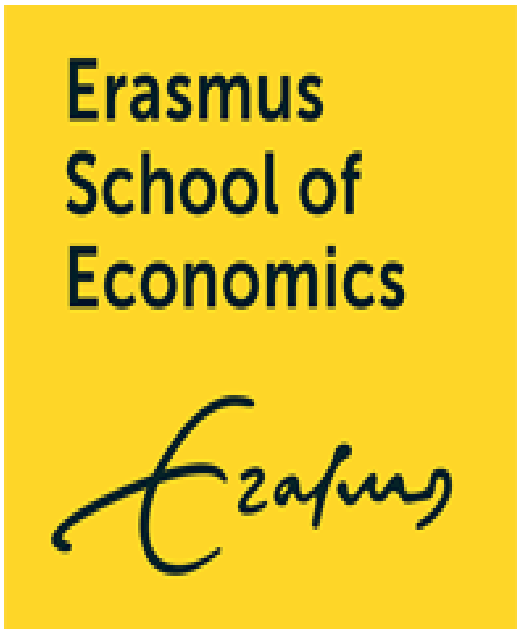
THE IMPACT OF CUSTOMER HAPPINESS ON THE EFFECTIVENESS OF URGENCY AND FRAMING MARKETING TACTICS



Name: R. Martijn Kamp

Track: Behavioural economics

Student number: 455479

Supervisor: Martijn Hendriks

Second assessor: Peter Wakker

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Abstract

In this experimental study, I aimed to answer the following question: Does happiness influence the effectiveness of urgency and framing marketing tactics? Interest in this topic is fuelled by: the lack of academic research exploring customer joy as a determinant of marketing tactics, adding an argument to the purpose of happiness studies by economists and increasing the effectiveness of marketing tactics. Based upon combined insights from the marketing and happiness literature, I hypothesise that attribute framing, sampling discounting, and subscription-based discounting are more effective for happier individuals. In comparison, urgency discounting is more effective for unhappier individuals. A one-shot field experiment in front of a local Albert Heijn supermarket manipulated happiness levels and tested these hypotheses. Using an OLS regression and ordinal/binary logistic regressions, a positive effect of customer happiness on urgency discounting and attribute framing was discovered. Where the effect of happiness on attribute framing was in line with the hypothesis, the effect of happiness on the discount ratio was not. Mixed evidence was found for the effect of happiness on subscription-based discounting, and no effect between happiness and sample discount was found. Not controlling for the total amount spent within the store was a limitation to the test discount ratios. The demand effect limited the power of the results within sample discounting and subscription-based discounting. Nonetheless, this experimental research is of significance as it gives evidence of happiness as a determinant of the effectiveness of marketing tactics. It encourages the purpose of further investigation into this subject as the implications of increasing output by bettering the use of marketing tactics. Creators of marketing- or policy-related designs within the economical field could find interest in bettered implications of these marketing tactics.

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1. Introduction

Happiness is not a fixed, constant value. Indeed, happiness levels cannot be generalised across people, nor can they be generalised across time. Since happiness is a feeling, it accounts for different outcomes amongst different individuals. One may feel joy, while the other one feels anxiety. We know that certain life events, internally or externally, influence the outcome of happiness one may experience. These life events can be personal, but these life events can also involve a society. The international success of a country in a sporting event, like the Olympics, can be an example of a life event that increases average happiness levels within that country. On the other hand, crises like a recession, pandemic, or war can account for a reduction in happiness levels.

Fluctuations of happiness levels are an utterly common phenomenon, hence these examples: Starting negatively, COVID-19 has left multiple negative marks on the world's population. Financially, countries and individuals took a big hit. The Organisation for Economic Co-operation and Development (2020) examined the impact of the first Corona wave that struck several countries. The data of the selected countries, which contained Australia, Japan, Germany, the US, France, Italy, Canada, and the U.K., showed that GDP dropped in every country by at least 6%. Inhabitants of the suffered countries experienced less disposable income and had become more preservable with their consumption expenditures. The British, who experienced the most significant loss, spent 23.3% less than the quarter before this wave.

The same rapport by the organisation also highlighted rising anxiety levels and significant increases in the prevalence of depression. Countries across the globe enforced measures that suppressed freedom. Here, anxiety and other negative emotions that arose were causing the world's population to be less happy, showing negative marks on their mental state. NBC News (2020) made headlines on how American citizens were unhappier than ever, and a survey in The Netherlands (EHERO, 2020) displayed significantly diminished happiness levels amongst the Dutch population. This survey, conducted in 2020, shows the self-rated happiness levels of individuals just before the pandemic and within the first wave. EHERO reported a severe decrease from a 7.5 to a 6.3 on a scale from 0 to 10.

On the other hand, positive events also substantially impact moods. Research by Gelukswijzer (2010) showed that the happiest the Dutch felt on average in 2010 was when their country got to the final of the FIFA World cup 2010. The research pointed to a national average of 7.9 on a scale from 1 to 10. This average was 0.5 points higher than the yearly average.

1.1 Problem and research question

The constant changes in life events in either a positive or negative direction cause a fluctuation in happiness levels, and much can be learned and discovered. The optimal climate for radical changes occurs when companies are offered opportunities or forced to show resilience and create opportunities themselves. Companies are implementing different approaches; therefore, testing these approaches as other circumstances apply within these times. Consumers spend less money on average during unhappy times, and changes in spending behaviour occur. In happier times, a shift in spending behaviour also occurs. Logically, extreme events shift happiness levels the most, thus changing consumer behaviour the most.

A recession is an example of such an extreme event. Generally, recessions are divided into two broad groups; the relatively short ones that change short-term consumer behaviour and the catastrophically long ones (Flatters & Willmott, 2009). What can be learned from recessions is that all recessions show similarities in consumer behavioural trends and needs. These trends involve the demand for simplicity in goods, the demand for trusted brands and values, and the desire to live a less wasteful life by focussing on recycling and conserving goods. The behavioural trends in such a crisis show that younger people tend to be more preservative in their spending behaviour than the elderly. Flatters & Willmott (2009) show that these trends contribute to maximising the consumer's utility and all these trends suggest a different sensitivity to marketing tactics, as if companies used these marketing tactics in happier times. The question arises if the same marketing tactics will still be desirable to use.

