysis Price consciousness

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,809
Bartlett's Test of Sphericity	Approx. Chi-Square	609,910
	df	10
	Sig.	,000

Communalities		
	Initial	Extraction
Pc1	1,000	,532
Pc2	1,000	,801
Pc3	1,000	,724
Pc4	1,000	,769
Pc5	1,000	,747
Extraction Method: Principal Component Analysis.		

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,574	71,476	71,476	3,574	71,476	71,476
2	,604	12,071	83,547			
3	,459	9,174	92,721			
4	,217	4,334	97,055			
5	,147	2,945	100,000			
Extraction Method: Principal Component Analysis.						

Factor analysis Coupon proneness

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,847
Bartlett's Test of Sphericity	Approx. Chi-Square	642,295
	df	28
	Sig.	,000

Communalities		
	Initial	Extraction
CP1	1,000	,645
CP2	1,000	,666
CP3	1,000	,744
CP4	1,000	,568
CP5	1,000	,738
CP6	1,000	,741
CP7	1,000	,555
CP8	1,000	,669
Extraction Method: Principal Component Analysis.		

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4,193	52,418	52,418	4,193	52,418	52,418
2	1,131	14,140	66,557	1,131	14,140	66,557
3	,672	8,396	74,954			
4	,592	7,395	82,349			
5	,488	6,099	88,448			
6	,381	4,766	93,214			
7	,288	3,605	96,819			
8	,254	3,181	100,000			

Extraction Method: Principal Component Analysis.

Component Matrix ^a		
	Component	
	1	2
CP8	,817	
CP3	,792	
CP6	,763	
CP2	,761	
CP1	,753	
CP4	,692	
CP5	,613	,601
CP7	,563	,488

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

Second factor analysis coupon proneness (without item Cp7)

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,827
Bartlett's Test of Sphericity	Approx. Chi-Square	588,961
	df	21
	Sig.	,000

Communalities		
	Initial	Extraction
CP1	1,000	,649
CP2	1,000	,669
CP3	1,000	,754
CP4	1,000	,557
CP5	1,000	,861

CP6	1,000	,773
CP8	1,000	,685
Extraction Method: Principal Component Analysis.		

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,933	56,192	56,192	3,933	56,192	56,192
2	1,016	14,514	70,706	1,016	14,514	70,706
3	,632	9,028	79,734			
4	,489	6,981	86,715			
5	,386	5,512	92,226			
6	,290	4,136	96,362			
7	,255	3,638	100,000			
Extraction Method: Principal Component Analysis.						

Component Matrix ^a		
	Component	
	1	2
CP8	,826	
CP3	,806	
CP2	,777	
CP1	,766	
CP6	,745	,467
CP4	,711	
CP5	,593	,714
Extraction Method: Principal Component Analysis.		
a. 2 components extracted.		

Third factor analysis coupon proneness (without Cp7 and Cp5)

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,847
Bartlett's Test of Sphericity	Approx. Chi-Square	486,045
	df	15
	Sig.	,000

Communalities		
	Initial	Extraction
CP1	1,000	,613

CP2	1,000	,651
CP3	1,000	,698
CP4	1,000	,527
CP6	1,000	,489
CP8	1,000	,672
Extraction Method: Principal Component Analysis.		

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,649	60,823	60,823	3,649	60,823	60,823
2	,676	11,266	72,089			
3	,611	10,179	82,268			
4	,420	6,996	89,264			
5	,382	6,362	95,626			
6	,262	4,374	100,000			
Extraction Method: Principal Component Analysis.						

Factor analysis intention

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,764
Bartlett's Test of Sphericity	Approx. Chi-Square	498,860
	df	10
	Sig.	,000

Communalities		
	Initial	Extraction
INT1	1,000	,554
INT2	1,000	,585
INT3	1,000	,667
INT4	1,000	,748
INT5	1,000	,711
Extraction Method: Principal Component Analysis.		

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,265	65,305	65,305	3,265	65,305	65,305
2	,739	14,785	80,089			

3	,562	11,245	91,335			
4	,274	5,480	96,815			
5	,159	3,185	100,000			
Extraction Method: Principal Component Analysis.						

Reliability Value Consciousness (after deletion of Vc1)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,787	,783	6

Reliability Coupon Proneness (after deletion of Cp5 and Cp7)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,869	,870	6

Appendix E: ANOVA

ANOVA.

