The Effect of Loyalty Program Design Elements on Program Loyalty and Store Loyalty

What effect does receiving an (un)expected positive extra have on program loyalty and store loyalty, and how can this relationship be explained by the attitude toward the loyalty program?

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Master Thesis

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Abstract

Many companies and stores have appointed loyalty programs as one of their main mechanisms of their marketing strategy. Too many loyalty programs fail due to having a boring and predictable saving process. Therefore, the purpose of this study is to investigate the effects of receiving an entertainment element on customer loyalty toward the program and store. We conducted an online between-subject experiment among 289 participants and empirically investigated the effects of receiving an (un)expected positive extra on program loyalty and store loyalty, using an Analysis of Variances and the mediating model of the PROCESS macro of Hayes. Moreover, the study assesses how the relationship between receiving an (un)expected positive extra and program loyalty and store loyalty can be explained by a positive attitude toward the loyalty program.

The results reveal that program loyalty and store loyalty are significantly predicted by a positive attitude toward the loyalty program and communal relationships. We tested potential mediators and found that a communal relationship has a positive mediating effect on the conditions of this study and program loyalty and store loyalty. No empirical evidence is found for the other constructs and mediators of this study, which were theorized to be of importance.

Finally, we discussed implications for academic researchers who are interested in conducting loyalty studies. Furthermore, the research provides new insights for retailers with regard to creating a loyalty program.

Keywords: loyalty program, program loyalty, store loyalty, attitude, communal relationship, online experiment.

Preface

This thesis serves as the conclusion of my Marketing Management Master at Tilburg University. The thesis is the end of my university career, and a start of a new period full of opportunities and challenges.

Inspired by the many loyalty programs I have encountered at different retailers, I immediately knew I wanted to write my Master Thesis about loyalty programs. After applying and being chosen for the academic-based supervisor-defined topic from Ms. Kolen, I worked diligently on the topic. After months of research, I proudly present this thesis.

During this thesis period, I have experienced support from many people whom I owe my appreciation and gratefulness. First of all, I would like to thank my thesis supervisor, Ms. Kolen, for her academic support, guidance, new insights, understanding and flexibility during my thesis period. I would also like to thank my second reader, Mrs. Deleersnyder, for her time and involvement.

Second, I really want to thank my parents, sister and boyfriend, who always supported and motivated me. They helped me in any way they could during the journey of my Masters and especially during this thesis period, which led to this essential milestone.

Lotte Mulder

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Chapter 1 – Introduction

1.1 Problem indication

The ongoing pursuit of customer loyalty began in the early 1980s. Since then in retailing, as in many other industries, some form of customer loyalty-building strategy has been developed, tested and implemented (Duffy, 2005). Customer loyalty programs are part of this customer loyalty-building strategy. Loyalty programs are organized, membership-based marketing activities designed to improve the building of continued marketing exchanges among customers toward a company or retailer (Lacey & Sneath, 2006). The main goal of a loyalty program is to deliver added value to customers with the purpose of establishing customer retention (Bolton, Kannan, & Bramlett, 2000; Liu, 2007).

Nowadays, many companies and stores in the retailing sector have appointed loyalty programs as one of their main mechanisms of their marketing strategy. This explosion of loyalty programs reflects a changing marketing environment that is characterized by intense competition among these programs (Liu & Yang, 2009). It is even argued that membership in multiple loyalty programs may eventually cancel out the effects of each individual loyalty program, which could lead to a decrease in program loyalty (Mägi, 2003). In addition, if customers perceive a certain loyalty program to be more attractive than competing programs, it is conceivable that they will be more likely to join, and actively participate in that program (Wirtz, Mattila, & Lwin, 2007). Overall, with too many loyalty programs, retailers are struggling to win business and to keep their customers loyal (Liu & Yang, 2009).

Next to the fact that there are too many loyalty programs in the retailing industry, too many programs fail (Fruend, 2017). This has negative consequences for retailers since this leads to a decrease in loyal customers toward the program and the store. A reason for these failing loyalty programs is that many customers start participating in a loyalty program when the program is introduced, but eventually stop participating without reaching the end goal of the loyalty program. Not only are half of the program members inactive in loyalty programs, statistics also show that almost one third of the program members have left a program before redeeming a single reward (Fruend, 2017). A reason could be that customers believe that the saving process of a loyalty program is boring (Kanter, 1996). Although loyalty programs can be perceived as entertaining because of the fun associated with

collecting and redeeming points (Johnson, 1999), this is often not the case and still leads to bored customers. Boredom may occur when customers perceive the saving process of a 'standard' loyalty program as static. A 'standard' loyalty program can be described as a program in which customers receive one stamp each time they spent €10, which makes the saving process quite predictable, and hence customers may experience boredom. According to Noble and Phillips (2004), the lack of focus on customers' feelings and attitudes lead to failing loyalty programs.

From the above stated problem indication, it appears that with too many loyalty programs, retailers are having trouble to win business and to create program loyalty and store loyalty. Also, it appears that customers stop participating in loyalty programs because the programs are perceived as boring and/or because the programs lack focus on the feelings and attitudes of customers. The latter makes it hard for retailers to convince and motivate customers to join their program instead of the programs of competitors (Liu & Yang, 2009; Wirtz et al., 2007). Consequently, it is hard to generate loyal customers. Therefore, it is important for a loyalty program to be fun and exciting, to create favorable attitudes and thus to improve overall program performance.

In order to decrease customer boredom and customer defection in loyalty programs, it is believed that retailers must offer their customers new possibilities to receive points. While considering new possibilities, retailers should focus on the feelings and attitudes of customers. It is critical that customers get motived to retain in the loyalty program and really enjoy the saving process, and thereby gain a positive attitude toward the loyalty program. Particularly since attitudes are important for building relationships (Allport, 1935). Retailers could consider introducing stimulations in the loyalty program as an element to possibly achieve positive attitudes. This stimulation could be introducing an entertainment element in the loyalty program. This entertainment element can be a positive extra, either unexpected or expected, which customers receive next to their original amount of stamps.

Whether it is expected or unexpected, customers like to receive something extra (for free) (Anderson, 2009), it could even lead to loyal behavior (Ariely, Gneezy, & Haruvy, 2018). Receiving something extra at no cost invokes a positive response (Flynn & Adams, 2009; Shampanier, Mazar, & Ariely, 2007), especially when the gift is a surprise. Research even shows that surprises can be an extremely

efficient marketing tool in retaining customers (Lindgreen & Vanhamme, 2003; Vanhamme, 2000).

It is believed that receiving a positive extra, either expected or unexpected, has positive effects on program- and store loyalty. However, before a customer gets loyal to a loyalty program, it is crucial that the customer can appreciate the saving process (Zidda & Demoulin, 2009). Entertainment associated with accumulating and redeeming points is very important in appreciating the saving process (Mimouni-Chaabane & Volle, 2010). It is believed that due to the extra free stamp, receiving an (un)expected positive extra can be perceived as more likeable in accumulating points, compared to the static loyalty program format. Hence, it is assumed that customers start to appreciate the saving process of a loyalty program, and are therefore motivated to continue saving in that loyalty program. Furthermore, receiving an unexpected positive extra not only creates a surprised feeling, it also induces a greater fun and entertained feeling compared to receiving an expected positive extra (Valenzuela, Mellers, & Strebel, 2010). It is therefore believed that the entertained feeling will have a positive effect on the appreciation of the saving process.

The same positive effects for store loyalty are expected because short-term loyalty programs lead to long-term loyalty toward the store (Bridson, Evans, & Hickman, 2008; Yi & Jeon, 2003). Loyalty toward the store appears during the loyalty program and persists even after the program finishes (McIntosh, 2012). Due to the free element in the saving process, it is believed that introducing an (un)expected positive extra increases store loyalty compared to a static loyalty program format. Yet, unexpected results, combined with the enjoyment of receiving an unexpected positive extra, increase customer loyalty toward a store even more compared to receiving an expected positive extra (Johnson, Kim, Mun, & Lee, 2015; Oliver, Rust, & Varki, 1997).

Positive affective responses toward a loyalty program can be invoked due to receiving something extra at no cost (Shampanier et al., 2007). Moreover, customers' behavior with the program (e.g., continue saving) and store (e.g., loyalty) is likely to be affected by the attitude of a customer toward the loyalty program (Bruneau & Zidda, 2014). If customers perceive a certain loyalty program to be attractive, and thus gain a positive attitude toward that loyalty program, they will be more likely to be motivated to join and actively participate in that program (Wirtz et al., 2007). Additionally, the more attractive a loyalty program is perceived to be, the more a

customer demonstrates store loyalty (Bridson et al., 2008; Meyer-Waarden, 2015). Therefore, it is expected that having a positive attitude toward a loyalty program explains the positive relationship between receiving an (un)expected positive extra and program- and store loyalty compared to the static loyalty program format. Yet, when receiving an unexpected gift, the positive attitude toward a loyalty program will increase (Valenzuela et al., 2010). It is therefore believed that the positive relationship between receiving an unexpected positive extra and program- and store loyalty can be explained by a greater positive attitude grounded on receiving an unexpected positive extra rather than the attitude based on receiving an expected positive extra.

The overall purpose of this study is to describe and test the element of receiving an (un)expected positive extra in a loyalty program. More specifically, the purpose of this study is to investigate the underlying mechanisms of an (un)expected positive extra on program- and store loyalty, compared to the static loyalty program format, and by examining whether the attitude toward a loyalty program explains this relationship. Additionally, the relationship between receiving an unexpected positive extra and program- and store loyalty, compared to receiving an expected positive extra, will be investigated.

1.2 Problem statement

That being said, the problem statement can be defined as:

What effect does receiving an (un)expected positive extra have on program loyalty and store loyalty, and how can this relationship be explained by the attitude toward a loyalty program?

1.3 Research questions

This thesis is grounded on multiple research questions. Answering these questions will lead to the answer of the problem statement.

1.3.1 Theoretical research questions

With the help of literature review, the following theoretical research questions will be answered:

- What is an expected positive extra?
- What is an unexpected positive extra?
- What is program loyalty?
- What is store loyalty?
- What is attitude toward a loyalty program?

1.3.2 Empirical research questions

With the help of an experiment, the following ten empirical research questions will be answered:

- What effect does receiving an (un)expected positive extra have on program loyalty compared to a static loyalty program format?
- What effect does receiving an unexpected positive extra have on program loyalty compared to receiving an expected positive extra?
- What effect does receiving an (un)expected positive extra have on store loyalty compared to a static loyalty program format?
- What effect does receiving an unexpected positive extra have on store loyalty compared to receiving an expected positive extra?
- To what extent does receiving an (un)expected positive extra influence attitude toward a loyalty program compared to a static loyalty program format?
- To what extent does receiving an unexpected positive extra influence attitude toward a loyalty program compared to receiving an expected positive extra?
- To what extent does attitude toward a loyalty program have a mediating role in the relationship between receiving an (un)expected positive extra and program loyalty compared to a static loyalty program format?
- To what extent does attitude toward a loyalty program have a mediating role in the relationship between receiving an unexpected positive extra and program loyalty compared to receiving an expected positive extra?
- To what extent does attitude toward a loyalty program have a mediating role in the relationship between receiving an (un)expected positive extra and store loyalty compared to a static loyalty program format?
- To what extent does attitude toward a loyalty program have a mediating role in the relationship between receiving an unexpected positive extra and store loyalty compared to receiving an expected positive extra?

1.3.3 Conceptual model

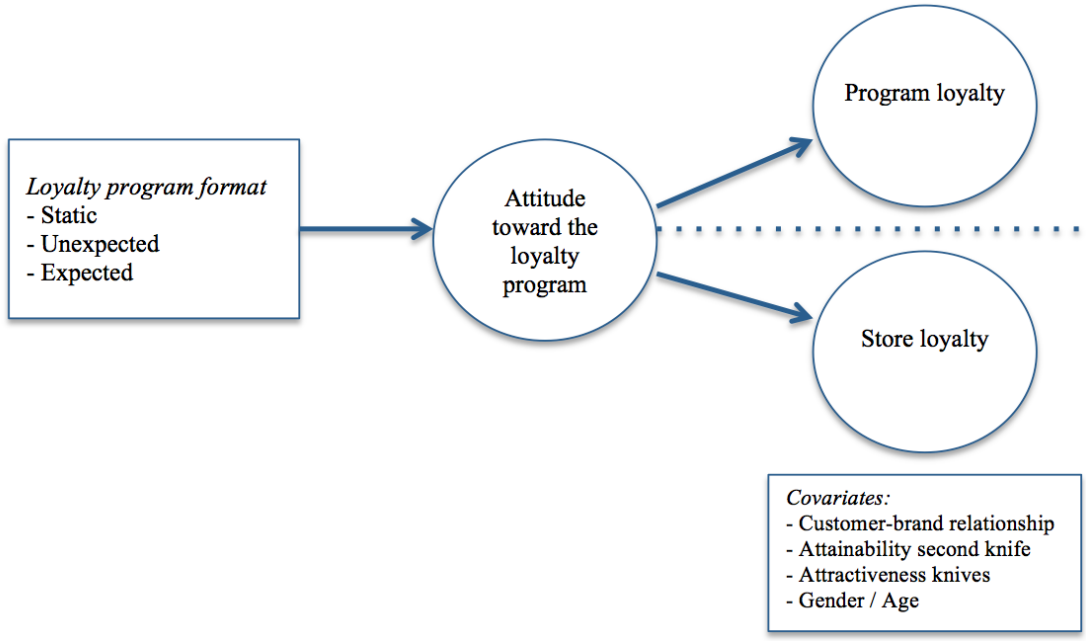

Figure 1: Conceptual model of this study

1.4 Research method

In order to answer the problem statement and its research questions, a literature review and an experiment will be conducted. The literature review will be conducted to define an (un)expected positive extra, the different components of loyalty and the attitude component. To test the influence of receiving an (un)expected positive extra on the different loyalty components, empirical quantitative research will be done via an online between-subjects experiment.

In this experiment, the independent variable will be manipulated. One group will be the control group. They will be exposed to the static treatment, which is the 'standard' loyalty program. Group two will receive treatment 1, which is the unexpected positive extra. Group three will be exposed to treatment 2, which is the expected positive extra. Based on receiving one of the treatments, the participants will be asked what their attitude is toward the loyalty program, and if they would continue saving (program loyalty) and continue shopping at that particular store (store loyalty).