As seen, the change in the consumer behaviour can be linked to happiness. An article in the Journal of Marketing Management (Lee & Kotler, 2019) mentions that people rarely seek change in their behaviour unless they are unhappy. During unhappy times individuals search for shifts to change their low moods, and these shifts can follow through consumer behaviour. Companies can help gain intrinsic feelings of satisfaction through exchange with the consumer. It is a principle within economics that both parties in the exchange should benefit if such an exchange is voluntary. However, here a theoretical contradiction arises. On one side, unhappier times motivate shifts in behaviour, as Lee and Kotler (2019) described. On the other side, Flatters and Willmott (2009) claim that unhappier behaviour leads to a greater demand for trusted brands and values, characterising a more stabilising behaviour. This theoretical contradiction encourages the objective of this study. Both explanations clearly describe that happiness levels influence consumer behavioural choices, yet the contradiction on the effect of unhappy or happy moods on these behavioural choices is debatable. Additionally, a lag of research that sets happiness as a determinant of consumer behaviour reveals that such a contradiction can exist. The actual effectiveness of happiness on consumer behaviour is of interest to companies. Companies are incentivised to make exchanges happen, as generating

profit is typically their primary objective. It is essential to increase the consumers' willingness to pay and interest in their products or services. Companies develop marketing strategies and use marketing tactics to make such exchanges happen. Therefore, it is desirable to know how happiness influences the effectiveness of such marketing tactics. This paper will investigate urgency and framing marketing tactics as these marketing tactics are easily applicable and commonly used marketing tactics. Consequently, the objective of this study is to examine the following research question:

Does happiness influence the effectiveness of urgency and framing marketing tactics?

Additional questions need to be discussed within this paper to reach a final answer to this central question. These sub-questions will be the primary foundation for finding a response to the research question and are used to formulate hypotheses. Chapter two will dedicate a sub-chapter to each sub-question. This research investigates the following sub-questions:

1) What is happiness?
2) How is happiness measured?
3) How does happiness affect consumer behaviour?
4) How do marketing tactics relate to the fluctuation of human traits?

1.2 Relevance

There have been countless studies and books on the determinants of the effectiveness of marketing tactics and how to imply such tactics to reach marketing strategies (Fifield, 1998; G. J. Hooley, N. Piercy, & B. Nicoulaud, 2008). Moreover, studies on the importance of happiness as a determinant of human behaviour (Frey & Stutzer, 2005) also exist. However, there has been little research on connecting the happiness of consumers to the choices they are making for the time being. Moreso, it has yet to be thoroughly examined which marketing tactics perform best under which happiness levels. As discussed, the role of happiness in consumer behaviour has been contradictory. This paper will be academically relevant as it will add to the existing literature by studying how happiness levels affect the effectiveness of specific marketing tactics. This research will add a chapter towards bettering the applicability of urgency and framing marketing tactics. It will further explain buying behaviour by centralising the role of happiness within these buying decisions.

Furthermore, this paper will have practical relevance for policymakers or companies. By providing insights retrieved from a field experiment, this paper will add to the existing literature by providing insights that can be useful in determining the tactics companies use within different mood states to increase the output. Moreover, companies focused on target audiences with mostly happier or unhappier happiness levels can find usefulness within these insights.

1.3 Structure

This paper has the following structure: chapter two will give a literature review. Here, the existing literature is discussed to form a basis for answering the sub-questions, and hypotheses will be formulated. This will be done by initially defining happiness and explaining how to measure happiness. This section will then investigate how buying decisions are made by looking at a sociological and psychoanalytical model. Here, the fluctuation of human traits affected by happiness will be discussed, and the connection of these human traits towards choice behaviour is displayed. This section will finish by matching urgency and framing marketing tactics onto these human traits. The fluctuation of these traits will then point out what marketing tactics will be best applicable. Based upon this literal review hypothesis will be formulated. Chapter three will account for the methodological section. The acquired data and a clarification of the experimental research design will be discussed in this chapter. The results of the experiment will be presented in chapter four. Lastly, the results will be interpreted, and the paper will be concluded in chapters five and six. Recommendations, limitations, and further research directions will be discussed here, and a final answer to the research question will be formulated.

2. Literature review

Chapter two will consist of four different main parts regarding the sub-questions. The reviewed literature builds a foundation for forming hypotheses and constructing an answer to the central research question. After the last part, a summary will be given regarding the hypotheses developed within chapter two.

2.1 Defining happiness

Happiness and utility could be interchanged as for what is discussed until this point. However, happiness is referred to as the state of being, while utility refers to total satisfaction obtained from an action, like consuming products or services (Bentham, 1890, p. 6). As this satisfaction is impossible to measure, revealed preferences were introduced as a solution to make utility

measurable (Samuelson, 1938). Happiness and utility can therefore not be intertwined as the same concept. Nevertheless, the acknowledgement that happiness is an indicator of utility is made. More precisely, happiness is an indicator of experienced utility. Research (Kimball & Willis, 2006) shows how long-run happiness, *baseline mood*, and short-run happiness, *elation*, account for an individual's reported happiness level. Both baseline mood and elation are utility indicators, thus partly revealing preferences. However, happiness cannot simply be measured because it is a feeling. The data derived for happiness levels are self-reported; it is subjective. Therefore, subjective well-being could be used interchangeably with happiness to describe the same self-reported outcome, and the definition used will be that of Ed Diener.

Ed Diener (1997) defines subjective well-being as consisting of two components: life satisfaction and hedonic levels. Life satisfaction is how individuals evaluate their lives as a whole or give judgemental evaluations of parts of their lives. It bases the reported level of well-being on accomplishments or goals and the cognitive judgements of these, rather than feelings and mood (Diener, Emmons, Larsen, & Griffin, 1985). Hedonic levels take credit for moods and feelings. Self-reported happiness levels within the specific moment of asking can describe such hedonic levels. Individuals consciously or unconsciously evaluate their state of mind by adding and subtracting respectively joyful, life-satisfying, and depressing, dissatisfying variables they are experiencing. The sum of these positives and negatives accounts for the happiness an individual feels in the moment. More particularly, it defines the sum of the pleasantness of how these variables are experienced (Diener, 1994).

Daniel Kahneman (2000) examined the difference between the memory-based approach and the moment-based approach. Kahneman's research explained why the moment-based approach is preferable when measuring an event's (un)pleasure. The experienced utility would be an indicator of the objective happiness and the level that an individual gives to the experience as it happens. His research (Kahneman & Tversky, 2000) did this with his colonoscopy 'experiment.' This experiment compares the self-reported pain of patients, where the duration of the procedure is the independent variable. Self-reported pain diagrams during the operation reported that the extended operation had objectively caused more pain. However, as the pain was experienced for a longer duration, it is seen that these lengthier procedures were referred to as preferable over the shorter ones. The memory-based approach thus reports a misconception of the happiness one felt objectively during the surgery. Kahneman, therefore, argues that the moment-based measures should be considered as the objective happiness could help explain decision making.