Between-Subjects Factors

		Value Label	N
Coupon	1	monetary	85
	2	non-monetary	95

Levene's Test of Equality of Error Variances^a

Dependent Variable: Intention			
F	df1	df2	Sig.
,002	1	178	,967
Tests the null hypothesis that the error variance of the dependent variable is equal across groups.			
a. Design: Intercept + ValueConscious + PriceConscious + CouponProne + Coupon			

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Intention	Based on Mean	,696	1	178	,405
	Based on Median	,460	1	178	,498
	Based on Median and with adjusted df	,460	1	176,026	,498
	Based on trimmed mean	,589	1	178	,444

Descriptives

Intention								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
monetary	85	3,9741	1,21764	,13207	3,7115	4,2368	1,40	7,00
non-monetary	95	3,9326	1,32717	,13616	3,6623	4,2030	1,00	7,00
Total	180	3,9522	1,27325	,09490	3,7650	4,1395	1,00	7,00

ANOVA					
Intention					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,077	1	,077	,047	,828
Within Groups	290,112	178	1,630		
Total	290,189	179			

ANCOVA

Levene's Test of Equality of Error Variances ^a			
Dependent Variable: Intention			
F	df1	df2	Sig.
,003	1	178	,956
Tests the null hypothesis that the error variance of the dependent variable is equal across groups.			
a. Design: Intercept + Coupon + Coupon * ValueConscious + Coupon * PriceConscious + Coupon * CouponProne			

Tests of Between-Subjects Effects						
Dependent Variable: Intention						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	167,351 ^a	7	23,907	33,475	,000	,577
Intercept	4,631	1	4,631	6,485	,012	,036
Coupon	,058	1	,058	,082	,775	,000
Coupon * ValueConscious	,455	2	,228	,319	,727	,004
Coupon * PriceConscious	3,277	2	1,639	2,295	,104	,026
Coupon * CouponProne	111,153	2	55,576	77,819	,000	,475
Error	122,838	172	,714			
Total	3101,800	180				
Corrected Total	290,189	179				
a. R Squared = ,577 (Adjusted R Squared = ,559)						

Tests of Between-Subjects Effects					
Dependent Variable: Intention					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	167,002 ^a	4	41,751	59,311	,000

Intercept	4,860	1	4,860	6,904	,009
Coupon	1,389	1	1,389	1,974	,162
ValueConscious	,310	1	,310	,441	,508
PriceConscious	3,083	1	3,083	4,380	,038
CouponProne	111,573	1	111,573	158,501	,000
Error	123,187	175	,704		
Total	3101,800	180			
Corrected Total	290,189	179			

a. R Squared = ,575 (Adjusted R Squared = ,566)

Parameter Estimates							
Dependent Variable: Intention							
Parameter	B	Std. Error	t	Sig.	95% Confidence Interval		Partial Eta Squared
					Lower Bound	Upper Bound	
Intercept	,703	,312	2,252	,026	,087	1,319	,029
[Coupon=1]	-,142	,496	-,286	,775	-1,121	,837	,000
[Coupon=2]	0 ^a
[Coupon=1] * ValueConscious	,094	,123	,764	,446	-,149	,336	,003
[Coupon=2] * ValueConscious	,025	,106	,233	,816	-,185	,235	,000
[Coupon=1] * PriceConscious	,123	,078	1,573	,117	-,031	,278	,014
[Coupon=2] * PriceConscious	,111	,076	1,454	,148	-,040	,261	,012
[Coupon=1] * CouponProne	,682	,090	7,565	,000	,504	,860	,250
[Coupon=2] * CouponProne	,755	,076	9,920	,000	,605	,905	,364

a. This parameter is set to zero because it is redundant.

Descriptives								
Intention								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
monetary	85	3,9741	1,21764	,13207	3,7115	4,2368	1,40	7,00
non-monetary	95	3,9326	1,32717	,13616	3,6623	4,2030	1,00	7,00
Total	180	3,9522	1,27325	,09490	3,7650	4,1395	1,00	7,00

Tests of Between-Subjects Effects	
Dependent Variable: Intention	

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	169,156 ^a	11	15,378	21,345	,000	,583
Intercept	,129	1	,129	,180	,672	,001
Coupon	,166	1	,166	,230	,632	,001
Coupon * ValueConscious	,403	2	,201	,280	,756	,003
Coupon * PriceConscious	4,064	2	2,032	2,820	,062	,032
Coupon * CouponProne	91,312	2	45,656	63,373	,000	,430
Gender	,061	1	,061	,084	,772	,001
Age	,174	1	,174	,241	,624	,001
Education	,034	1	,034	,047	,828	,000
Income	,479	1	,479	,664	,416	,004
Error	121,033	168	,720			
Total	3101,800	180				
Corrected Total	290,189	179				

a. R Squared = ,583 (Adjusted R Squared = ,556)