1.5 Academic and managerial relevance

1.5.1 Academic relevance

Research on loyalty programs has increased in the last years. Previous research has found positive effects of loyalty programs on store loyalty (Bridson et al., 2008; Kim, Lee, Choi, Wu, & Johnson, 2013; Meyer-Waarden, 2015; Uncles, Dowling, &

Hammond, 2003) and program loyalty (Kim et al., 2013; Yi & Jeon, 2003). Additionally, research found positive attitudes toward loyalty programs (Bruneau & Zidda, 2014). However, literature states that the above-mentioned positive effects of loyalty programs (e.g., program loyalty and store loyalty) soon decline after customers adopted the program (Berry, 2015; Fruend, 2017). Furthermore, actual research seems to neglect the underlying thought on how to keep customers loyal to the program. Besides, current research on loyalty programs seems to only focus on attracting customers, by for example examining attractive design elements of loyalty programs (Kreis & Mafael, 2014; McCall & Voorhees, 2010). Design elements of loyalty programs, such as the types and values of rewards (Danaher, Sajtos, & Danaher, 2016; Keh & Lee, 2006) and reward redemption (Choi & Kim, 2013; Dorotic, Verhoef, Fok, & Bijmolt, 2014) have been examined. Hence, this study will contribute to the literature about keeping customers loyal to a loyalty program by examining the effects of receiving an (un)expected positive extra during the saving process on the loyalty components, and how this relationship can be explained by the attitude toward the loyalty program.

1.5.2 Managerial relevance

In the current market, retailers are spending five to ten times more on capturing new customers than retaining current ones (Berry, 2013). Gaining loyal customers toward the program and store could cost less and creates more benefits in the long run (Yi & Jeon, 2003). However, if members of the loyalty programs experience that they are receiving higher quality and service at another store, it may cause customers to switch to another retailer (Bolton et al., 2000). Moreover, many customers adopt loyalty programs but do not redeem because of the distraction of other competing loyalty programs (Liu & Yang, 2009). Not redeeming in a loyalty program also appears when a customer perceives the loyalty program as boring (Kanter, 1996). Eventually, this may have a negative effect on program- and store loyalty because loyalty programs continue to be used by retailers as marketing tools to support their customer loyalty-building strategy. By gaining more knowledge of the effects of receiving an (un)expected positive extra during the saving process, retailers can enhance the fun of saving. In this way, retailers can convince and motivate their customers to continue to join their loyalty program instead of the programs of competitors. Also, receiving an (un)expected positive extra could create a fun and favorable feeling that can result in

a positive attitude, which makes customers motivated to continue saving in the loyalty program of that particular store.

1.6 Structure of the thesis

This thesis has five chapters of which this first chapter was the introduction. In the second and third chapter, the theoretical framework and methodology are discussed. Chapter four presents the analyses by explaining the results and findings of the research in detail. The thesis will be finalized with chapter five in which further discussion, limitations and future research will be discussed.

Chapter 2 – Theoretical framework

2.1 Loyalty

Although many loyalty studies have been done, the concept of loyalty is a sophisticated construct that has led to various definitions. According to Dick and Basu (1994) customer loyalty can be described as the strength of the relationship between an individual's relative attitude and repeat patronage. Oliver (1997, 1999) describes loyalty as an intensely held commitment to rebuy a favored product constantly in the future. Loyalty consists of attitudinal loyalty and behavioral loyalty (Bandyopadhyay & Martell, 2007). A customer who is attitudinally loyal will help to create a positive image of a product, brand or store to others (Cheng, 2011). Attitudinally loyal customers might also simply feel really positive about the product or store (Baldinger & Rubinson, 1996). Attitude is one of the key components of attitudinally loyalty (Gómez, Arranz, & Cillán, 2006). From a behavioral standpoint, loyalty is defined as repeated support given to a single firm/brand. In other words, a customer who shops at the same place regularly is behaviorally loyal (Cheng, 2011). For this study, we will research behavioral loyalty.

Behavioral loyalty can be divided into several components. For this study, the first component is program loyalty. Program loyalty is conceptualized as having a high relative short-term attitude and support leaning toward the loyalty program of the retailer (Yi & Jeon, 2003). Program loyalty is operationalized as the customers' drive to continue and maintain a short-term relationship with a loyalty program in order to accumulate the benefits, such as loyalty stamps or points (Evanschitzky et al., 2012; Omar, Aziz, & Nazri, 2011).

The second component is store loyalty. Store loyalty can be defined as a constant, long-term positive attitude toward a store (Meyer-Waarden, 2015; Yi & Jeon, 2003). Jacoby and Chestnut (1978) define store loyalty as the non-random behavioral response of a customer, which is expressed over time, with respect to one store out of a set of multiple stores. Store loyalty is a function of psychological processes resulting from personal preference (Jacoby & Chestnut, 1978). When customers become loyal to your store, they buy more, willingly pay more and recommend more (Sirohi, McLaughlin, & Wittink, 1998). Also, customers who are loyal toward a store are less price sensitive (Krishnamurthi & Raj, 1991).

Customer loyalty is a crucial element of gaining competitive advantage. Loyal customers allow retailers to secure a comfortable long-term position, particularly in the current extremely competitive industries (TaghiPourian & Bakhsh, 2015). Therefore, it is important that once a retailer has achieved loyal customers, these customers are motivated to retain loyal.

2.2 Positive extra

Retailers can experience difficulties with customer retention toward the program and store. Among other reasons, loyalty programs fail due to having a very static, obvious and predictable saving process. Because there is little variation in loyalty programs, the static loyalty program formats can lead to bored customers (Kanter, 1996). In the long-term this may have negative effects on program- and store loyalty (e.g., decline in customer retention) (Noble & Phillips, 2004). Therefore, it is critical that customers get motived to retain in the loyalty program and really enjoy the saving process. Retailers could consider introducing stimulations in the loyalty program as an element to possibly achieve positive attitudes. This stimulation could be introducing an entertainment element in the loyalty program. This entertainment element can be a positive extra, either unexpected or expected, which customers receive next to their original amount of stamps.

Whether it is expected or unexpected, customers like to receive something extra (for free) (Anderson, 2009). Receiving something extra at no cost invokes a positive response (Flynn & Adams, 2009; Shampanier et al., 2007), especially when it decreases the feeling of uncertainty (Luhmann, Chun, Yi, Lee, & Wang, 2008). Uncertainty is the inability to create a complete map of a situation (Hawkins & Blakeslee, 2005). People don’t like uncertainty; it creates a stressful feeling (de

Berker et al., 2016). Customers regularly desire to collect information in advance about future rewards, even when they cannot take any action to influence the outcome (Bromberg-Martin & Hikosaka, 2009).

However, research also suggests that uncertainty motivates and that individuals experience greater pleasure from uncertainty than from certainty (Shen, Fishbach, & Hsee, 2015). An unexpected positive extra can be seen as a surprise. Research shows that surprises can be an extremely efficient marketing tool in retaining customers (Lindgreen & Vanhamme, 2003; Vanhamme, 2000). Obviously, it is argued that the surprise must be positive for customers to be delighted (Schmitt, 2000). Besides, positive emotions are more likely to be more intense in a surprising purchasing or consumption experience (Westbrook, 1987).

It is believed that receiving a positive extra, either expected or unexpected, has positive effects on program- and store loyalty. First, it is crucial that customers, before they get loyal to the program, can perceive and identify the benefits of membership and appreciate the saving process (Zidda & Demoulin, 2009). Moreover, the entertainment associated with accumulating and redeeming points is very important in appreciating the saving process (Mimouni-Chaabane & Volle, 2010). It is believed that due to the extra free stamp, receiving an (un)expected positive extra can be perceived as more likeable in accumulating points, compared to the static loyalty program format. Because of this element, it is expected that customers are more likely to appreciate the saving process compared to a static loyalty program format. Based on the above, we hypothesize:

> *H1: Introducing an (un)expected positive extra in a loyalty program increases program loyalty compared to a static loyalty program format.*

Conversely, customers experience greater, immediate positive feelings when they encounter positive events with uncertain or unexpected prospects than with certain or expected ones (Lee & Qiu, 2009). It is believed that receiving an unexpected positive not only creates a surprised feeling; it also induces a greater fun and entertained feeling compared to receiving an expected positive extra. It is argued that because of the surprising element in the saving process, customers will appreciate the saving process even more, which will eventually lead to loyal customers (Zidda & Demoulin, 2009). It is suspected that receiving an unexpected positive extra influences program loyalty more positively.

Therefore, it is hypothesized that:

> *H2: Introducing an unexpected positive extra results in higher program loyalty compared to introducing an expected positive extra in the saving process.*

We expect the same positive effects for store loyalty because research shows that loyalty programs are found to be significant predictors of store loyalty (Bridson et al., 2008; Yi & Jeon, 2003). The longer a customer has been in the loyalty program, the more interested the customer is in the program and the higher the switching costs. Customers are less likely to have extended experiences with competitors due to these switching costs (Bolton et al., 2000). However, these are all short-term effects and applicable while the loyalty program is still running. There is little research on the long-term effects of loyalty programs on store loyalty, even after the loyalty program has ended. According to Kivetz, Urminsky and Zheng (2006), the positive change in behavior dissolves after customers obtain the reward. Nonetheless, other research shows that the duration of being loyal toward a store after a loyalty program depends on how much the customers purchased in that store during the loyalty program. The more the customers purchase proportionally, the longer they will remain with that retailer (Meyer-Waarden, 2007). Additionally, Sharp and Sharp (1997) say that loyalty programs can be distinguished from sales promotions by their longer-term nature. As customers quickly get back into their previous behavior pattern when the promotion finishes, loyalty programs aim to lock customers in, even after the program (Sharp & Sharp, 1997). Moreover, other research proofs that short-term loyalty programs lead to long-term loyalty toward the store. Loyalty toward the store appears during the loyalty program and stays strong even after the program finishes (McIntosh, 2012). Based on the information above, it can be concluded that static loyalty programs create loyal customers toward the store. However, because of the extra free stamp in the saving process, it is believed that introducing an (un)expected positive extra increases store loyalty, compared to a static loyalty program format. Hence, it can be hypothesized that:

> *H3: Introducing an (un)expected positive extra in a loyalty program increases store loyalty compared to a static loyalty program format.*

Receiving an unexpected in-store coupon increases the overall number and dollar value of unplanned purchases (Heilman, Nakamoto, & Rao, 2002). Oliver et al. (1997) found evidence that unexpected results, combined with delight, pleasure, joy, or elation increases long-term customer loyalty toward a store. Also, when a customer has a feeling of enjoyment while shopping, it has a positive influence on customers' intention to revisit the store (Hart, Farrell, Stachow, Reed, & Cadogan, 2007; Wong, 2004).

Building on the foregoing discussion, it is argued that due to the enjoyment of receiving an unexpected positive extra, store loyalty increases compared to receiving an expected positive extra, even after the loyalty program has ended. It is further hypothesized that:

H4: Introducing an unexpected positive extra results in higher store loyalty compared to introducing an expected positive extra in the saving process.

2.3 Attitude toward a loyalty program

Attitude is a broad defined topic. It has been developed over the last era. One of the first definitions of attitude was formed by LaPiere in 1934 and was stated as a "learned tendency to give a response to an item in a positive and negative direction". Allport (1935) defined attitude as "an expression of favor or disfavor toward a person, place, thing or event" (p. 798). Almost sixty years later, the concept of attitude was still defined in a similar way: "a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor" (Eagly & Chaiken, 1993, p. 1).

An attitude consists of three components, namely cognition, affection and conation (or behavioral) (Solomon, 2009). Since this study focuses on customers' feelings toward a loyalty program, the affection component of an attitude is of interest. The affection, or emotional, component refers to the psychological or emotional reaction that a customer has with an attitude object (Ajzen, 1989; Solomon, 2009).

Attitude can be created toward almost every object, event or person. The formation of an attitude will either occur through direct experience or through the persuasion of others (Solomon, 2009). Much research has been done on the formation of a positive attitude. In almost every setting, positive affective responses can be invoked due to receiving something extra at no cost (Shampanier et al., 2007). The

same holds for gifts; when a customer receives a gift, the feeling of appreciation increases and positive affective responses are created (Flynn & Adams, 2009). Consequently, it is expected that receiving an (un)expected positive extra, which can be seen as a gift, invokes positive affective responses. We believe that these responses positively influence attitude toward the loyalty program, compared to the static loyalty program format. Taking together, the following hypothesis is proposed:

H5: Introducing an (un)expected positive extra in a loyalty program results in a higher positive attitude compared to a static loyalty program format.

Furthermore, several relevant studies have done research on the effects of unexpected or surprise incentives on the formation of a positive attitude. To refer back to the research of Lee and Qiu (2009), it is suggested that uncertainty provokes greater instant positive feelings compared to certainty. Uncertainty would increase the duration of positive feelings (Lee & Qiu, 2009). Further research showed that surprise and reported pleasure are significantly correlated. When a gift was announced beforehand, respondents expressed roughly equivalent surprised. However, when the gift was unexpected, respondents expressed significantly more positively surprised (Valenzuela et al., 2010). Norton and colleagues (2007) found effects in the formation of attitudes in the context of online dating. In particular, no or little information about an upcoming date can often lead to greater liking (Norton, Frost, & Dan, 2007). Somewhat similar effects account for advertisements. Unexpected advertising claims produce more favorable evaluations of the ad (Lee, 2000). Summarizing, the likelihood of liking an object, event or person greatly increases when there is little or unexpected information about the object, event or person, compared to receiving information beforehand. Because of its surprising element, it is believed that the likelihood of liking a loyalty program, with an unexpected positive extra, increases. According to Bruneau and Zidda (2014), retailers need to differentiate their program from its competitors by creating unique associations to create positive attitudes toward the loyalty program. This surprising element is believed to create unique associations toward the loyalty program.

Building on the foregoing discussion, it is argued that because of the surprising element, customers can enjoy the saving process of a loyalty program more, eventually leading to a greater expression of favor toward the loyalty program, relative to receiving an expected positive extra.