This paper will focus on happiness as mood and hedonic levels. Dieners' definition of happiness will be used because not only this definition allows individuals to map their

subjective well-being successfully. As an additional benefit, it makes it comparable as well. The measurability and comparability are favourable applications of this method. Kahneman's (2000) argument that Ed Diener's definition of happiness combines a memory-based approach, as in the life-satisfaction, with a moment-based approach, objective happiness, is to be taken seriously. However, this research focuses on how the effectiveness of marketing tactics react to happiness as mood; happiness. Within this specific research, the experienced utility is dependent on the mood, whereas the moment-based approach would see the mood depending on the experienced utility. Ed Dieners' definition will best fit this description.

2.2 Measurement of happiness

Controversy on the possibility of measuring happiness is starting to become a discussion of the past. That subjective well-being can be measured is acknowledged, and multiple methods have been developed to perform this measurement. The Organisation for Economic Co-operation and Development (OECD, 2013) discusses various techniques within a guideline book where the measurement of subjective well-being is visualised. Each method considers subjective well-being from a different aspect, and each method has its strengths and biases. These methods can measure life satisfaction or focus on measuring happiness as mood. Ruut Veenhoven (2017) discussed how to choose a measurement of happiness. The distinction between 'overall happiness,' 'affective happiness component,' and 'cognitive happiness component' is made, which measures the total life satisfaction, your current mood, and the satisfaction about accomplishments. For this research, it is essential to know how happy individuals are at this moment. Therefore, a measurement focussing on happiness as mood, *affect,* will be used.

Happiness is something that happens inside the mind. Subsequently, it would only be possible to measure these hedonic levels of affect by self-reports (Veenhoven, 1984). These self-reports are acquired using questionnaires. As the interest lies entirely in measuring current happiness, affective happiness, the questionnaire can be simplified by asking one question: 'On a scale of one to ten, one being very unhappy and ten being very happy, how do you feel *right now*?'. This question is used within the experience sampling method (ESM) to record feelings and current moods and is usually used to collect panel data on moods. This question allows analysis that connects affective states to specific activities (OECD, 2013, p. 31), like the buying behaviour experiment performed within this research. Within this research, a one-time sample of experienced moods is taken.

It must be said that a baseline mood makes it difficult to compare happiness interpersonally. This baseline mood (Kimball & Willis, 2006) is subjective for the individual. Some individuals have a higher base-level mood than others, which can make the comparison between happiness biased. However, since interpersonal differences in response tendencies cancel out between groups due to the randomisation within the experiment, if there are sufficient observations, this data will presumably still suffice in finding the effectivity of different mood states. Conclusively, happiness levels are used as an independent variable to test the effectiveness of specific marketing tactics at these higher or lower levels, enhancing comparability.

2.3 Consumer decision making and the role of happiness

A variety of variables explain decisions by consumers. However, all these variables have the same end: the consumer and producer are better off after the transaction than before. This economic principle allows for the presumption that producers always lookout for potential customers to realise such a profitable transaction. Within this subpart, a deeper understanding of the decision-making process is given. A representation of the psychoanalytic and sociological approaches will be provided. Moreover, the role of happiness within this process is presented. This subsection will investigate the parts of human behaviour that are receptive to happiness. Moreover, human traits that are important in buying behaviour and are affected by happiness will be discussed. This will form a basis for understanding where companies need to focus their marketing tactics on because of changing happiness levels.

2.3.1 Sociological model: The Five Stages of Buying Decision Making

The five stages of buying also referred to as the buying decision process, form an excellent tool for comprehending the steps taken by individuals as they make a purchase consciously. Engel, Blackwell, and Kollat (1968) broadened the original theory in their book Consumer Behaviour. Here, they explained the purchase decision process as a process containing five stages. The stages represent the customers' thought process, from the recognition of wanting a need to the evaluation of having fulfilled this need. These steps will be considered one at a time. Engel, Blackwell and Kollat described the five stages of buying as follows:

The first stage contains the creation of purpose. The customer recognises they have a problem or need something to fill the gap between the state they are currently in and the ideal state they want to achieve. This gap can be formed by internal stimuli, like a change in mood or feelings, or external stimuli, for example, marketing tactics that seem appealing. As soon as the trigger is formed, this stage is followed by the second stage: information search. As obvious

as it sounds, future customers now spend their precious time finding perceived relevant information to fill the experienced gap or solve the problem. The length of the search is specific to the strength of the need, and the channels used may vary from personal connections to online research or pre-trying solutions. Anything that will allow the individual to help obtain a close to complete understanding of solving the problem/need (Verhoef, Gensler, & Böhm, 2012). For example, impulsive buying behaviour has little information search, as these decisions affect problems that were not high in intensity. The third stage compares all relevant information and evaluates the alternatives. Differentiation between choices varies in detail, for instance, price, the feeling a brand creates, or how accessible the product or service seems. After a careful weighing process, stage four arises; the final decision to purchase. This might seem like the most crucial step for the producers; the transaction has been made. However, stage five is of greater importance to consumers. Evaluating the purchase experience and achieving the ideal state sought after by solving the gap or the problem will determine if the purchase was successful. Satisfaction arises from assessing if expectations were met or exceeded. Higher satisfaction levels are what consumers want, not the specific product/service (Sen Demir & Correia, 2014). This process can take up much time, but it can also happen split second. This process is all depended on the weight of the decision.

2.3.2 Psychoanalytic model: Three-Layered Iceberg Theory

Not all decisions are made upon deep consideration and careful steps. Purchases can be made upon feelings that range much deeper inside than the consumer initially thought. Producers do not necessarily have to influence the consciousness of decision-making; a desire created within their subconsciousness may also do the trick (Jisana, 2014). A desire arises from primitive needs and functions as the primary driver of motivation for buying behaviour (Berger & Dichter, 2017). These needs are ranked in Maslow's hierarchy of needs, where at the top of the pyramid are the lastly satisfied needs. The hierarchy plays no part in this paper, but it demonstrates that subconscious needs lower within the pyramid can alter motivation for buying decisions (Gawel, 1996).

Sigmund Freud (1920) developed his theory about the three levels of the mind: the conscious mind (I.D.), the preconscious mind (ego), and the unconscious mind (superego). This theory is often represented metaphorically by the Freudian Iceberg (Green, 2019). Conscious decisions are measurable and observable. These decisions form the outer layer of decision-making that actively responds to feelings. This would be the part of the iceberg within the metaphor that reaches above the water. However, this layer of consciousness is subject to the last two layers. The middle layer, the preconscious mind, is the part of the iceberg seen beneath the water's surface. This part of the mind still responds to feelings individuals feel;

however, these feelings are not feelings that someone is currently of aware. These feelings can return to the conscious mind quickly. For example, memories help influence choices within this layer of decision-making (Freud, 1920). Lastly, the inner layer of consciousness shapes behaviour. This behaviour is explained by instinct only. Certain words, colours, or other variables may play a part in the primitive cravings for something as they instinctively attract the individual. Different happiness levels could alter different unconscious needs. To better understand this possibility, what kind of human behaviour is affected by happiness should be understood.