It is therefore hypothesized that:

> *H6: Introducing an unexpected positive extra results in a higher positive attitude toward the loyalty program compared to introducing an expected positive extra.*

Attitudes are important for building relationships (Allport, 1935). Attitudes toward a loyalty program are built from associations that customers make about the programs. These attitudes are likely to drive customer behavior with the program (e.g., continue saving) (Bruneau & Zidda, 2014). A person with a favorable attitude toward an object performs favorable behaviors (Ajzen & Fishbein, 1977). Likewise, previous studies suggest a positive link between the attitude toward a loyalty program and program loyalty (Kim et al., 2013). If customers perceive a certain loyalty program to be attractive, and thus gain a positive attitude toward that loyalty program, they will be more likely to be motivated to join and actively participate in that program (Wirtz et al., 2007). Accordingly, participating in a loyalty program will often result in a positive attitude toward that loyalty program (Bruneau & Zidda, 2014; Kim et al., 2013). This positive attitude could have positive effects on program loyalty. Since receiving an (un)expected positive extra can be seen as a gift, it is believed that the extra free stamp increases positive attitudes toward the loyalty program. Eventually, these positive attitudes toward the loyalty program, would lead to motivated customers who want to keep saving in the loyalty program. So, it is expected that a positive attitude toward a loyalty program has a positive mediating role in the relationship between receiving an (un)expected positive extra and program loyalty. It is hypothesized that:

> *H7: Introducing an (un)expected positive extra in a loyalty program increases program loyalty compared to a static loyalty program format, and this relationship can be explained through a higher positive attitude with the saving process.*

Since surprise and reported pleasure are significantly related (Valenzuela et al., 2010), and the likelihood of liking an object greatly increases when there is no or little information about the object (Lee, 2000; Norton et al., 2007), it is believed that receiving an unexpected positive extra creates higher positive attitudes toward the loyalty program compared to receiving an expected positive extra. Due to these higher positive attitudes, customers are more motivated to keep participating in the loyalty program (Bruneau & Zidda, 2014). Therefore, it is believed that the positive

relationship between receiving an unexpected positive extra and program loyalty can be explained by a greater positive attitude grounded on receiving an unexpected positive extra, rather than the attitude based on receiving an expected positive extra. Taking together, the following hypothesis is proposed:

> *H8: Introducing an unexpected positive extra in a loyalty program increases program loyalty compared to introducing an expected positive extra, and this relationship can be explained through a higher positive attitude with the saving process.*

The same mediating effect is expected for store loyalty because a positive attitude toward a loyalty program appears to have a central role between the program and the loyalty towards a store: customers are more likely to visit a store when they have a positive attitude toward its loyalty program (Bruneau & Zidda, 2014). Research also shows that the more attractive a loyalty program is perceived to be, the more a customer purchases (Lewis, 2004) and the more the customer demonstrates store loyalty (Bridson et al., 2008; Meyer-Waarden, 2015) even after the program finishes (McIntosh, 2012). It is believed that due to receiving an extra free stamp, positive attitudes are created, which can motivate customers to stay loyal toward the store. Therefore, it is hypothesized that:

> *H9: Introducing an (un)expected positive extra in a loyalty program increases store loyalty compared to a static loyalty program format, and this relationship can be explained through a higher positive attitude with the saving process.*

Positive attitudes are likely to drive customer behavior with the store (e.g., loyalty) (Bruneau & Zidda, 2014). As it is expected that receiving an unexpected positive extra creates a feeling of enjoyment, it is believed that the higher positive attitude toward the loyalty program increases store loyalty. Therefore, we believe that the positive relationship between receiving an unexpected positive extra and store loyalty can be explained by a greater positive attitude based on receiving an unexpected positive extra, compared to receiving an expected positive extra. It is hypothesized that:

> *H10: Introducing an unexpected positive extra in a loyalty program increases store loyalty compared to introducing an expected positive extra, and this relationship can be explained through a higher positive attitude with the saving process.*

Chapter 3 – Methodology

3.1 Experiment

In order to answer the problem statement and its research questions, an experiment will be conducted. The purpose of an experiment is to study whether a change in an independent variable produces a change in a dependent variable (De Vaus, 2001).

This research will make use of an online experiment because of its advantages. Online experiments are experimental studies conducted over the Internet (Sekaran & Bougie, 2016). With online experiments, external validity is high due to a bigger and diverse sample (Christensen, Johnson, & Turner, 2015; Hair, Black, Babin, & Anderson, 2010). Moreover, online experiments are cost saving and the results are easier to compare compared to the other types of experiments. Nevertheless, it is hard to control for the participants' environment, which leads to low internal validity (Hair et al., 2010).

Valid results can be found and generalized by maintaining high external validity and trying to achieve a high level of internal validity by creating an online retail setting, which is similar to the real world.

3.2 Experimental design

The experiment applied a between-subjects design. In this design, each respondent is exposed to only one treatment (Charness, Gneezy, & Kuhn, 2012). This will prevent the risk of participants working out the aim of the experiment. Further, participants in a between-subjects design do not have the opportunity to learn from one condition and use this knowledge to the next condition, so there will be no carry-over effects (Charness et al., 2012).

The participants will be randomly assigned to the different levels of the independent variable. With randomization, bias will be avoided and the participants will each have an equal chance of receiving any treatment. Also, random assignment is crucial for internal validity (Kirk, 1982).

According to Cohen (1992), for a study to have at least 80% power, which is the minimum suggested for a study, 64 participants per cell are needed. Power refers to the ability to detect relationships among variables (Leary, 2012). Given the number of cells, a total of 64 respondents per cell is needed. So, data of at least 192 participants will be gathered. The participants will be approached via convenience sampling, which means that the sample is taken from people easy to contact or reach.

Convenience sampling will be used because it is a quick, easy and readily available way to collect participants (Sekaran & Bougie, 2016). Participants will be approached via online and offline social networks.

3.3 Pre-test

The questionnaire was pre-tested among several participants to maintain simplicity and logicalness. The pre-test was done to determine whether the treatments are understandable and clear. To uncover problems in the questionnaire, small samples of five to fifteen participants are commonly used (Perneger, Courvoisier, Hudelson, & Gayet-Ageron, 2014). For this pre-test, eleven participants completely fulfilled the pre-test. The results reveal an average (*M* = 4.45, *SD* = 0.73*)* on a scale of 1 *(strongly disagree)* to 5 *(strongly agree)* for the question "I clearly understand the above-mentioned information about this loyalty program". For the question "I understand how the above-mentioned loyalty program works", results reveal an average (*M* = 4.49, *SD* = 0.78*)* on a scale of 1 *(strongly disagree)* to 5 *(strongly agree)*. The results show that the treatments are understandable and clear and thus can be used in the questionnaire. The pre-test can be found in appendix 1.1, the results of the pre-test can be found in appendix 1.2.

3.4 Method

3.4.1 Participants

After a period of ten days, the questionnaire was taken offline. The questionnaire can be found in appendix 2. In total, 312 participants took part in this study, of which 21 opened the survey, and immediately closed the survey. These participants are removed from the dataset. Subsequently, there has been a check for outliers during the data inspection. Outliers are observations that are distinctly different than the other observations in the dataset (Hair et al., 2010). Two outliers were found as it is assumed that two participants did not truthfully take part in this study. Both participants scored zeros on all variables and 99 on the age variable. These participants are removed from the dataset as well.

The final sample exists of 289 participants. The sample descriptives can be found in appendix 3.1. A small overview can be found in Table 1. Slightly more than half of the participants were female (53.3%). A Chi-square test is conducted to check if the sample corresponds with the Dutch population. The test shows that the observed group of participants equals the Dutch population (49.6% men and 50.4% women

(Centraal Bureau voor de Statistiek, 2017)) (X^2 (2) = 1.574, p = .455). Participants' ages ranged from 17 to 82 years (M = 35.33, SD = 14.15). As the average age of the Dutch population is currently 41.6 years old (Centraal Bureau voor de Statistiek, 2017), the Chi-square test shows that the observed group of participants is not equal to the Dutch population (X^2 (52) = 71.735, p = .036). The difference in age can be derived from the researchers' younger environment.

	Gender				**Age**	
	Male		Female			
	N	%	*N*	%	*M*	*(SD)*
Static	52	51%	50	49%	36.65	(15.24)
Unexpected	51	46.4%	59	53.6%	34.95	(13.32)
Expected	32	41.6%	45	58.4%	34.13	(13.83)
Total	135	46.7%	154	53.3%	35.33	(14.15)

Table 1: Gender and age of the sample

3.4.2 Treatments

The experiment consisted of three different treatments. Participants were exposed to one of the treatments. The first treatment group was the control group. The internal validity of this study will greatly increase because of the inclusion of a control group (Kirk, 1982). The first treatment was the static treatment, which is the 'standard' loyalty program. Meaning, the customers will receive one stamp each time they spend €10. In this study, the customer bought groceries for €55.55 and thus received five stamps. The control group consisted of 102 participants (N_{male} = 52, N_{female} = 50. M_{age} = 36.65, SD = 15.24, range 20-82).

The second treatment was an unexpected positive extra, which the customers received next to their original amount of stamps. The customers did not know about this positive extra beforehand. In this study, the customer bought groceries for €55.55, but instead of receiving five stamps, five unexpected scratch cards were handed to the customer. The purpose of these scratch cards is that the customers are challenged and induced to scratch for either one or two stamps. The customers found an extra stamp in the fifth scratch card. Eventually, the customer received six stamps. This treatment group consisted of 110 participants (N_{male} = 51, N_{female} = 59. M_{age} = 34.95, SD = 13.32, range 17-61).

Further, the third treatment was an expected positive extra that customers obtained next to their original sum of stamps. The customers gained information about receiving this positive extra beforehand. In this study, customers noticed an announcement in the brochure of the supermarket. The announcement states that the

customers will receive one extra stamp if they spend at least €50 on groceries. In this study, the customer bought groceries for €55.55, and thus received six stamps. This treatment group consisted of 77 participants (N_{male} = 32, N_{female} = 45. M_{age} = 34.13, *SD* = 13.83, range 17-78*)*. Note that the positive extra is exactly the same across the two treatment groups.

3.4.3 Dependent variables

Program loyalty was measured with an eleven-point scale, starting from 0 *(strongly disagree)* to 10 *(strongly agree)*. The four measurement items for this loyalty component are adopted from previous research on program loyalty done by Yi and Jeon (2003). They developed a scale measuring (1) the intention to continue saving in the loyalty program, (2) the likelihood of liking the loyalty program more than other programs, (3) the preference for the loyalty program compared to other loyalty programs, and (4) the intention to recommend the loyalty program (α = .87).

Store loyalty was measured with an eleven-point scale, starting from 0 *(strongly disagree)* to 10 *(strongly agree)*. This scale measured the intention to recommend the store and the likelihood of repeat purchases (after the loyalty program has ended) ($\alpha \geq .90$). The three items are derived from previous research on customer loyalty done by Sirdeshmukh, Singh, and Sabol (2002).

The attitude toward the loyalty program was measured using a seven-point Likert scale, starting from 1 *(strongly disagree)* to 7 *(strongly agree)*, using five items derived from Bruner (2013). Likert scales are commonly used to measure attitude offering a variety of responses to a certain question (Likert, 1932). The five items measured attractiveness, pleasantness, fun, entertainment and distinctiveness of the proposed loyalty program (α = .78). All measurement items mentioned above were presented in a random order.

3.4.4 Covariates

For this study, five covariates are selected. As the covariates can obscure the relationship between the independent and dependent variables, they are controlled in the analyses. The first covariate is the customer-brand relationship variable. This variable will lead to a better understanding in the nature of the customer-brand relationships (Aggarwal, 2004). The customer-brand relationships can be explained using two items tapped into communal relationship norms and two items tapped into exchange relationship norms derived from Aggarwal (2004). The communal

relationship norms measured to what extent the participants agreed with the statements "The supermarket does things for me without expecting anything back" and "The supermarket treats me special" (α = .89). The exchange relationship norms measured to what extent the participants agreed with the statements "The supermarket expected to get paid for each benefit provided" and "The supermarket gives service to get business" (α = .76). Due to the manipulation, communal feelings can arise in one condition and exchange feelings in another condition, hence we will control for these variables.

Another possible covariate is the confound variable "attainability". Confound variables are also known as the third variable, which can influence both the independent and dependent variables (MacKinnon, Krull, & Lockwood, 2000). Two statements with a rating scale from 1 *(strongly disagree)* to 7 *(strongly agree)* were used to assess the participants' evaluations of the easiness and feasibility of gaining enough stamps for a second knife. We will control for attainability because receiving an extra stamp may affect the dependent variables, regardless of the attitude toward the loyalty program.

Control variables can affect the dependent variables (Saunders, Lewis, & Thornhill, 2015). The control variable, attractiveness of the rewards, may influence program loyalty and store loyalty, independent of the manipulation. For example, when the respondent doesn't think the knives are attractive, this may decrease program loyalty irrespective of the entertaining element of the loyalty program format. So, in the model, there will be controlled for the attractiveness of the reward. A seven-point Likert scale, starting from 1 *(strongly disagree)* to 7 *(strongly agree)*, measured the attractiveness of the knives.

We will also control for the demographics of the participants, because women tend to be more loyal than men to a loyalty program in a retail setting (CrowdTwist, 2016). The gender and age of the participants were measured through multiple-choice and open-ended questions.

3.5 Procedure

For this experiment, data was gathered by conducting an online questionnaire. The questionnaire consisted of four parts. In the first part, the participants were told they are joining the loyalty program of a supermarket where they normally don't go for groceries. Within one month, they have easily saved twenty stamps and redeemed the

stamps for one of the four knives. The participants were told that they are very satisfied with the quality of the knife, and that they decided to join the loyalty program again to save for a second knife, as the loyalty program continues for two months. In the second part, the participants were exposed to one of the three experimental treatments (i.e. (1) static loyalty program (customer spends €55.55 and receives five stamps), (2) unexpected positive extra (customer spends €55,55 and receives six stamps due to extra stamp in one of the unexpected scratch cards), (3) expected positive extra (customer spends €55,55 and receives six stamps due to receiving an extra stamp because they spent more than €50, of which the customer knows about because of the announcement in the brochure of the supermarket).

The third and fourth part of the questionnaire was the same for all participants. The third part consists of twelve items that measured the attitude toward the loyalty program, program loyalty and store loyalty. Besides that, several questions measured the customer-brand relationship, the attainability of a second knife and the attractiveness of the knives. All questions measured to what extent the participants agreed with statements such as "Saving for a full card is fun", "I have a strong preference for this loyalty program" and "I tend to continue shopping at this store after the loyalty program has ended". The questionnaire concluded with gaining information about participants' age and gender. Completion of the questionnaire took approximately seven minutes.