2.3.3 Happiness within decision making

Within decision-making, individuals choose outcomes that generally benefit their happiness levels. However, multiple studies found that happiness levels also alter the choices that individuals make, whereas happiness is defined as the state of mood. The mood of individuals reflects several behavioural traits which are of importance within choice behaviour. The Big Five Personality Model (Cobb-Clark & Schurer, 2012) shows key human characteristics of individual behaviour. These traits are relatively stable, but just like happiness levels, these human traits fluctuate over time due to moods or events. Of these five traits, openness, contentiousness, and agreeableness are the main interest within this paper. These traits are presumably affected by mood and can be linked to decision-making behaviour based on what is said about the consumer decision-making process. Within the following paragraphs, more light will be shed on the role of happiness on these human traits.

Diener et al. (2013) discussed self-control as a human trait that is affected by the role of happiness. Self-control can be placed into the trait of contentiousness. Higher happiness levels lead to individuals who are more potent in containing themselves regarding time preference and become more deviant towards risky behaviour. Therefore, happier individuals put their good mood at stake and will be less risk-taking in their choices. Individuals with lower self-reported moods choose quick gratification more often at the expense of future rewards. These future rewards would be lower valued in unhappier moods, thus wrongly discounted (Lerner, Li, & Weber, 2013). Product type is a crucial factor. Garg et al. (2007) found that individuals with higher happiness levels avoided foods with high fat and sugar that give instant gratification; hedonic foods, while unhappier individuals tend to seek these products more to receive this quick gratification. This phenomenon is categorised as product-affect asymmetry. This asymmetry does not only occur with foods. Another research (Woodruffe, 1997) found that for women shopping, quicker gratifications received from a purchase at the expense of a future reward were more common amongst women within a lower mental state, while women with a higher mental state were less tempted to make such a trade-off.

Several studies also found that pro-social behaviour was more common amongst happier people. Lane (2017) mentions that this pro-social behaviour reflects within selfishness, trust, and reciprocity. Especially selfishness and trust are attractive to this research. Where unhappier individuals tend to show less social behaviour and report lower trust levels, this is the opposite for individuals in a happier mood. Giving money to a good cause, spending money on friends and family, and being more environmentally responsible have been seen more frequently among happier individuals (Dunn, L, & Norton, 2008). Pro-social behaviour is part of the trait of agreeableness. Within this trait, compassion and cooperativity play a role.

A more positive mood thus increases trust (Lane, 2017). This is important as higher happiness levels make individuals more brand loyal (Belanche, Casaló, & Guinalíu, 2013). However, happy moods can increase openness to other products, as the broaden-and-build theory of positive emotions explains (Fredrickson, 2001). Within this theory, positive emotions, like happiness, broaden awareness and increase openness by encouraging the thought-action process. Actions will flee more easily from the thought as these happier emotions are experienced. Another contradiction exists because being happy increases the openness to try out new products as advertisements are often experienced as more believable. Still, brand loyalty is more common, which can explain lower openness to alternatives.

Nevertheless, brand switching should be less of an issue if the happy mood reflects on the buying experience with the brand. Individuals could be experiencing more openness to experiment with another product but would likely be preferred within the same trusted brand. Nevertheless, the brand of choice, in this case, should respond to this need by offering alternatives as to the curiosity about trying out new products increases. In the end, happier moods could threaten loyalty if companies do not evolve.

2.3.4 Concluding remarks happiness on decision making

Consumer decision-making follows the conscious stages of the decision process and is triggered by the unconscious mind. Within the five stages of decision-making, it is seen that the purpose of purchase is given. Individuals carefully weigh their options and make the purchase. Nevertheless, this decision-making process is affected by happiness as the human behavioural traits are influenced by happiness, providing different insights on the purpose to purchase. Happier people have more self-control and are better at procrastinating gratification. Within the five stages of decision making, a new purpose for purchase is created: instant gratification to compensate for the current mood. Moreover, the individual is not weighting the future rewarded alternatives as they would be in a more positive mood, and the information search is cut short. More hedonic experiences become more tempting. A greater trust resulting

from a happier mood will also increase openness. Messages sent by producers will be more believable. Therefore, happier individuals will be more tempted to try something out of the regular. Lastly, more pro-social behaviour is seen in happier people. On the other hand, mood alters unconscious needs. A lower mood could result in buying behaviour where quicker gratification at the expense of future rewards would be more likely to happen. Alternative or extended choices are unconsciously seen as alternatives with lower values as underlying emotions or needs form the new purpose to purchase. Therefore, unhappier people are unconsciously altered in their choice behaviour. Shortly, outcomes do not only consist of the happiness we derive from the decisions but are also influenced reversibly by the currently experienced mood.

2.4 How do marketing tactics relate to happiness

Currently, all that has been discussed projects on defining happiness, measuring it, and understanding the consumer decision-making processes. The light will be shed within this chapter on the producers' side. The marketing tactics used will be discussed and connected to the personality traits that affect happiness. Marketing tactics focussing on self-control, openness, trust, or pro-social behaviour will be found using the marketing mix. The examined tactics that respond to the traits discussed will function as the tactics used to test the hypothesis.

2.4.1 Marketing mix: an introduction to the model

Neil Borden (1964) first introduced the marketing mix concept as he believed that marketing does not relate to one aspect of marketing but a mixture of ingredients. His model required two elements: (1) a list of ingredients that addresses aspects of the marketing program, and (2) a list of market forces that affect the marketing mix. The first element is described originally as the four p's, product, price, place, and promotion, and the second element represents all that is of influence brand to such a p. For example, functionality, quality, and appearance all are market forces that marketers need to consider when considering the product aspect of the marketing mix. This original model only took practical aspects into account, thus not how the products were delivered. Price, promotion, and product will be the p's used to examine the effect on the consumer behavioural traits affected by mood.

Price, promotion, and product are fundamental drivers of marketing tactics. Every p focuses on different aspects of marketing, which reflects on different traits or characteristics accessed within an exchange. As there are countless marketing tactics, this research focuses on urgency and framing marketing tactics. These two sub-categories will be discussed as the applicability

of these tactics fit the happiness fluctuations. This will be further shown within their sub-paragraphs. In conclusion, framing and urgency marketing tactics presumably generate higher effectiveness of exchange at different affective states. Self-control, openness, trust, and pro-social behaviour are the human traits that will be approached from the happiness and marketing tactic position to validate the effectiveness.

2.4.2 Urgency

One way producers and marketeers accomplish sales is through urgency. Urgency can be seen as an action that implies an immediate reciprocal reaction: an unconscious pressure to make choices on events that will seemingly not return shortly. This could be caused by price urgency in the form of temporal discounts or by amplifying immediate benefits of products or services. Either way, this creation of urgency plays into the trait of self-control.

Urgency can be divided into positive and negative urgency and is one of five factors that influence impulsivity (Rose & Segrist, 2014). Cyders and Smith (2007) discuss how decisions are shown to be made in extremer moods. Positive and negative urgency relates to riskier behaviour induced by corresponding negative or positive moods. Within a negative or positive mood beyond a normal fluctuation of moods, choices fail to align with long-term goals. Instant gratification will be a result of rash decision making. Within this same article, Cyders and Smith explain that positive urgency, which happens in positive moods, focuses more on the immediate benefit. This fear of missing out increases risky behaviour. This, in combination with increased trust, could be beneficial to producers to sell more subscription-based packages or services. A limited discount on long-term deals powers subscription-based discount sales. This purchase is riskier as individuals have to sign contracts that confirm this long-term agreement. Within more negative moods, this agreeableness is at a lower benchmark. Thus, this would not be the ideal state to sell such subscription-based packages. Lower moods are more conceptual towards instant gratification problematic feelings. More alcoholic beverages or smoking is susceptible to negative urgency (Settles, et al., 2012). Therefore, it could be said that negative moods focus more on instant gratification and could be stimulated by providing urgency. Discounting is a powerful tool to create such urgency on these products/services. Discounting can be done in multiple ways. This will be discussed in chapter 2.4.3. Based on this information, the following hypothesis regarding urgency can be made:

Hypotheses 1: Individuals with higher happiness are more prone to sign up for subscription-based discount sales than unhappier individuals.

Hypotheses 2: Individuals with lower happiness levels are more likely to buy discounted products than individuals with higher happiness levels.

2.4.3 Framing

It has been discussed within the consumer decision-making process that choices are either made with conscious decision-making steps or unconsciously. A framing effect is a popular tool used to influence this process as it highlights the same product or service from another perspective. Human traits like self-control, trust and openness will be affected by such a cognitive bias as the message contains information that aligns with these traits. Pro-social behaviour can be stimulated through such statements as well. These messages can contain positive framing, focussing on the benefits, or negative framing, concentrating on the losses (Levin & Gaeth, 1988). Framing comes in many sub-categories; however, this paper will specify information framing, attribute framing and discount framing. These categories are believed to have the most significant influence on the discussed traits.

Individuals with higher happiness levels display more pro-social behaviour than individuals in a lower mood. This pro-social behaviour refers to decision making that will be better for society and the environment. Companies can use this to add pro-social attributes to their products. Attribute framing is a type of framing that perfectly fits this description as it highlights how buying a product with regard to another product will be beneficial. An example of such attribute framing is that of Tony's Chocolonely. Withing their company's mission, they strive to make chocolate 100% slave free (Chocolonely, n.d.). In doing so, they have added this pro-social attribute to the packages in the form of a picture that highlights their mission.

Furthermore, attribute framing can be used to highlight healthier or more pro-social choices, which are also in line with the preferences of individuals with a more positive mood. This positive valence was first discussed by Levin et al. (1998) and describes how positive emotions arise from the positive ascription of these favourable attributes. Attribute framing focuses on the product; more specifically, it will exploit characteristics such as vegan, biological, fat-free, plant-based, environment friendly etc. The following hypothesis can be formulated:

Hypotheses 3: Pro-social attribute framing increases the willingness to buy an identical product more at higher happiness levels

When evaluating how to propose discounts on a product, the marketeers consider discount framing. Where the main objective of discounting is to create urgency, the goal of discount framing is to perceive the message as most desirable. Discount framing is part of price framing and affects the consumers' perspective, as discussed by Gendall et al. (2006). Promotions can be framed as a dollar-off, percentage-off or at certain odd/even price levels (Kinard & Capella, 2013). Furthermore, such discount framing could include sampling gifts with products (Krishna, Briesch, Lehmann, & Yuan, 2002). Gendall et al. (2006) proposed that a percentage off is the preferred strategy for low-priced products as it highlights a more significant numerical discount.

Consumers find the most desirable product to be the one offering potentially the greatest benefit. Where price discount framing highlights the savings on a loss, the sampling discount framing highlights the potential external gain a purchase can acquire. While considering how happiness affects certain human traits, like openness toward new products, it can be presumed that happier individuals are more likely to fall for sampling framing effects compared to less happy individuals.

Furthermore, unhappier individuals purchase for instant gratification. Discounting that frames how the loss of one-time purchases is minimal will therefore be preferred by individuals with lower happiness levels. It will be preferred over the potential gain of sampling discounting. Thus, the following hypotheses on sample discounting can be made:

Hypotheses 4: sample discounting will have a greater impact on happier individuals compared to unhappier individuals.

2.4.4 Summary of hypothesis

Throughout this research, the effect of happiness on consumer choice behaviour is discussed. Moreover, it is seen that certain traits differ at the base level, taking happiness levels into account. These traits form the fundament of marketing tactics that rely on the creation of urgency and those that use framing, particularly attribute framing and discount framing. This has led to assumptions on when these marketing tactics best apply to individuals, looking at their current mood. The following hypothesis has been made:

Hypotheses 1: Individuals with higher happiness are more likely to sign up for subscription-based discount sales than unhappier individuals.

Hypotheses 2: Individuals with lower happiness levels are more likely to buy discounted products than individuals with higher happiness levels.

Hypotheses 3: Pro-social attribute framing increases the willingness to buy an identical product more at higher happiness levels

Hypotheses 4: sample discounting will have a greater impact on happier individuals compared to unhappier individuals.