Chapter 4 – Analysis and results

4.1 The data

4.1.1 Randomization

The final sample consists of 289 participants. All participants were randomly assigned to one of the three conditions (i.e. (1) static loyalty program, (2) unexpected positive extra, (3) expected positive extra). It is important for the reliability and validity of the study that all participants are randomly assigned to one of the conditions. To check if the randomization went well, a one-way ANOVA is performed. This one-way ANOVA tested any differences in age or gender between the groups. The results can be found in appendix 3.2. Although the number of participants in the three groups is unequal ($N_{static} = 102$; $N_{unexpected} = 110$; $N_{expected} = 77$), the ANOVA showed no significant differences in age *(*$F(2) = .76$, $p = .470$*)* and gender *(*$F(2) = .78$,

p = .458*)* between the groups. This means that the groups are successfully randomized with respect to age and gender.

4.1.2 Cronbach's Alpha

Before running the main analyses, there must be checked whether the items relating to all constructs measure the same construct. This was done measuring the reliability of the different items via a Cronbach's Alpha. When the Cronbach's Alpha is greater than 0.70, the internal consistency between the different items is acceptable (Cronbach, 1951). The items for the exchange relationship-construct do not meet the internal consistency restriction; the other items of the constructs have a Cronbach's Alpha greater than 0.70. The results of the reliability tests can be found in Table 2 and in appendix 3.3.

Construct	Items	Factor loading	Cronbach's α
Program loyalty	*Intention to continue saving*	.92	.94
	Likelihood of liking	.84	
	Preference	.90	
	Intention to recommend	.93	
Store loyalty	*Intention to continue shopping*	.88	.91
	Intention to continue shopping after LP	.92	
	Intention to recommend	.84	
Attitude	*Attractiveness*	.74	.78
	Pleasantness	.82	
	Fun	.98	
	Entertaining	.73	
	Distinctiveness	.69	
Attainability	*Easiness*	.91	.91
	Feasibility	.91	
Communal relationship	*Store does not expect back*	.82	.80
	Store gives special treatment	.82	
Exchange relationship	*Store expects to get paid*	.35	.34
	Store gives service to get business	.45	

Table 2: Factor loading and Cronbach's Alpha for all measurement items.

4.2 Assumptions

As this study executes analyses using an analysis of variance, the assumptions for ANOVA should be met. There are multiple assumptions for ANOVA to be met. First, the observations should be independent; this is the case since each respondent received only one treatment. Further, the data should be measured on ratio scale and the variances should be equal across the treatment groups. The homogeneity of the variances should be checked with a Levene's test. Program loyalty ($F(2, 286) = 1.48$, $p = .229$) and store loyalty ($F(2, 286) = 1.11$, $p = .330$) are not significant, which means that the variances of these dependent variables are equal across the groups.

Another assumption for ANOVA to be met is the normality assumption. The Kolmogorov-Smirnov and Shapiro-Wilk tests of normality suggest that normality

cannot be found for either program loyalty ($D(289) = .16$, $p < .001$; $W(289) = .94$, $p < .001$) and store loyalty ($D(289) = .15$, $p < .001$; $W(289) = .96$, $p < .001$). According to Hair et al. (2010), we can be less concerned about non-normal variables when the sample size is bigger than 200. Further, when the sample size is sufficiently large (> 200), it is not really necessary to meet the normality assumption as the Central Limit Theorem ensures an approximate normal distribution (Hall, 1984; Hogg, McKean, & Craig, 2014). Since it is considered that an ANOVA is robust against the normality assumption even though the tests are violated (Malhotra, Birks, & Wills, 2012), we proceed with the analyses. The results of all tested assumptions can be found in appendix 3.4.

4.3 Descriptive statistics

The descriptives, which are summarized in Table 3, show the different means of the groups for program loyalty, store loyalty and attitude. All variables are highest for the "unexpected"-condition.

	Program loyalty (Y)		Store loyalty (Y)		Attitude (M)	
	M	*(SD)*	*M*	*(SD)*	*M*	*(SD)*
Static (*N* = 102)	5.80	(2.10)	4.60	(2.20)	4.43	(1.04)
Unexpected (*N* = 110)	6.01	(2.40)	4.98	(2.28)	4.48	(1.28)
Expected (*N* = 77)	5.34	(2.19)	4.71	(2.01)	4.30	(1.22)
Total (*N* = 289)	5.76	(2.25)	4.78	(2.18)	4.42	(1.18)

Table 3: Mean and standard deviation of dependent variables and mediator.
Notes: Program- and store loyalty are measured on a scale from 0 to 10. Attitude is measured on a scale from 1 to 7.

4.4 Correlations

The detailed correlation matrix, which can be found in appendix 3.5, shows some interesting correlations between the constructs. Correlations can be described as a relationship between two variables (Leary, 2012). The correlation matrix indicates that program loyalty positively relates to store loyalty ($r(289) = .75$, $p < .01$). Further, attitude toward the loyalty program seems to positively correlate with program loyalty ($r(289) = .71$, $p < .01$) and store loyalty ($r(289) = .60$, $p < .01$). Also, communal relationships correlate negatively with static loyalty program formats ($r(289) = -.15$, $p < .05$) and positively with receiving an unexpected positive extra ($r(289) = .21$, $p < .01$). Also, there is a positive correlating relationship between communal relationships and store loyalty ($r(289) = .50$, $p < .01$). Another interesting correlation is the positive relationship between the attainability of a second knife with static loyalty program formats ($r(289) = .12$, $p < .05$). These interesting correlations highlight the importance of adding covariates in the model.

4.5 Main analyses

To conduct the main analyses, an ANOVA is executed. The results of all one-way ANOVA's can be found in appendix 3.6. Also, model 4 of the PROCESS macro of Hayes (2017) is used to test the mediating effect in the conceptual model. To use this PROCESS macro, the independent categorical variable is coded using Helmert coding. Helmert coding is used to compare the mean of a level to the mean of the remaining levels (Wendorf, 2004). In this study, the first comparison is made using the mean of the static condition and compares this to the mean of the other two conditions combined (a positive extra, both expected and unexpected) (X1 in the model). Consequently, the second comparison is made using the mean of the unexpected condition, and compares this to the mean of the expected condition (X2 in the model). The mediating effect was tested via a bootstrap confidence interval (Preacher & Hayes, 2004; 2008). The results of all PROCESS macros can be found in appendix 3.7.

4.5.1 Confound check

As this study contains several covariates, which can obscure the relationship between the independent and dependent variables, they are controlled in the analyses. Not only are the covariates added in the analyses, we will also conduct a confound check to reveal any significant differences among the groups of the covariates. Table 4 summarizes the descriptive statistics of each of the covariates. Since we already know that there are no significant differences in age *(F*(2) = .76, *p* = .470*)* and gender *(F*(2) = .78, *p* = .458*)* between the groups, these covariates will not be discussed in the confound check.

The one-way ANOVA shows significant differences among the means of the groups for communal relationships (M_{static} = 3.01, *SD* = 1.51; $M_{unexpected}$ = 3.68, *SD* = 1.33; $M_{expected}$ = 3.12, *SD* = 1.38; *F*(2, 286) = 6.89, *p* = .001). The Bonferroni post-hoc test shows that the unexpected positive extra leads to a higher communal relationship than the static loyalty program (*p* = .002) and expected positive extra (*p* = .022). This result is in line with the earlier mentioned correlations.

With respect to the attainability of a second knife, the one-way ANOVA reveals marginally significant differences among the means of the groups (M_{static} = 5.51, *SD* = 1.08; $M_{unexpected}$ = 5.26, *SD* = 1.30; $M_{expected}$ = 5.09, *SD* = 1.46; *F*(2, 286) = 2.47, *p* = .086). The Bonferroni post-hoc test shows that the expected

positive extra leads to a higher feeling of attainability than the static loyalty program (p = .090).

With respect to the attractiveness of the knives, the one-way ANOVA reveals no significant differences among the means of the groups (M_{static} = 5.00, SD = 1.44; $M_{unexpected}$ = 4.83, SD = 1.49; $M_{expected}$ = 4.64, SD = 1.53; F(2, 286) = 1.32, p = .268).

	Communal		Attainability		Attractiveness	
	M	*(SD)*	*M*	*(SD)*	*M*	*(SD)*
Static (*N* = 102)	3.01	(1.51)	5.51	(1.08)	5.00	1.44)
Unexpected (*N* = 110)	3.68	(1.33)	5.26	(1.30)	4.83	(1.49)
Expected (*N* = 77)	3.12	(1.38)	5.09	(1.46)	4.64	(1.53)
Total (*N* = 289)	3.29	(1.43)	5.30	(1.28)	4.84	(1.49)

Table 4: Mean and standard deviation of the covariates.
Notes: The covariates are measured on a scale from 1 to 7.

4.5.2 Program loyalty

The results of the one-way ANOVA show almost marginally significant differences among the means of the groups for program loyalty (M_{static} = 5.80, SD = 2.10; $M_{unexpected}$ = 6.01, SD = 2.40; $M_{expected}$ = 5.34, SD = 2.19; F(2, 286) = 2.06, p = .129). Therefore, H1 cannot be accepted as introducing an (un)expected positive extra in a loyalty program doesn't increase program loyalty compared to a static loyalty program format. The ANOVA shows that introducing an unexpected positive extra ($M_{unexpected}$ = 6.01, SD = 2.40) increases program loyalty compared to receiving an expected positive extra ($M_{expected}$ = 5.34, SD = 2.19; F(1, 185) = 3.80, p = .053). When adding the covariates to the analyses, the PROCESS macro showed an almost marginally significant effect (c_2 = -.32, p = .169). Therefore, H2 cannot be accepted.

Both ANOVA and a mediation analysis, using the PROCESS macro, were conducted in order to assess the relationship between attitude toward the loyalty program and the conditions as well as the relationship with program loyalty. An overview of the key findings can be found in Table 5. The one-way ANOVA revealed insignificant differences among the means of the different conditions on attitude (M_{static} = 4.43, SD = 1.04; $M_{unexpected}$ = 4.48, SD = 1.28; $M_{expected}$ = 4.30, SD = 1.22; F(2, 286) = .56, p = .572). The mediation analyses also showed that receiving an (un)expected positive extra, compared to a static loyalty program format has no significant effect on the attitude toward the loyalty program (a_1 = .02, p = .848). This means that H5 cannot be accepted as receiving an (un)expected positive extra doesn't

influence attitude toward the loyalty program compared to the static loyalty program format. Furthermore, receiving an unexpected positive extra, compared to receiving an expected positive extra, has no significant effect on the mediator (a_2 = .01, p = .955). Therefore, hypothesis 6 cannot be accepted. It is possible that there is no effect in attitude due to the fact that the knives are not perceived as attractive (F(2, 286) = 1.32, p = .268). As can be seen in Table 5, attitude toward the loyalty program positively predicts program loyalty (b_1 = .82, p < .001).

The covariates communal relationships (f_1 = .19, p < .001), attainability of a second knife (f_2 = .31, p < .001) and attractiveness of the knives (f_3 = .25, p < .001) are significantly related to attitude toward the loyalty program. This suggests that customers with a higher feeling of communal relationships or when they perceive the rewards as (more) attainable or attractive, attitude toward the loyalty program increases. Besides, the covariates attainability of a second knife (g_2 = .20, p = .014), attractiveness of the knives (g_3 = .53, p < .001), and age (g_5 = -.01, p = .054) are significantly related to program loyalty. This indicates that customers with a higher feeling of attainability or attractiveness toward the rewards, seem to have a higher program loyalty score. For older customers, it seems that program loyalty decreases.

The next step in the mediation analysis is to check whether attitude toward the loyalty program mediates the relationship between the conditions and program loyalty. The direct effect of receiving an (un)expected positive extra, compared to a static loyalty program format, on program loyalty while controlling for attitude, was not statistically significant (c'_1 = .05, p = .759). The bootstrap confidence interval for the indirect effect of receiving an (un)expected positive extra, compared to a static loyalty program format, on program loyalty through attitude showed no mediation, 95% CI [-.15, .19]. Therefore, H7 cannot be accepted.

An almost marginally significant direct effect (c'_2 = -.33, p = .115) was found for receiving an unexpected positive extra, compared to receiving an expected positive extra, on program loyalty while controlling for attitude. The bootstrap confidence interval for the indirect effect showed no mediation either, 95% CI [-.21, 21]. Consequently, H8 cannot be accepted.

		Consequent						
		M (Attitude)				Y_1 (Program Loyalty)		
Antecedent		Coeff.	SE	p		Coeff.	SE	p
X_1 (Static vs. (Un)expected positive extra)	a_1	.021	.112	.848	c'_1	.054	.175	.759
X_2 (Unexpected vs. Expected)	a_2	.008	.133	.955	c'_2	-.328	.207	.115
M (Attitude)		---	----	---	b_1	.817	.093	< .001
C_1 (Communal)	f_1	.193	.039	< .001	g_1	.109	.064	.089
C_2 (Attainability)	f_2	.306	.047	< .001	g_2	.195	.079	.014
C_3 (Attractiveness)	f_3	.246	.041	< .001	g_3	.530	.069	< .001
C_4 (Gender)	f_4	.308	.106	.004	g_4	-.146	.168	.386
C_5 (Age)	f_5	-.004	.004	.294	g_5	-.011	.006	.054
Constant	i_m	.637	.342	.064	i_{y1}	-1.199	.538	.027
		R^2 = .457				R^2 = .637		
		F(7, 281) = 33.762				F(8, 280) = 61.494		
		p < .001				p < .001		

Table 5: Mediation model for all conditions on program loyalty, while controlling for attitude.

4.5.3 Store loyalty

Contrary to H3, no significant differences among the means of the groups are found in the one-way ANOVA with respect to store loyalty (M_{static} = 4.60, SD = 2.20; $M_{unexpected}$ = 4.98, SD = 2.28; $M_{expected}$ = 4.71, SD = 2.01; F(2, 286) = .859, p = .425). Also, H4 cannot be accepted as introducing an unexpected positive extra ($M_{unexpected}$ = 4.98, SD = 2.28) has no significant effect on store loyalty, compared to introducing an expected positive extra ($M_{expected}$ = 4.71, SD = 2.01; F(1, 185) = .685, p = .409).

Both ANOVA and mediation analyses were conducted by estimating attitude toward the loyalty program from the conditions as well as reactions to store loyalty. An overview of the key findings can be found in Table 6. Attitude toward the loyalty program turns out to be a positive predictor of store loyalty (b_2 = .56, p < .001).

The covariates communal relationships (g_6 = .42, p < .001), attractiveness of the knives (g_8 = .38, p < .001) and age of the customer (g_{10} = -.02, p = .019) are significantly related to store loyalty. This indicates that customers with a higher feeling of communal relationships or when they perceive the rewards as (more) attractive, the store loyalty score seems to be higher. For older customers, it seems that store loyalty decreases.