3. Methodology and Data

3.1 Experimental design

A field experiment was the methodological approach of choice to test for the hypothesised causal effects. The experiment has a one-shot between-subject design. The experiment was done at Albert Heijn Dillenburgplein, a local supermarket in Ridderkerk. Participants of the experiment were gathered at random, as they consisted of supermarket customers, and were gathered before entering the store. This randomisation cancelled out interpersonal differences in response tendencies. Participation in the experiment was incentivised by giving the participants two lottery tickets in the form of a scratch card. This incentive extrinsically motivated the participants to join the experiment. The customers could otherwise achieve this local scratchcard if they spent fifteen euros inside the store. Giving two scratchcards for free when participating ought to be a great incentive to join the experiment. With the scratchcard, customers could win either a 0-, 10-, 50- or 100- euro gift card to be spent at this local supermarket; see figure 1 within Appendix A: experimental design. The scratchcard would be scratched after the experiment was done to cancel out the happiness effects of the lottery result. The participants were randomly assigned to either the treatment group or the control group. The total sample size consisted of 149 participants, distributed between the treatment and control groups at respectively 72 and 77 per group. The treatment and control groups followed the same experimental procedure, with the only difference being manipulating the independent variable.

The treated group was approached differently from the control group to influence the independent variable. The treatment group was approached more energetically and was given a sincere compliment about their appearance. This maneuverer intended to increase the happiness level of the treatment group in contrast to the control group. The experiment then continued as follows:

A statement was read by the experiment host to instruct the participant (Appendix A2/A3 for Dutch and translated English statements), followed by a brief questionnaire (Appendix A4/A5 for Dutch and translated English questionnaire). The questionnaire started with demographic questions, including gender and age. These demographics could be used to check for randomisation, and if needed, they could be used as control variables. Within this part of the questionnaire, individuals also had to state their current self-rated happiness on a 1 to 10 scale. After that, the questionnaire proceeded into two hypothetical case questions to test hypothesis one. Taking excessive costs and the limiting feasibility of acquiring enough data when using actual choices on subscription-based discounting, hypothetical choices were chosen to test hypothesis one. For hypotheses two, three and four, the participants had to make real choices

within the experiment. The questionnaire contained a page number on the bottom of the paper. This number was of great importance, as it functioned as a reference number to the participant. Whenever the participant came back to collect their scratch cards, this number would be written on the receipt to connect the receipt to the filled-out questionnaire. The treated individuals also got a plus sign written next to the page number. This would make the groups recognisable when the data was analysed.

As the statement read, participants of the store had exclusive deals within the supermarket. These deals were centralised at a recognisable spot within the store; see Appendix A6 for a visual display of this part of the experimental design. To test hypothesis two, the discount ratio of every participant was calculated. This was done by dividing the total received discount by the total expense and multiplying this by 100%. This information was achieved by analysing the receipts of the participants and linking this information to the questionnaire. To test hypothesis 3, the receipts were browsed for biological and vegan products. All biological and vegan products are provided within the store with a cover around the shelf label, see appendix A7. The store consisted of 268 biological and 154 vegan products. The covers of half of each category were taken off within this experiment. This procedure was done at random, and a list was kept of the products that kept the vegan or biological cover. Whenever participants bought a vegan or biological product, which was seen on the receipt, it could be seen if it was a vegan/biological product with an attribute framing shelf label cover. This would be stored in a binary variable, taking value 1 if such an attribute framed product was found on the receipt and 0 if it did not appear on the receipt. To test for hypothesis four, products were chosen and displayed at normal price levels; see appendix A6 again. Individuals who bought these products would receive an exclusive free sample of the product(s) with alternative features as a sampling discount. The product that the customers had to buy was at least twice as expensive as the free sample, as the perceived discount could otherwise be seen as the only reason for purchase. Here, three different products were chosen to broaden the product range and lower the demand effects. Alike attribute framing within the previous hypothesis, sample discounting would be stored in a binary variable, taking value 1 if sample discounting was found on the receipt and 0 if it did not appear on the receipt. To see an image of the reception of the experiment at the front of the store and the final data, see figures 3-5 within appendix A8.

3.2 Specification of the model:

The results from the experiment gave different kinds of data. Questions one and two of the questionnaire had a variable with an ordinal scale, as these questions had scaled answers. The demographic variable on gender was binary, and the demographic variable age was a variable on a nominal scale. The happiness level was stored as a continuous variable. Considering what kind of data was acquired, an ordered logistic regression was used to explore the effect of happiness on subscription-based discounting, binary logistic regressions were used to discuss how happiness levels influence attribute framing and sampling discounting, and an OLS regression was used to examine the effect of happiness on urgency discounting. The regressions were run with the statistical software STATA. The independent and dependent variables will be discussed, corresponding to every model specification used to test a specific hypothesis. The control variables consist of the binary variable gender and the categorical variable age. The binary variable gender is called Male, taking value 1 if the participant is a male and 0 if the participant is a female. Age is split into three age categories: younger than 34, 35 to 49 and 50 years old or older. These categories were chosen as the individuals within each class were presumed to have relatively similar consumption behaviour.

After running a randomisation and manipulation check, the following formulas were used to test the effect of the treatment on the different dependent variables corresponding to the specific hypothesis:

Model (1): Ordered logistic regression formula

$$P\left(Subscription\_based\_discounting \ = j, Treatment, Male\right) = \frac{exp\left(\tau_j - \beta 1 Treatment + \beta 2 Male\right)}{1 + exp\left(\tau_j - \beta 1 Treatment + \beta 2 Male\right)} - \frac{\exp\left(\tau_{-j} - \beta 1 Treatment + \beta 2 Male\right)}{1 + \exp\left(\tau_{-j} - \beta 1 Treatment + \beta 2 Male\right)} + \varepsilon$$

*H0: T*he effect of Treatment on subscription based discounting $= 0$

H1: *T*he effect of Treatment on subscription based discounting $\neq 0$

Here, the probability of falling in an ordered category j, which can take the value between 1 and 5, depends on the treatment variable *Treatment* and the control variable *Male*. The age categories' variable was dropped from the regression as the randomisation in age categories was unsuccessful. This was also the case in models 2-4. Tau displays the cuts of the categories, which shall be displayed within the regression's results. These cuts resemble the division of the ordinal scale. As this model will be used for two different data sources, namely

question one and question 2 of the survey, this model will be referred to as model 1.1 and model 1.2.

Model (2): Ordinary least squares regression:

$$Discount_{ratio} = \beta 0 + \beta 1 Treatment + \beta 2 Male + \varepsilon$$

H0: The effect of Treatment $= 0$

H1: The effect of Treatment $\neq 0$

The continuous variable *Discount_ratio* is dependent on the treatment variable *Treatment* and the control variable *Male*.

Model (3): Binary logistic regression

$$P\,(Attribute\_framing) = 1 \mid Treatment, Male) = \beta 0 + \beta 1 Treatment + \beta 2 Male + \varepsilon$$

H0: The effect of Treatment on attribute framing $= 0$

H1: The effect of Treatment on attribute framing $\neq 0$

The variable *Attribute_framing* is equal to one whenever the participant purchased a product subducted by attribute framing. This variable is dependent on the treatment variable *Treatment* and the control variable *Male*.

Model (4): Binary logistic regression

$$P\,(Sampling\_discount) = 1 \mid Treatment, Male) = \beta 0 + \beta 1 Treatment + \beta 2 Male + \varepsilon$$

H0: The effect of Treatment on Sampling discount $= 0$

H1: The effect of Treatment on sampling discount $\neq 0$

The variable *Sampling_discount* is equal to one whenever the participant purchased a product that participated within the sampling discounts. This variable is dependent on the treatment variable *Treatment* and the control variable *Male*.

3.3 Descriptive variables

Table 1 provides a summary of the descriptive statistics of the key variables. As briefly discussed, the sample size consisted of 149 participants. Of these 149 participants, fourteen individuals provided data with missing values. Hypotheses two to four required receipts as part of the data collection. Here fifteen participants were lost as they lost the receipt or never returned to the start of the experiment. To test for these hypotheses, the treatment and control groups' sample sizes consisted of respectively 64 and 71. Hypotheses one is tested using data retrieved from only the survey questions, hence the *N* of 149. From top to bottom, the following information is displayed in table 1:

Firstly, the dependent variables *subscription discount question 1* and *subscription discount question 2* had a mean of respectively 2.92 and 2.77. These means display that the average answer centres around the middle option three. Secondly, the treatment variable dummy reveals that the sample is almost evenly divided between treatment and control. The group size of participants receiving compliments before starting the experiment (*treatment*=1) turned out to be just smaller (48%) than that of the control group (52%). Thirdly, the control dummy variable *Male* took value 1 for 36% of the sample. Thus, 64% of the sample contained females. Fourthly, the average happiness level in the sample was 7.35. The minimum of this variable shows that no participant felt below a four, and the maximum highlights that at least one individual reported the highest possible outcome for happiness: a ten. Lastly, the dependent dummy variables of attribute framing, discount ratio and sample discount are showcased. The means of 26% and 18% of attribute framing and sample discount highlight the number of participants who bought a product with attribute framing or sampling discounting. The discount ratio mean shows that the participants received 11% discount on their total purchases on average. The maximum discount ratio that was achieved was 49 percent, as seen in the maximum of this variable.

Table 1

Descriptive Statistics of Key Variables

Measures	*M*	*SD*	*Min*	*Max*	*N*
Subscription discount question 1	2.92	1.39	1	5	149
Subscription discount question 2	2.77	1.33	1	5	149
Treatment	0.48	0.50	0	1	149
Male	0.36	0.48	0	1	149
Happiness total sample	7.35	1.25	4	10	149
Attribute framing	0.26	0.44	0	1	135
Discount ratio	0.11	0.11	0	0.49	135
Sample discount	0.18	0.38	0	1	135

4. Results & analyses

Before the regression models were run, the following three steps were taken: Firstly, randomisation checks were run to determine whether the sum of the differences between the means of the control group and treatment group was significantly different from zero. The control variables were categorised as age groups and gender groups. The descriptive statistics of these groups can be found in table 2 and table 3. A Chi-Squared Goodness of Fit test resulted in insignificant differences (P=0.24) within the age categories between the treated and control group. A two-sample t-test on the variable gender uncovered a statistically significant difference from zero between the sum of the means of the groups. This was significant at a 90% confidence level, $t(133) = 1.92$, $p < 0.1$. The effect size of gender was measured as a small size effect by the Cohen's d ($d=0.31$).

Table 2

Descriptive statistics of Binary Variable Gender

Measures	*Frequency Control*	*Percent*	*Frequency Treatment*	*Percent*
Female	44	57.14	52	72.22
Male	33	42.86	20	27.78
Total	77	100.00	72	100.00

Note. N = 149.

Table 3

Descriptive Statistics of Categorical Variable subscription discount question 2

Measures	*Frequency Control*	*Percent*	*Frequency Treatment*	*Percent*
Younger than 34 years old	12	15.58	11	15.28
Between 35 and 49 years old	17	22.08	18	25.00
50 years of age or older	48	62.34	43	59.72
Total	77	100.00	72	100.00

Note. N = 149.

Secondly, the two-sample t-test was reused to perform a manipulation check of the treatment. Here, the sum of the means between the two groups was significantly different than zero at a 95% confidence level, t (133) = -2.58, p < 0.05). The Cohen's d reported an effect size which was just within the small category (d= -0.44). As seen in the descriptive statistic table 4, the control group scored an average happiness level of 7.16, and the treatment group had an average happiness level of 7.54.

Table 4

Descriptive Statistics of Happiness per group

Measures	*M*	*SD*	*Min*	*Max*	*N*
Happiness treatment group	7.54	1.11	4	10	72
Happiness control group	7.16	1.16	4	10	77

Note. N = 149.

Lastly, regressions were run using the models 1-4. This model specification section explains that only the variable *Male* will function as a control variable within these regressions. Each regression model will be discussed separately as each model retrieves results regarding the intended hypothesis.

4.1 Results model 1

Within table 5 and table 6, the descriptive statistics of the ordinal variable subscription discount 1 and subscription discount 2 are displayed. Both questions regarding subscription-based discounting gave about 40% of the sample being likely or very likely to buy the subscription. Question one was more favoured in the very likely scale (16.11% compared to 10.07%). Also, both questions returned about 45% of the sample to reject the subscription deal, with question two being the group where individuals were most often very unlikely to buy such a deal (22.14% compared to 19.46%).

Table 5

Descriptive Statistics of Ordinal Variable subscription discount question 1

Measures	*Frequency Control*	*Percent*	*Frequency Treatment*	*Percent*
Very Unlikely	16	20.08	13	18.06
Unlikely	24	31.17	14	19.44
Not likely nor unlikely	12	15.58	10	13.89
Likely	16	20.78	20	27.78
Very likely	9	11.67	15	20.83
Total	77	100.00	72	100.00

Note. N = 149.

Table 6

Descriptive Statistics of Categorical Variable subscription discount question 2

Measures	*Frequency Control*	*Percent*	*Frequency Treatment*	*Percent*
Very Unlikely	19	24.68	14	19.44
Unlikely	20	25.97	19	26.39
Not likely nor unlikely	11	14.29	11	15.28
Likely	18	23.38	22	28.57
Very likely	9	11.67	6	8.33
Total	77	100.00	72	100

Note. N = 149.