The next step in the mediation analysis is to check whether attitude toward the loyalty program mediates the relationship between the conditions and store loyalty. While controlling for attitude as mediator, no direct effects (c'_3 = .24, p = .226) are found for receiving an (un)expected positive extra on store loyalty, compared to a static loyalty program format. The confidence interval, 95% CI [-.10, .13], revealed

no indirect effects, and thus no mediation. Therefore, H9 cannot be accepted. No significant direct effects (c'_4 = .17, p = .479) were found for receiving an unexpected positive extra, compared to receiving an expected positive extra, on store loyalty while controlling for attitude. The bootstrap confidence interval showed no indirect effects and mediation, 95% CI [-.14, .15]. This means that H10 cannot be accepted either.

		Consequent						
		M (Attitude)				Y_2 (Store Loyalty)		
Antecedent		Coeff.	SE	p		Coeff.	SE	p
X_1 (Static vs. (Un)expected positive extra)	a_1	.021	.112	.848	c'_3	.239	.197	.226
X_2 (Unexpected vs. Expected)	a_2	.008	.133	.955	c'_4	.165	.233	.479
M (Attitude)		---	----	---	b_2	.561	.105	< .001
C_1 (Communal)	f_1	.193	.039	< .001	g_6	.419	.072	< .001
C_2 (Attainability)	f_2	.306	.047	< .001	g_7	.128	.089	.151
C_3 (Attractiveness)	f_3	.246	.041	< .001	g_8	.383	.077	< .001
C_4 (Gender)	f_4	.308	.106	.004	g_9	-.231	.189	.222
C_5 (Age)	f_5	-.004	.004	.294	g_{10}	-.016	.007	.019
Constant	i_m	.637	.342	.064	i_{y2}	-.694	.605	.252
		R^2 = .457				R^2 = .512		
		F(7, 281) = 33.762				F(8, 280) = 36.674		
		p < .001				p < .001		

Table 6: Mediation model for all conditions on program loyalty, while controlling for attitude.

4.5.4 All results

Table 7 shows all hypotheses and their final conclusion.

H	Hypothesis	Conclusion
H1	Introducing an (un)expected positive extra in a loyalty program increases program loyalty compared to a static loyalty program format.	Rejected (n.s.)
H2	Introducing an unexpected positive extra results in higher program loyalty compared to introducing an expected positive extra in the saving process.	Rejected (n.s.)
H3	Introducing an (un)expected positive extra in a loyalty program increases store loyalty compared to a static loyalty program format.	Rejected (n.s.)
H4	Introducing an unexpected positive extra results in higher store loyalty compared to introducing an expected positive extra in the saving process.	Rejected (n.s.)
H5	Introducing an (un)expected positive extra in a loyalty program results in a higher positive attitude compared to a static loyalty program format.	Rejected (n.s.)
H6	Introducing an unexpected positive extra results in a higher positive attitude toward the loyalty program compared to introducing an expected positive extra.	Rejected (n.s.)
H7	Introducing an (un)expected positive extra in a loyalty program increases program loyalty compared to a static loyalty program format, and this relationship can be explained through a higher positive attitude with the saving process.	Rejected (n.s.)
H8	Introducing an unexpected positive extra in a loyalty program increases program loyalty compared to introducing an expected positive extra, and this relationship can be explained through a higher positive attitude with the saving process.	Rejected (n.s.)
H9	Introducing an (un)expected positive extra in a loyalty program increases store loyalty compared to a static loyalty program format, and this relationship can be explained through a higher positive attitude with the saving process.	Rejected (n.s.)
H10	Introducing an unexpected positive extra in a loyalty program increases store loyalty compared to introducing an expected positive extra, and this relationship can be explained through a higher positive attitude with the saving process.	Rejected (n.s.)

Table 7: All hypotheses and their final conclusion.

4.6 Exploratory analyses

4.6.1 Customer-brand relationship

Based on the correlation matrix and the previous stated covariates, we will explore the relationship between the conditions and the constructs of this study while controlling for the covariate "communal relationship". A communal relationship is part of the customer-brand relationship. As research shows that customer-brand relationships, and especially communal relationships, positively influence long-term customer loyalty toward the store (Fournier & Yao, 1997; Marzo-Navarro, Pedraja-Iglesias, & Rivera-Torres, 2004; Too, Souchon, & Thirkell, 2001), it is very interesting to explore the effects of this covariate in our conceptual model.

As mentioned before, the one-way ANOVA shows significant differences among the communal means of the groups (M_{static} = 3.01, *SD* = 1.51; $M_{unexpected}$ = 3.68, *SD* = 1.33; $M_{expected}$ = 3.12, *SD* = 1.38; $F(2, 286) = 6.89$, $p = .001$). The Bonferroni post-hoc test shows that the unexpected positive extra leads to a higher communal relationship than the static loyalty program ($p = .002$) and expected positive extra ($p = .022$). The overview of the key findings can be found in Table 8.

Receiving a positive extra, compared to a static loyalty program format, significantly predicts a communal relationship ($a_1 = .48$, $p = .004$). The same significant result holds for receiving an unexpected positive extra, compared to receiving an expected positive extra (a_2 = -.50, $p = .012$). This means that when a customer receives either an unexpected or expected positive extra, the feeling of a communal relationship increases, but even more when it is unexpected. Also, communal relationships significantly predict program loyalty ($b_1 = .27$, $p < .001$) and store loyalty ($b_2 = .53$, $p < .001$) in a positive way. This is in line with the above-mentioned research stating that communal relationships positively influence long-term customer loyalty toward the store.

The covariate attractiveness of the knives ($f_2 = .25$, $p < .001$) is significantly related to a communal relationship. This suggests that when customers perceive the rewards as (more) attractive, the feeling of a communal relationship increases.

The mediation analysis tested whether a communal relationship mediates the relationship between the conditions and program- and store loyalty. No evidence is found that receiving an (un)expected positive extra, compared to a static loyalty program format, has direct effects on program loyalty ($c'_1 = .07$, $p = .718$) and store

loyalty (c'_3 = .25, p = .225), while controlling for communal relationships. The bootstrap confidence interval found significant indirect effects for both program loyalty, 95% CI [.03, .26], and store loyalty, 95% CI [.07, .46], as the interval does not include zero. It can be concluded that a communal relationship positively mediates the relationship between receiving an (un)expected positive extra on program- and store loyalty compared to the static loyalty program format.

No significant direct effects were found for receiving an unexpected positive extra, compared to receiving an expected positive extra, on program loyalty (c'_2 = -.32, p = .169) and store loyalty (c'_4 = .17, p = .488) while controlling for a communal relationship. The bootstrap confidence interval, however, showed indirect effects and mediation for program loyalty, 95% CI [-.28, -.03], and store loyalty, 95% CI [-.48, -.07]. This means that a communal relationship positively mediates the relationship between receiving an unexpected positive extra compared to receiving an expected positive extra.

		Consequent						
		M (Communal)				Y_1 (Program Loyalty)		
Antecedent		Coeff.	SE	p		Coeff.	SE	p
X_1 (Static vs. (Un)expected positive extra)	a_1	.483	.167	.004	c'_1	.071	.197	.718
X_2 (Unexpected vs. Expected)	a_2	-.501	.199	.012	c'_2	-.322	.233	.169
M (Communal)		---	----	---	b_1	.267	.069	< .001
C_1 (Attainability)	f_1	.113	.071	.114	g_1	.444	.083	< .001
C_2 (Attractiveness)	f_2	.249	.061	< .001	g_2	.731	.073	< .001
C_3 (Gender)	f_3	-.047	.160	.769	g_3	.106	.186	.570
C_4 (Age)	f_4	-.007	.006	.242	g_4	-.015	.007	.028
Constant	i_m	1.778	.508	< .001	i_{y1}	-.679	.603	.261
		R^2 = .153				R^2 = .538		
		F(6, 282) = 8.492				F(7, 281) = 46.741		
		p < .001				p < .001		
		M (Communal)				Y_2 (Store Loyalty)		
Antecedent		Coeff.	SE	p		Coeff.	SE	p
X_1 (Static vs. (Un)expected positive extra)	a_1	.483	.167	.004	c'_3	.251	.206	.225
X_2 (Unexpected vs. Expected)	a_2	-.501	.199	.012	c'_4	.169	.244	.488
M (Communal)		---	----	---	b_2	.527	.072	< .001
C_2 (Attainability)	f_1	.113	.071	.114	g_5	.299	.087	.001
C_3 (Attractiveness)	f_2	.249	.061	< .001	g_6	.521	.076	< .001
C_4 (Gender)	f_3	-.047	.160	.769	g_7	-.058	.195	.765
C_5 (Age)	f_4	-.007	.006	.242	g_8	-.018	.007	.011
Constant	i_m	1.778	.508	< .001	i_{y2}	-.337	.630	.597
		R^2 = .153				R^2 = .462		
		F(6, 282) = 8.492				F(7, 281) = 34.447		
		p < .001				p < .001		

Table 8: Mediation model for all conditions on program- and store loyalty, while controlling for a communal relationship.

Chapter 5 – Discussion, conclusions and recommendations

5.1 Conclusion

This study investigated the impact of receiving an (un)expected positive extra on program- and store loyalty with the following problem statement: "*What effect does receiving an (un)expected positive extra have on program loyalty and store loyalty, and how can this relationship be explained by the attitude toward the loyalty program?"*

It was expected that introducing an (un)expected positive extra in a loyalty program would increase attitude toward the loyalty program, program- and store loyalty compared to a static loyalty program format. These expectations were based on literature about the positive effects of receiving gifts on attitude (Flynn & Adams, 2009; Shampanier et al., 2007), the entertainment associated with accumulating points on program loyalty (Mimouni-Chaabane & Volle, 2010) and loyalty programs being significant predictors of store loyalty (Bridson et al., 2008; Yi & Jeon, 2003). Additionally, based on literature stating that the likelihood of liking an object greatly increases when there is no or little information about the object (Lee, 2000; Norton et al., 2007; Valenzuela et al., 2010) and that receiving unexpected results increases long-term customer loyalty toward a store (Heilman et al., 2002; Oliver et al., 1997), it was expected that introducing an unexpected positive extra would increase attitude, program- and store loyalty even more, compared to introducing an expected positive extra in the saving process. Finally, it was expected that a higher positive attitude would mediate the above-mentioned relationships as previous research stated that a positive attitude toward a loyalty program appears to have a central role between the program and program loyalty (Kim et al., 2013) and the loyalty towards a store (Bruneau & Zidda, 2014).

Contrary to the expectations of this study, all relationships appear to be insignificant. Receiving an (un)expected positive extra, compared to a static loyalty program format, did not have a significant effect on program loyalty, store loyalty and attitude. The effects did not change when attitude toward the loyalty program was added to the relation as it does not have a significant mediating effect on the relationship between receiving an (un)expected positive extra on program loyalty and store loyalty, compared to a static loyalty program format.

Furthermore, receiving an unexpected positive extra, compared to receiving an expected positive extra, did not have a significant effect on program loyalty. The same effect is found for store loyalty and attitude, as the regressions stay insignificant. Attitude toward the loyalty program does not have a significant mediation effect on the relationship between receiving an unexpected positive extra on program loyalty and store loyalty, compared to receiving an expected positive extra.

The results reveal that program- and store loyalty are significantly predicted by a positive attitude toward the loyalty program and communal relationships. We tested potential mediators and found that a communal relationship has a positive mediating effect on all conditions of this study and program- and store loyalty. In other words, the relationship between receiving an (un)expected positive extra and program- and store loyalty can be explained through higher communal feelings.

5.2 Discussion

In the past, there have been studies on loyalty programs that mainly focused on attracting customers by for example examining attractive design elements of loyalty programs (Kreis & Mafael, 2014; McCall & Voorhees, 2010). Actual research seems to neglect the underlying thought on how to keep customers loyal to the program and store. For this study, we have examined the effects on customer loyalty toward the loyalty program and store using three conditions. These conditions were based on research stating that positive affective responses are invoked due to receiving something extra at no cost (Shampanier et al., 2007) or when receiving an unexpected gift (Valenzuela et al., 2010). Research even shows that the enjoyment of receiving an unexpected positive extra significantly predicts store loyalty (Johnson et al., 2015). Unexpectedly, this study showed no significant effects. It is possible that the unbalanced design, caused in Qualtrics, might be the reason why the hypotheses did not have a significant effect. Another reason why the conditions did not have a significant effect on the constructs might be because the conditions weren't successfully manipulated. However, this remains speculative, and additional research, with for example other manipulations, might clarify when and why receiving extra stamps at no cost elicits program- and store loyalty.

Furthermore, this research provides insight to customer-brand relationships. Several studies have investigated the positive effects of customer-brand relationships on customer loyalty (Fournier & Yao, 1997; Marzo-Navarro et al., 2004; Too et al.,

2001). The results of this study confirm that the feeling of a communal relationship positively influence program- and store loyalty. So, it could be interesting to research if in other industries, the same result will be found.

5.3 Managerial implications

With the increasing number of competing loyalty programs and customers who stop participating in loyalty programs, it is wise for a retailer to pay attention to new possibilities of receiving stamps. This study was therefore interesting to see if receiving a positive extra, either unexpected or expected, would motivate customers to keep saving in the loyalty program and/or to keep shopping at the particular store. However, no significant effects for receiving an (un)expected positive extra on program- and store loyalty were found. Though, attitude toward the loyalty program turns out to be a significant predictor of program- and store loyalty. Therefore, it is recommended for retailers to create a loyalty program that would increase positive feelings toward the loyalty program.

Another interesting implication for retailers is the fact that communal relationships predict program- and store loyalty. It might be interesting to focus on creating a communal relationship with customers as it creates a positive bond with the retailer.

5.4 Limitations and future research

This study has some limitations, but also a number of recommendations, and therefore opportunities, for future research.

This study made use of an online experiment because of its advantages. However, a limitation of online experiments is that it is hard to control for the participants' environment (Hair et al., 2010). Therefore, for future research it is recommended to conduct research on loyalty program elements via a lab or field experiment. During lab experiments, in which a real store could be imitated, the participants' environment can be controlled (Sekaran & Bougie, 2016). Also, field experiments, in a real store, are more likely to reflect real life behavior because of its natural setting (Christensen et al., 2015).

Another limitation of this study would be that all constructs are measured at one point in time. As store loyalty is expressed over time (Jacoby & Chestnut, 1978), the experiment of this study was too short to really measure store loyalty. Therefore,

it is advisable to study store loyalty over time making use of a longitudinal research design.

Furthermore, as the Cronbach's alpha for the items of the exchange relationship construct in this study was below 0.70, it is recommended for future research to include more items in the measurement scale to reliably measure an exchange relationship. By including more items, more insight in this construct could be gained (Aggarwal, 2004).

Since the current manipulation evoked no significant differences in attitude, using another manipulation is recommended. It might be interesting to conduct a study where customers receive an extra stamp while shopping, instead of at the cashier, as previous studies show that positive emotions toward an item are more likely to be more intense in a surprising purchasing experience (Westbrook, 1987).

As the data of this study is from only one loyalty program in one industry, it may potentially limit its generalizability. Therefore, it might be interesting to test the conditions and constructs of this study, while possibly controlling for the covariates, in different industries. An interesting industry would be the hospitality industry as loyalty programs are now an important backbone in this industry (McCall & Voorhees, 2010; Yoo & Bai, 2013). Moreover, most loyalty programs in the hospitality industry are long-term programs (Fowler, 2003; Yoo & Bai, 2013). As we studied a short-term loyalty program, in which only one stimulation or surprise was needed, it might be interesting to test if more stimulations or surprises are needed to convince customers to continue saving in the loyalty programs.

Hopefully, researchers will take our lead and make the underlying thought on how to keep customers loyal to the program and store the fundamental focus of some of their work.

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Appendix 1 – Pre-test

Appendix 1.1 – Pre-test survey

Beste meneer/mevrouw,

Hartelijk dank voor het invullen van deze vragenlijst.

In deze vragenlijst wordt u geïntroduceerd aan verschillende loyaliteitsprogramma's en daarover wil ik graag uw mening weten. Het invullen van deze vragenlijst bevat 6 korte vragen. De antwoorden zullen anoniem worden verwerkt.

Met vriendelijke groet,

Lotte Mulder

Neem het onderstaande loyaliteitsprogramma aandachtig door:

Stel u voor dat u mee spaart in dit loyaliteitsprogramma:

- Gewoonlijk doet u geen boodschappen bij deze supermarkt maar u bent toch mee gaan sparen omdat u het programma zo leuk vindt en graag het koksmes wilt hebben.
- Binnen 1 maand heeft u gemakkelijk 20 spaarzegels gespaard en heeft u voor het koksmes gekozen. U bent erg tevreden over de kwaliteit van het mes.
- Het loyaliteitsprogramma is nog 2 maanden actief en u heeft besloten om nog een keertje mee te sparen.

<u>Neem het onderstaande loyaliteitsprogramma aandachtig door:</u>

Stel u voor dat u boodschappen gaat halen en dat u aan het sparen bent voor een tweede mes. U hebt boodschappen gedaan ter waarde van €55,55 en ontvangt **5 spaarzegels** van de caissière.

Ik vind bovenstaande informatie over het loyaliteitsprogramma duidelijk.	Helemaal mee oneens	Mee oneens	Mee oneens / mee eens	Mee eens	Helemaal mee eens

Ik begrijp hoe bovenstaand loyaliteitsprogramma werkt.	Helemaal mee oneens	Mee oneens	Mee oneens / mee eens	Mee eens	Helemaal mee eens

Neem het onderstaande loyaliteitsprogramma aandachtig door:

Stel u voor dat u boodschappen gaat halen en dat u aan het sparen bent voor een tweede mes. U hebt boodschappen gedaan ter waarde van €55,55 en ontvangt onverwachts **5 kraskaarten in plaats van 5 spaarzegels** van de caissière.

De caissière legt uit dat het spaarsysteem is aangepast:

- Voorheen ontving u bij elke €10 aan boodschappen één spaarzegel. Nu ontvangt u één kraskaart.
- Met deze kraskaart ontvangt u altijd één spaarzegel maar maakt u bovendien ook kans om 2 spaarzegels te winnen.

U krast de kraskaarten open:

- Voor de eerste vier kraskaarten ontvangt u een spaarzegel maar met de vijfde kraskaart wint u 2 spaarzegels.
- In totaal ontvangt u dus **6 spaarzegels.**

Ik vind bovenstaande informatie over het loyaliteitsprogramma duidelijk.	Helemaal mee oneens	Mee oneens	Mee oneens / mee eens	Mee eens	Helemaal mee eens
Ik begrijp hoe bovenstaand loyaliteitsprogramma werkt.	Helemaal mee oneens	Mee oneens	Mee oneens / mee eens	Mee eens	Helemaal mee eens

Neem het onderstaande loyaliteitsprogramma aandachtig door:

Stel u voor dat u boodschappen gaat halen en dat u aan het sparen bent voor een tweede mes. U heeft thuis in de aanbiedingsfolder van de supermarkt gelezen dat u deze week **één extra spaarzegel** ontvangt bij een minimale besteding van €50 aan boodschappen.

U hebt boodschappen gedaan ter waarde van €55,55 en ontvangt van de caissière naast de 5 spaarzegels die u ontvangt per elke €10 aan boodschappen, ook één extra spaarzegel voor uw besteding boven de €50. In totaal ontvangt u dus **6 spaarzegels.**

Ik vind bovenstaande informatie over het loyaliteitsprogramma duidelijk.	Helemaal mee oneens	Mee oneens	Mee oneens / mee eens	Mee eens	Helemaal mee eens
Ik begrijp hoe bovenstaand loyaliteitsprogramma werkt.	Helemaal mee oneens	Mee oneens	Mee oneens / mee eens	Mee eens	Helemaal mee eens

---

Hartelijk dank voor uw tijd en medewerking.

Appendix 1.2 – Pre-test results

Question 1: "I clearly understand the above-mentioned information about this loyalty program."

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Static	11	2	5	4,45	,934
Unexpected	11	3	5	4,18	,603
Expected	11	3	5	4,73	,647
Valid N (listwise)	11				

Question 2: "I understand how the above-mentioned loyalty program works."

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Static	11	2	5	4,55	,934
Unexpected	11	3	5	4,18	,751
Expected	11	3	5	4,73	,647
Valid N (listwise)	11				

Appendix 2 – Questionnaire

Beste meneer/mevrouw,

Hartelijk dank voor uw deelname aan dit onderzoek. Voor het afronden van mijn opleiding Marketing Management aan de Universiteit van Tilburg doe ik onderzoek naar loyaliteitsprogramma's.

Het invullen van de enquête duurt ongeveer 7 minuten en heeft betrekking op uw gedachten ten opzichte van het voorgestelde loyaliteitsprogramma. De antwoorden zullen anoniem worden verwerkt.

Met vriendelijke groet,

Lotte Mulder

Neem het onderstaande loyaliteitsprogramma aandachtig door:

Stel u voor dat u mee spaart in dit loyaliteitsprogramma:

- Gewoonlijk doet u geen boodschappen bij deze supermarkt maar u bent toch mee gaan sparen omdat u het programma zo leuk vindt en graag het koksmes wilt hebben.
- Binnen 1 maand heeft u gemakkelijk 20 spaarzegels gespaard en heeft u voor het koksmes gekozen. U bent erg tevreden over de kwaliteit van het mes.
- Het loyaliteitsprogramma is nog 2 maanden actief en u heeft besloten om nog een keertje mee te sparen.

Setting 1 – Standaard treatment
Stel u voor dat u boodschappen gaat halen en dat u aan het sparen bent voor een tweede mes. U hebt boodschappen gedaan ter waarde van €55,55 en ontvangt **5 spaarzegels** van de caissière.

Setting 2 – Treatment 1
Stel u voor dat u boodschappen gaat halen en dat u aan het sparen bent voor een tweede mes. U hebt boodschappen gedaan ter waarde van €55,55 en ontvangt onverwachts **5 kraskaarten in plaats van 5 spaarzegels** van de caissière.

De caissière legt uit dat het spaarsysteem is aangepast:

- Voorheen ontvang u bij elke €10 aan boodschappen één spaarzegel. Nu ontvangt u één kraskaart.
- Met deze kraskaart ontvangt u altijd één spaarzegel maar maakt u bovendien ook kans om 2 spaarzegels te winnen.

U krast de kraskaarten open:

- Voor de eerste vier kraskaarten ontvangt u een spaarzegel maar **met de vijfde kraskaart wint u 2 spaarzegels**.
- In totaal ontvangt u dus **6 spaarzegels.**

Setting 3 – Treatment 2

Stel u voor dat u boodschappen gaat halen en dat u aan het sparen bent voor een tweede mes. U heeft thuis in de aanbiedingsfolder van de supermarkt gelezen dat u deze week **één extra spaarzegel ontvangt bij een minimale besteding van €50** aan boodschappen.

U hebt boodschappen gedaan ter waarde van €55,55 en ontvangt van de caissière naast de 5 spaarzegels die u ontvangt per elke €10 aan boodschappen, ook één extra spaarzegel voor uw besteding boven de €50. In totaal ontvangt u dus **6 spaarzegels.**

Denk terug aan het loyaliteitsprogramma waarin u zojuist heeft mee gespaard.

Geef aan in hoeverre u het eens bent met de volgende stellingen:
(0 = Helemaal mee oneens; 6 = Helemaal mee eens)

Sparen voor een volle spaarkaart is aantrekkelijk.	1	2	3	4	5	6	7
Sparen voor een volle spaarkaart is prettig.	1	2	3	4	5	6	7
Sparen voor een volle spaarkaart is leuk.	1	2	3	4	5	6	7
Sparen voor een volle spaarkaart is vermakelijk.	1	2	3	4	5	6	7
Sparen voor een volle spaarkaart is niet onderscheidend.	1	2	3	4	5	6	7

Geef aan in hoeverre u het eens bent met de volgende stellingen:

Ik wil verder sparen in dit loyaliteitsprogramma.										
0	1	2	3	4	5	6	7	8	9	10

Ik vind dit loyaliteitsprogramma leuker dan andere loyaliteitsprogramma's.										
0	1	2	3	4	5	6	7	8	9	10

Ik heb een sterke voorkeur voor dit loyaliteitsprogramma.										
0	1	2	3	4	5	6	7	8	9	10

Ik zou dit loyaliteitsprogramma aan anderen aanbevelen.										
0	1	2	3	4	5	6	7	8	9	10

Geef aan in hoeverre u het eens bent met de volgende stellingen:

Ik ben geneigd om vaker bij deze supermarkt boodschappen te doen.										
0	1	2	3	4	5	6	7	8	9	10

Ik ben geneigd om vaker bij deze supermarkt boodschappen te doen nadat het loyaliteitsprogramma is afgelopen.										
0	1	2	3	4	5	6	7	8	9	10

Ik ben geneigd om deze supermarkt aan anderen aan te bevelen.										
0	1	2	3	4	5	6	7	8	9	10

Geef aan in hoeverre u het eens bent met de volgende stellingen over deze supermarkt:
(0 = Helemaal mee oneens; 6 = Helemaal mee eens)

Deze supermarkt doet dingen voor mij zonder dat zij daar iets voor terug verwachten.	1	2	3	4	5	6	7
Deze supermarkt behandelt mij speciaal.	1	2	3	4	5	6	7
Deze supermarkt verwacht dat zij voor elk verstrekt voordeel betaald moeten worden.	1	2	3	4	5	6	7
Deze supermarkt geeft extra service om meer te verkopen.	1	2	3	4	5	6	7

Denk terug aan de situatiebeschrijving van het loyaliteitsprogramma: binnen een maand heeft u gespaard voor het koksmes. Vervolgens besloot u om nogmaals mee te sparen. Het programma zou nog zeker 2 maanden actief zijn.

Geef aan in hoeverre u het eens bent met de volgende stellingen:

Sparen voor een volle spaarkaart lijkt me gemakkelijk.	1	2	3	4	5	6	7
Sparen voor een volle spaarkaart lijkt me haalbaar.	1	2	3	4	5	6	7

Naast het koksmes, kunt u ook sparen voor een gratis vleesmes, schilmes of broodmes.

Geef aan in hoeverre u het eens bent met de volgende stelling:

Ik vind de messen erg aantrekkelijk.	1	2	3	4	5	6	7

Hieronder volgen nog enkele vragen die betrekking hebben op u als persoon. Deze informatie geeft een indicatie over de doelgroepen die vertegenwoordigd zijn in dit onderzoek.

Wat is uw geslacht?
☐ Man
☐ Vrouw

Wat is uw leeftijd?
….

U bent aan het einde van de vragenlijst.
Bedankt voor uw tijd om aan deze enquête deel te nemen.

Appendix 3 – Data analysis

Appendix 3.1 – Participants

Variable: age

Statistics

What is your age?

N	Valid	289
	Missing	0
Mean		35,33
Std. Deviation		14,148
Minimum		17
Maximum		82

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	71,735[a]	52	,036
Likelihood Ratio	88,620	52	,001
Linear-by-Linear Association	7,118	1	,008
N of Valid Cases	289		

a. 97 cells (91,5%) have expected count less than 5. The minimum expected count is ,47.

Report

Age

Which manipulation?	Mean	N	Std. Deviation	Minimum	Maximum
Static	36,65	102	15,242	20	82
Unexpected	34,95	110	13,323	17	61
Expected	34,13	77	13,828	17	78
Total	35,33	289	14,148	17	82

Variable: gender

Statistics

What is your gender?

N	Valid	289
	Missing	0

What is your gender?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	135	46,7	46,7	46,7
	Female	154	53,3	53,3	100,0
	Total	289	100,0	100,0	

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1,574[a]	2	,455
Likelihood Ratio	1,577	2	,455
Linear-by-Linear Association	1,568	1	,211
N of Valid Cases	289		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 35,97.

Which manipulation? * Gender Crosstabulation

Count

		Gender		
		Male	Female	Total
Which manipulation?	Static	52	50	102
	Unexpected	51	59	110
	Expected	32	45	77
Total		135	154	289

Appendix 3.2 – Randomization

Statistics

Which manipulation?

N	Valid	289
	Missing	0

Which manipulation?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Static	102	35,3	35,3	35,3
	Unexpected	110	38,1	38,1	73,4
	Expected	77	26,6	26,6	100,0
	Total	289	100,0	100,0	

Variable: age

ANOVA

What is your age?

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	303,343	2	151,671	,756	,470
Within Groups	57342,768	286	200,499		
Total	57646,111	288			

Variable: gender

ANOVA

What is your gender?

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,392	2	,196	,783	,458
Within Groups	71,546	286	,250		
Total	71,938	288			

Appendix 3.3 – Reliability of different items

Program loyalty

Reliability Statistics

Cronbach's Alpha	N of Items
,942	4

Store loyalty

Reliability Statistics

Cronbach's Alpha	N of Items
,910	3

Attitude

Reliability Statistics

Cronbach's Alpha	N of Items
,778	5

Attainability

Reliability Statistics

Cronbach's Alpha	N of Items
,910	2

Communal relationship

Reliability Statistics

Cronbach's Alpha	N of Items
,799	2

Exchange relationship

Reliability Statistics

Cronbach's Alpha	N of Items
,335	2

Appendix 3.4 – Assumptions

Homogeneity of Variances

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Program Loyalty	1,481	2	286	,229
Store Loyalty	1,113	2	286	,330

Tests of Normality

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Program Loyalty	,156	289	,000	,942	289	,000
Store Loyalty	,150	289	,000	,955	289	,000

a. Lilliefors Significance Correction

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Which manipulation?	Statistic	df	Sig.	Statistic	df	Sig.
Program Loyalty	Static	,165	102	,000	,931	102	,000
	Unexpected	,178	110	,000	,935	110	,000
	Expected	,177	77	,000	,933	77	,001
Store Loyalty	Static	,171	102	,000	,944	102	,000
	Unexpected	,163	110	,000	,942	110	,000
	Expected	,128	77	,003	,961	77	,019

a. Lilliefors Significance Correction

Appendix 3.5 – Correlation matrix

Correlations

Correlations

		Static	Unexpected	Expected	Program Loyalty	Store Loyalty	Attitude	Communal	Attainability	Attractiveness	Age	Gender
Static	Pearson Correlation	1	-,579**	-,445**	,015	-,060	,010	-,147*	,119*	,081	,069	-,063
	Sig. (2-tailed)		,000	,000	,797	,309	,864	,013	,044	,170	,244	,284
	N	289	289	289	289	289	289	289	289	289	289	289
Unexpected	Pearson Correlation	-,579**	1	-,472**	,088	,074	,044	,212**	-,025	-,005	-,021	,005
	Sig. (2-tailed)	,000		,000	,137	,207	,452	,000	,671	,928	,723	,926
	N	289	289	289	289	289	289	289	289	289	289	289
Expected	Pearson Correlation	-,445**	-,472**	1	-,113	-,017	-,060	-,075	-,101	-,082	-,051	,062
	Sig. (2-tailed)	,000	,000		,056	,776	,312	,206	,087	,166	,385	,291
	N	289	289	289	289	289	289	289	289	289	289	289
Program Loyalty	Pearson Correlation	,015	,088	-,113	1	,746**	,712**	,390**	,526**	,663**	-,135*	,019
	Sig. (2-tailed)	,797	,137	,056		,000	,000	,000	,000	,000	,022	,742
	N	289	289	289	289	289	289	289	289	289	289	289
Store Loyalty	Pearson Correlation	-,060	,074	-,017	,746**	1	,598**	,504**	,419**	,545**	-,165**	-,004
	Sig. (2-tailed)	,309	,207	,776	,000		,000	,000	,000	,000	,005	,941
	N	289	289	289	289	289	289	289	289	289	289	289
Attitude	Pearson Correlation	,010	,044	-,060	,712**	,598**	1	,404**	,523**	,546**	-,107	,112
	Sig. (2-tailed)	,864	,452	,312	,000	,000		,000	,000	,000	,070	,057
	N	289	289	289	289	289	289	289	289	289	289	289
Communal	Pearson Correlation	-,147*	,212**	-,075	,390**	,504**	,404**	1	,216**	,303**	-,085	-,006
	Sig. (2-tailed)	,013	,000	,206	,000	,000	,000		,000	,000	,151	,915
	N	289	289	289	289	289	289	289	289	289	289	289
Attainability	Pearson Correlation	,119*	-,025	-,101	,526**	,419**	,523**	,216**	1	,492**	-,014	-,084
	Sig. (2-tailed)	,044	,671	,087	,000	,000	,000	,000		,000	,816	,156
	N	289	289	289	289	289	289	289	289	289	289	289
Attractiveness	Pearson Correlation	,081	-,005	-,082	,663**	,545**	,546**	,303**	,492**	1	-,046	,010
	Sig. (2-tailed)	,170	,928	,166	,000	,000	,000	,000	,000		,441	,871
	N	289	289	289	289	289	289	289	289	289	289	289
Age	Pearson Correlation	,069	-,021	-,051	-,135*	-,165**	-,107	-,085	-,014	-,046	1	-,157**
	Sig. (2-tailed)	,244	,723	,385	,022	,005	,070	,151	,816	,441		,007
	N	289	289	289	289	289	289	289	289	289	289	289
Gender	Pearson Correlation	-,063	,005	,062	,019	-,004	,112	-,006	-,084	,010	-,157**	1
	Sig. (2-tailed)	,284	,926	,291	,742	,941	,057	,915	,156	,871	,007	
	N	289	289	289	289	289	289	289	289	289	289	289

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix 3.6 – Results

Program loyalty

Average (all conditions)

Descriptives

Program Loyalty

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Static	102	5,80	2,097	,208	5,39	6,22	0	10
Unexpected	110	6,01	2,402	,229	5,56	6,46	0	10
Expected	77	5,34	2,192	,250	4,84	5,84	0	10
Total	289	5,76	2,251	,132	5,50	6,02	0	10

Test of Homogeneity of Variances

Program Loyalty

Levene Statistic	df1	df2	Sig.
1,481	2	286	,229

ANOVA

Program Loyalty

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	20,755	2	10,377	2,064	,129
Within Groups	1438,290	286	5,029		
Total	1459,045	288			

Average (unexpected vs. expected)

ANOVA

Program Loyalty

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	20,419	1	20,419	3,800	,053
Within Groups	994,212	185	5,374		
Total	1014,631	186			

Store loyalty

Average (all conditions)

Descriptives

Store Loyalty

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Static	102	4,60	2,195	,217	4,17	5,03	0	9
Unexpected	110	4,98	2,283	,218	4,55	5,41	0	9
Expected	77	4,71	2,012	,229	4,26	5,17	0	9
Total	289	4,78	2,181	,128	4,52	5,03	0	9

Test of Homogeneity of Variances

Store Loyalty

Levene Statistic	df1	df2	Sig.
1,113	2	286	,330

ANOVA

Store Loyalty

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8,183	2	4,092	,859	,425
Within Groups	1362,198	286	4,763		
Total	1370,381	288			

Average (unexpected vs. expected)

ANOVA

Store Loyalty

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3,242	1	3,242	,685	,409
Within Groups	875,678	185	4,733		
Total	878,920	186			

Attitude

Average (all conditions)

Descriptives

Attitude

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Static	102	4,43	1,039	,103	4,23	4,64	1	6
Unexpected	110	4,48	1,276	,122	4,24	4,72	1	7
Expected	77	4,30	1,215	,138	4,02	4,57	1	6
Total	289	4,42	1,179	,069	4,28	4,55	1	7

Test of Homogeneity of Variances

Attitude

Levene Statistic	df1	df2	Sig.
2,667	2	286	,071

ANOVA

Attitude

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1,560	2	,780	,560	,572
Within Groups	398,613	286	1,394		
Total	400,173	288			

Average (unexpected vs. expected)

ANOVA

Attitude

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1,519	1	1,519	,970	,326
Within Groups	289,594	185	1,565		
Total	291,112	186			

Customer-brand relationship

Communal relationship

Descriptives

Communal

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Static	102	3,01	1,506	,149	2,71	3,31	1	7
Unexpected	110	3,68	1,327	,126	3,43	3,93	1	7
Expected	77	3,12	1,376	,157	2,80	3,43	1	6
Total	289	3,29	1,434	,084	3,13	3,46	1	7

Test of Homogeneity of Variances

Communal

Levene Statistic	df1	df2	Sig.
1,057	2	286	,349

ANOVA

Communal

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	27,198	2	13,599	6,886	,001
Within Groups	564,802	286	1,975		
Total	592,000	288			

Multiple Comparisons

Dependent Variable: Communal

Bonferroni

(I) Which manipulation?	(J) Which manipulation?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Static	Unexpected	-,672*	,193	,002	-1,14	-,21
	Expected	-,107	,212	1,000	-,62	,40
Unexpected	Static	,672*	,193	,002	,21	1,14
	Expected	,565*	,209	,022	,06	1,07
Expected	Static	,107	,212	1,000	-,40	,62
	Unexpected	-,565*	,209	,022	-1,07	-,06

*. The mean difference is significant at the 0.05 level.

Exchange relationship

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
The supermarket expected to get paid for each benefit provided.	Static	102	4,12	1,518	,150	3,82	4,42	1	7
	Unexpected	110	4,00	1,234	,118	3,77	4,23	1	7
	Expected	77	4,10	1,343	,153	3,80	4,41	1	7
	Total	289	4,07	1,365	,080	3,91	4,23	1	7
The supermarket gives service to get business.	Static	102	4,04	1,711	,169	3,70	4,38	1	7
	Unexpected	110	4,47	1,543	,147	4,18	4,76	1	7
	Expected	77	4,36	1,746	,199	3,97	4,76	1	7
	Total	289	4,29	1,664	,098	4,10	4,48	1	7

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
The supermarket expected to get paid for each benefit provided.	3,102	2	286	,046
The supermarket gives service to get business.	1,420	2	286	,244

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
The supermarket expected to get paid for each benefit provided.	Between Groups	,859	2	,429	,229	,795
	Within Groups	535,757	286	1,873		
	Total	536,616	288			
The supermarket gives service to get business.	Between Groups	10,505	2	5,253	1,909	,150
	Within Groups	787,080	286	2,752		
	Total	797,585	288			

Attainability

Report

Attainability

Which manipulation?	Mean	N	Std. Deviation
Static	5,51	102	1,076
Unexpected	5,26	110	1,301
Expected	5,09	77	1,457
Total	5,30	289	1,278

ANOVA

Attainability

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7,996	2	3,998	2,471	,086
Within Groups	462,708	286	1,618		
Total	470,704	288			

Attractiveness

Report

Attractiveness

Which manipulation?	Mean	N	Std. Deviation
Static	5,00	102	1,442
Unexpected	4,83	110	1,489
Expected	4,64	77	1,530
Total	4,84	289	1,485

ANOVA

Attractiveness

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5,820	2	2,910	1,322	,268
Within Groups	629,536	286	2,201		
Total	635,356	288			

Appendix 3.7 – Indirect, direct and total effects

Y = Program loyalty
X = All conditions
M = Attitude

Matrix

```
Run MATRIX procedure:

***************** PROCESS Procedure for SPSS Version 3.00 *****************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2018). www.guilford.com/p/hayes3

**************************************************************************
Model  : 4
    Y  : PLMean
    X  : Manipula
    M  : Attitude

Covariates:
 Communal Attainab Attracti Gender   Age

Sample
Size:  289

Coding of categorical X variable for analysis:
 Manipula       X1       X2
    1,000    -,667     ,000
    2,000     ,333    -,500
    3,000     ,333     ,500

**************************************************************************
OUTCOME VARIABLE:
 Attitude

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,6759      ,4568      ,7735    33,7623     7,0000   281,0000      ,0000

Model
             coeff         se          t          p       LLCI       ULCI
constant     ,6374      ,3423     1,8623      ,0636     -,0363     1,3111
X1           ,0214      ,1118      ,1916      ,8482     -,1987      ,2415
X2           ,0075      ,1325      ,0569      ,9546     -,2533      ,2684
Communal     ,1929      ,0393     4,9110      ,0000      ,1156      ,2702
Attainab     ,3055      ,0472     6,4726      ,0000      ,2126      ,3984
Attracti     ,2459      ,0414     5,9443      ,0000      ,1645      ,3274
Gender       ,3078      ,1057     2,9113      ,0039      ,0997      ,5159
Age          -,0039      ,0037    -1,0513      ,2940     -,0113      ,0034

**************************************************************************
OUTCOME VARIABLE:
 PLMean

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,7983      ,6373     1,8901    61,4944     8,0000   280,0000      ,0000

Model
             coeff         se          t          p       LLCI       ULCI
constant   -1,1993      ,5383    -2,2280      ,0267    -2,2589     -,1397
X1           ,0538      ,1748      ,3076      ,7586     -,2903      ,3979
X2          -,3277      ,2071    -1,5820      ,1148     -,7354      ,0801
Attitude     ,8165      ,0932     8,7560      ,0000      ,6329     1,0001
Communal     ,1093      ,0640     1,7083      ,0887     -,0166      ,2352
Attainab     ,1948      ,0791     2,4632      ,0144      ,0391      ,3505
Attracti     ,5300      ,0686     7,7232      ,0000      ,3949      ,6650
Gender       -,1455      ,1677     -,8675      ,3864     -,4757      ,1847
Age          -,0113      ,0058    -1,9348      ,0540     -,0228      ,0002
```

```
************************** TOTAL EFFECT MODEL ****************************
OUTCOME VARIABLE:
 PLMean

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,7335      ,5380     2,3990    46,7405     7,0000   281,0000      ,0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     -,6789      ,6027    -1,1263      ,2610    -1,8653      ,5076
X1            ,0713      ,1969      ,3618      ,7177     -,3164      ,4589
X2           -,3215      ,2334    -1,3778      ,1694     -,7809      ,1378
Communal      ,2668      ,0692     3,8570      ,0001      ,1306      ,4029
Attainab      ,4442      ,0831     5,3446      ,0000      ,2806      ,6078
Attracti      ,7308      ,0729    10,0294      ,0000      ,5873      ,8742
Gender        ,1058      ,1862      ,5683      ,5703     -,2607      ,4723
Age          -,0145      ,0066    -2,2082      ,0280     -,0274     -,0016

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

Relative total effects of X on Y:
       Effect         se          t          p       LLCI       ULCI       c_ps
X1      ,0713      ,1969      ,3618      ,7177     -,3164      ,4589      ,0317
X2     -,3215      ,2334    -1,3778      ,1694     -,7809      ,1378     -,1428

Omnibus test of total effect of X on Y:
    R2-chng          F        df1        df2          p
      ,0035     1,0662     2,0000   281,0000      ,3457
----------

Relative direct effects of X on Y
       Effect         se          t          p       LLCI       ULCI      c'_ps
X1      ,0538      ,1748      ,3076      ,7586     -,2903      ,3979      ,0239
X2     -,3277      ,2071    -1,5820      ,1148     -,7354      ,0801     -,1456

Omnibus test of direct effect of X on Y:
    R2-chng          F        df1        df2          p
      ,0035     1,3514     2,0000   280,0000      ,2606
----------

Relative indirect effects of X on Y

 Manipula    ->    Attitude    ->    PLMean

       Effect     BootSE   BootLLCI   BootULCI
X1      ,0175      ,0863     -,1514      ,1881
X2      ,0062      ,1058     -,2061      ,2071

Partially standardized relative indirect effect(s) of X on Y:

 Manipula    ->    Attitude    ->    PLMean

       Effect     BootSE   BootLLCI   BootULCI
X1      ,0078      ,0385     -,0673      ,0835
X2      ,0027      ,0473     -,0913      ,0937

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

Level of confidence for all confidence intervals in output:
  95,0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000

NOTE: Variables names longer than eight characters can produce incorrect output.
      Shorter variable names are recommended.

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

Y = Store loyalty
X = All conditions
M = Attitude

Matrix

```
Run MATRIX procedure:

***************** PROCESS Procedure for SPSS Version 3.00 *****************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2018). www.guilford.com/p/hayes3

**************************************************************************
Model  : 4
    Y  : SLMean
    X  : Manipula
    M  : Attitude

Covariates:
 Communal Attainab Attracti Gender   Age

Sample
Size:  289

Coding of categorical X variable for analysis:
 Manipula       X1       X2
    1,000    -,667     ,000
    2,000     ,333    -,500
    3,000     ,333     ,500

**************************************************************************
OUTCOME VARIABLE:
 Attitude

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,6759      ,4568      ,7735    33,7623     7,0000   281,0000      ,0000

Model
             coeff         se          t          p       LLCI       ULCI
constant      ,6374      ,3423     1,8623      ,0636     -,0363     1,3111
X1            ,0214      ,1118      ,1916      ,8482     -,1987      ,2415
X2            ,0075      ,1325      ,0569      ,9546     -,2533      ,2684
Communal      ,1929      ,0393     4,9110      ,0000      ,1156      ,2702
Attainab      ,3055      ,0472     6,4726      ,0000      ,2126      ,3984
Attracti      ,2459      ,0414     5,9443      ,0000      ,1645      ,3274
Gender        ,3078      ,1057     2,9113      ,0039      ,0997      ,5159
Age          -,0039      ,0037    -1,0513      ,2940     -,0113      ,0034

**************************************************************************
OUTCOME VARIABLE:
 SLMean

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,7153      ,5117     2,3900    36,6736     8,0000   280,0000      ,0000

Model
             coeff         se          t          p       LLCI       ULCI
constant     -,6942      ,6053    -1,1468      ,2524    -1,8857      ,4973
X1            ,2387      ,1966     1,2145      ,2256     -,1482      ,6257
X2            ,1652      ,2329      ,7091      ,4789     -,2933      ,6237
Attitude      ,5607      ,1049     5,3468      ,0000      ,3542      ,7671
Communal      ,4187      ,0719     5,8204      ,0000      ,2771      ,5603
Attainab      ,1279      ,0889     1,4388      ,1513     -,0471      ,3030
Attracti      ,3826      ,0772     4,9589      ,0000      ,2307      ,5345
Gender       -,2309      ,1886    -1,2242      ,2219     -,6022      ,1404
Age          -,0155      ,0066    -2,3568      ,0191     -,0284     -,0026
```

```
************************** TOTAL EFFECT MODEL ****************************
OUTCOME VARIABLE:
 SLMean

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,6796      ,4618     2,6246    34,4468     7,0000   281,0000      ,0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     -,3368      ,6304     -,5343      ,5936    -1,5778      ,9042
X1            ,2507      ,2060     1,2173      ,2245     -,1547      ,6562
X2            ,1694      ,2441      ,6940      ,4883     -,3111      ,6499
Communal      ,5269      ,0724     7,2823      ,0000      ,3845      ,6693
Attainab      ,2992      ,0869     3,4419      ,0007      ,1281      ,4703
Attracti      ,5205      ,0762     6,8301      ,0000      ,3705      ,6705
Gender       -,0583      ,1947     -,2996      ,7647     -,4417      ,3250
Age          -,0177      ,0069    -2,5734      ,0106     -,0312     -,0042

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

Relative total effects of X on Y:
       Effect         se          t          p       LLCI       ULCI       c_ps
X1      ,2507      ,2060     1,2173      ,2245     -,1547      ,6562      ,1149
X2      ,1694      ,2441      ,6940      ,4883     -,3111      ,6499      ,0777

Omnibus test of total effect of X on Y:
    R2-chng          F        df1        df2          p
      ,0035      ,9150     2,0000   281,0000      ,4017
----------

Relative direct effects of X on Y
       Effect         se          t          p       LLCI       ULCI      c'_ps
X1      ,2387      ,1966     1,2145      ,2256     -,1482      ,6257      ,1094
X2      ,1652      ,2329      ,7091      ,4789     -,2933      ,6237      ,0757

Omnibus test of direct effect of X on Y:
    R2-chng          F        df1        df2          p
      ,0032      ,9208     2,0000   280,0000      ,3994
----------

Relative indirect effects of X on Y

 Manipula    ->    Attitude    ->    SLMean

       Effect     BootSE   BootLLCI   BootULCI
X1      ,0120      ,0589     -,1045      ,1283
X2      ,0042      ,0732     -,1398      ,1525

Partially standardized relative indirect effect(s) of X on Y:

 Manipula    ->    Attitude    ->    SLMean

       Effect     BootSE   BootLLCI   BootULCI
X1      ,0055      ,0270     -,0482      ,0584
X2      ,0019      ,0337     -,0647      ,0708

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

Level of confidence for all confidence intervals in output:
  95,0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000

NOTE: Variables names longer than eight characters can produce incorrect output.
      Shorter variable names are recommended.

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

Y = Program loyalty
X = All conditions
M = Communal relationship

Matrix

```
Run MATRIX procedure:

***************** PROCESS Procedure for SPSS Version 3.00 *****************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2018). www.guilford.com/p/hayes3

**************************************************************************
Model  : 4
    Y  : PLMean
    X  : Manipula
    M  : Communal

Covariates:
 Attainab Attracti Gender   Age

Sample
Size:  289

Coding of categorical X variable for analysis:
 Manipula       X1       X2
    1,000    -,667     ,000
    2,000     ,333    -,500
    3,000     ,333     ,500

**************************************************************************
OUTCOME VARIABLE:
 Communal

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,3912      ,1530     1,7780     8,4924     6,0000   282,0000      ,0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     1,7782      ,5080     3,5007      ,0005      ,7783     2,7781
X1            ,4832      ,1671     2,8922      ,0041      ,1543      ,8121
X2           -,5011      ,1987    -2,5223      ,0122     -,8922     -,1100
Attainab      ,1128      ,0712     1,5842      ,1143     -,0274      ,2531
Attracti      ,2490      ,0609     4,0847      ,0001      ,1290      ,3689
Gender       -,0471      ,1603     -,2941      ,7689     -,3626      ,2683
Age          -,0066      ,0056    -1,1734      ,2416     -,0177      ,0045

**************************************************************************
OUTCOME VARIABLE:
 PLMean

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,7335      ,5380     2,3990    46,7405     7,0000   281,0000      ,0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     -,6789      ,6027    -1,1263      ,2610    -1,8653      ,5076
X1            ,0713      ,1969      ,3618      ,7177     -,3164      ,4589
X2           -,3215      ,2334    -1,3778      ,1694     -,7809      ,1378
Communal      ,2668      ,0692     3,8570      ,0001      ,1306      ,4029
Attainab      ,4442      ,0831     5,3446      ,0000      ,2806      ,6078
Attracti      ,7308      ,0729    10,0294      ,0000      ,5873      ,8742
Gender        ,1058      ,1862      ,5683      ,5703     -,2607      ,4723
Age          -,0145      ,0066    -2,2082      ,0280     -,0274     -,0016
```

```
************************** TOTAL EFFECT MODEL ****************************
OUTCOME VARIABLE:
 PLMean

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,7166      ,5135     2,5171    49,6101     6,0000   282,0000      ,0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     -,2045      ,6044     -,3383      ,7354    -1,3942      ,9852
X1            ,2002      ,1988     1,0070      ,3148     -,1911      ,5915
X2           -,4552      ,2364    -1,9258      ,0551     -,9205      ,0101
Attainab      ,4743      ,0848     5,5962      ,0000      ,3075      ,6412
Attracti      ,7972      ,0725    10,9928      ,0000      ,6544      ,9399
Gender        ,0932      ,1907      ,4889      ,6253     -,2821      ,4686
Age          -,0163      ,0067    -2,4241      ,0160     -,0295     -,0031

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

Relative total effects of X on Y:
       Effect         se          t          p       LLCI       ULCI       c_ps
X1      ,2002      ,1988     1,0070      ,3148     -,1911      ,5915      ,0889
X2     -,4552      ,2364    -1,9258      ,0551     -,9205      ,0101     -,2022

Omnibus test of total effect of X on Y:
    R2-chng          F        df1        df2          p
      ,0090     2,6197     2,0000   282,0000      ,0746
----------

Relative direct effects of X on Y
       Effect         se          t          p       LLCI       ULCI      c'_ps
X1      ,0713      ,1969      ,3618      ,7177     -,3164      ,4589      ,0317
X2     -,3215      ,2334    -1,3778      ,1694     -,7809      ,1378     -,1428

Omnibus test of direct effect of X on Y:
    R2-chng          F        df1        df2          p
      ,0035     1,0662     2,0000   281,0000      ,3457
----------

Relative indirect effects of X on Y

 Manipula    ->    Communal    ->    PLMean

       Effect     BootSE   BootLLCI   BootULCI
X1      ,1289      ,0591      ,0295      ,2612
X2     -,1337      ,0640     -,2780     -,0261

Partially standardized relative indirect effect(s) of X on Y:

 Manipula    ->    Communal    ->    PLMean

       Effect     BootSE   BootLLCI   BootULCI
X1      ,0573      ,0261      ,0132      ,1157
X2     -,0594      ,0283     -,1227     -,0116

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

Level of confidence for all confidence intervals in output:
  95,0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000

NOTE: Variables names longer than eight characters can produce incorrect output.
      Shorter variable names are recommended.

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

Y = Store loyalty
X = All conditions
M = Communal relationship

Matrix

```
Run MATRIX procedure:

***************** PROCESS Procedure for SPSS Version 3.00 *****************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2018). www.guilford.com/p/hayes3

**************************************************************************
Model  : 4
    Y  : SLMean
    X  : Manipula
    M  : Communal

Covariates:
 Attainab Attracti Gender   Age

Sample
Size:  289

Coding of categorical X variable for analysis:
 Manipula       X1       X2
    1,000    -,667     ,000
    2,000     ,333    -,500
    3,000     ,333     ,500

**************************************************************************
OUTCOME VARIABLE:
 Communal

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,3912      ,1530     1,7780     8,4924     6,0000   282,0000      ,0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     1,7782      ,5080     3,5007      ,0005      ,7783     2,7781
X1            ,4832      ,1671     2,8922      ,0041      ,1543      ,8121
X2           -,5011      ,1987    -2,5223      ,0122     -,8922     -,1100
Attainab      ,1128      ,0712     1,5842      ,1143     -,0274      ,2531
Attracti      ,2490      ,0609     4,0847      ,0001      ,1290      ,3689
Gender       -,0471      ,1603     -,2941      ,7689     -,3626      ,2683
Age          -,0066      ,0056    -1,1734      ,2416     -,0177      ,0045

**************************************************************************
OUTCOME VARIABLE:
 SLMean

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,6796      ,4618     2,6246    34,4468     7,0000   281,0000      ,0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     -,3368      ,6304     -,5343      ,5936    -1,5778      ,9042
X1            ,2507      ,2060     1,2173      ,2245     -,1547      ,6562
X2            ,1694      ,2441      ,6940      ,4883     -,3111      ,6499
Communal      ,5269      ,0724     7,2823      ,0000      ,3845      ,6693
Attainab      ,2992      ,0869     3,4419      ,0007      ,1281      ,4703
Attracti      ,5205      ,0762     6,8301      ,0000      ,3705      ,6705
Gender       -,0583      ,1947     -,2996      ,7647     -,4417      ,3250
Age          -,0177      ,0069    -2,5734      ,0106     -,0312     -,0042
```

```
************************** TOTAL EFFECT MODEL ****************************
OUTCOME VARIABLE:
 SLMean

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,6002      ,3602     3,1089    26,4660     6,0000   282,0000      ,0000

Model
              coeff         se          t          p       LLCI       ULCI
constant      ,6001      ,6717      ,8934      ,3724     -,7221     1,9223
X1            ,5053      ,2209     2,2873      ,0229      ,0705      ,9402
X2           -,0946      ,2627     -,3602      ,7190     -,6117      ,4225
Attainab      ,3587      ,0942     3,8077      ,0002      ,1733      ,5441
Attracti      ,6517      ,0806     8,0861      ,0000      ,4931      ,8103
Gender       -,0832      ,2119     -,3925      ,6950     -,5003      ,3340
Age          -,0212      ,0075    -2,8378      ,0049     -,0359     -,0065

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

Relative total effects of X on Y:
       Effect         se          t          p       LLCI       ULCI       c_ps
X1      ,5053      ,2209     2,2873      ,0229      ,0705      ,9402      ,2317
X2     -,0946      ,2627     -,3602      ,7190     -,6117      ,4225     -,0434

Omnibus test of total effect of X on Y:
    R2-chng          F        df1        df2          p
      ,0128     2,8133     2,0000   282,0000      ,0617
----------

Relative direct effects of X on Y
       Effect         se          t          p       LLCI       ULCI      c'_ps
X1      ,2507      ,2060     1,2173      ,2245     -,1547      ,6562      ,1149
X2      ,1694      ,2441      ,6940      ,4883     -,3111      ,6499      ,0777

Omnibus test of direct effect of X on Y:
    R2-chng          F        df1        df2          p
      ,0035      ,9150     2,0000   281,0000      ,4017
----------

Relative indirect effects of X on Y

 Manipula    ->    Communal    ->    SLMean

       Effect     BootSE   BootLLCI   BootULCI
X1      ,2546      ,0980      ,0731      ,4597
X2     -,2640      ,1062     -,4843     -,0666

Partially standardized relative indirect effect(s) of X on Y:

 Manipula    ->    Communal    ->    SLMean

       Effect     BootSE   BootLLCI   BootULCI
X1      ,1167      ,0447      ,0332      ,2091
X2     -,1210      ,0488     -,2221     -,0305

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

Level of confidence for all confidence intervals in output:
  95,0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000

NOTE: Variables names longer than eight characters can produce incorrect output.
      Shorter variable names are recommended.

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