The ordinal logistic regression analyses to test for hypothesis one were conducted. The first two survey questions were treated as separate data to this hypothesis and were used in different logistic regressions. As displayed in tables 7 and 8, the ordinal logistic formulas direct the effect of treatment positively on choosing *very likely* as the answer of choice. Moreover, the unstandardised beta of *Treatment* is 0.60. So, for a treated individual compared to an untreated individual, an increase of 0.60 in the log-odds of being in a higher level (thus more positive answer outcome) of the ordinal variable *Subscription-based discounting Question 1* is expected, given that the variable *Male* is kept equal. Thus, the effect of the treatment positively affects the likelihood of choosing *very likely* as the answer of choice. This is significant at a 95% confidence level ($p < 0.05$) within model 1.1. However, this effect is not statistically significant at a 90% confidence level ($p > 0.10$) or higher for model 1.2. Model 1.2 shows that the unstandardised beta of *Treatment* is 0.28. So, for a treated individual compared to an untreated individual, an increase of 0.28 in the log-odds of being in a higher level (thus more positive answer outcome) of the ordinal variable *Subscription-based discounting Question 2* is expected, given that the variable *Male* is kept equal. The same direction of effect is discovered within the variable *Male*. Being a male increases the likelihood of choosing the answer *very likely* as the answer of choice. This is not statistically significant on at least a 90% confidence level ($P > 0.10$) for model 1.1, but at this confidence level, it is significant for model 1.2.

Table 7

Regression results model (1.1): Subscription-based discounting Question 1

Variables	*β*	*SE*	CI (95% u.)	CI (95% l.)	*Z*
Treatment	0.60**	0.30	0.02	1.18	2.02
Male	0.40	0.30	-0.19	1.00	1.32

*Note. ***p<.001, **p<0.05, *p<0.10. CI=confidence interval of β. n=149.*

Table 8

Regression results model (1.2): Subscription-based discounting Question 2

Variables	*β*	*SE*	CI (95% u.)	CI (95% l.)	*Z*
Treatment	0.28	0.30	-0.33	0.88	0.91
Male	0.67*	0.32	-0.01	1.36	1.93

*Note. ***p<.001, **p<0.05, *p<0.10. CI=confidence interval of β. n=*149.

Appendix B visualises the direction of the treatment effect on each survey question outcome as scatterplots. STATA calculated the predicted probabilities of the margins used within these plots. These margins are used to get the true likelihood of the outcome occurring, as predicted by the model. The predicted values of each answer outcome are projected separately within a scatterplot. For model 1.1, within the scatterplots, an apparent positive effect of the treatment is seen on the *very likely* and *likely* possibilities, and a clear negative impact of the treatment is projected on the *unlikely* and *very unlikely* answer possibilities. For model 1.2, the results returned insignificantly. No effect between happiness and subscription-based discounting was found. The average margins regressions of model 1.1 and model 1.2 are found in Appendix C. Here, a predicted value for each ordinal outcome of the variable *subscription-based discounting question 1* is projected. The dy/dx of each predicted value resembles the slope of that outcome, which would be the magnitude of the effect.

Consequently, for model 1.1, being within the treatment group compared to being within the control group, keeping the variable *Male* fixed, increases the probability of choosing *very likely* or *likely* as the answer of choice by respectively 8.00 ($p<0.10$) and 6.10 ($p<0.05$) percentage points on average. Being within the treatment group compared to being within the control group, keeping the variable *Male* fixed decreases the probability of choosing *unlikely* or *very unlikely* as the answer of choice by respectively 5.24 ($p<0.05$) and 9.23 ($p<0.05$) percentage points on average. These outcomes were significant on at least a 90% confidence level ($p < 0.10$).

4.2 Results model 2

To test hypothesis two, an OLS regression analysis was conducted. The outcome variable was the continuous variable *Discount ratio*, and the predictors were again the variables *Treatment* and *Male*. Table 4 shows that the effect of the treatment was statistically significant at a 90% confidence level ($\beta=0.04$, 95% C.I. (0.00,0.01), $p < 0.10$), indicating that the individuals within the treated group, on average, had a discount ratio that was four percentage points higher than that of the control group. Males have two percentage points lower discount ratios than their opposite gender; however, this is not statistically significant on at least a 90% confidence level ($p > 0.10$). Within the sample, the average discount ratio received by the control group was 10%.

Table 9

Regression results model (2): Discount ratio

Variables	*β*	*SE*	CI (95% l.)	CI (95% u.)	*t*
Treatment	0.04*	0.02	0.00	0.07	1.91
Male	-0.02	0.02	-0.06	0.02	-1.11
Constant	0.10***	0.02	0.07	0.13	6.24

*Note. ***p<.001, **p<0.05, *p<0.10. CI=confidence interval of β.*

4.3 Results model 3

To test hypothesis 3, a logistic regression analysis was used to investigate a relationship between increasing happiness and the probability of buying an attribute framed product. Only the unstandardised coefficients were calculated within this logistic regression as the standardised coefficients are not needed. No model comparison is necessary to test for hypothesis 3. Table 10 displays the regression results of model 3. The unstandardised beta of the variable *Treatment* 1.18, which is interpreted in log-odds. The odds ratio is calculated as follows: $e^{1.18} = 2.72$. Conclusively, keeping *Male* fixed, the odds of the treatment group buying an attributed framed product is 2.72 times greater than the odds of the control group buying an attribute framed product. This is significant at a 95% confidence level ($p < 0.05$). No effect of gender was found as the beta coefficient of the variable *Male* was insignificant on at least a 90% confidence level. Thus, the effect of the treatment had a statistically significant positive effect on the probability of buying an attribute framed product.

Table 10

Regression results model (3): Attribute framing

Variables	*β*	*SE*	CI (95% u.)	CI (95% l.)	*Z*
Treatment	1.18**	0.42	0.36	2.01	2.81
Male	0.00	0.44	-0.87	0.86	-0.01
Constant	-1.69***	0.37	-2.42	-0.97	-4.55

*Note. ***p<.001, **p<0.05, *p<0.10. CI=confidence interval of β.*

Even though the hypotheses only require the direction of the effect of *Treatment*, the margins are interesting to interpret. As seen within appendix C, treated individuals were 21.3 percentage points more likely to buy an attribute framed product than the control group. This is significant at a 95% confidence level ($p < 0.05$).

4.4 Results model 4

The logistic regression was used within this final model to investigate a relationship between Treatment and the probability of buying a sampling discounted product. This model gave highly insignificant results on the beta coefficient of *Treatment*. Moreover, the p-value turned out to be 0.57. The results of the regression are displayed in table 11. Regression model 4 concludes that no effect between happiness levels and sampling discounting is found.

Table 11

Regression results model (4): Sampling discounting

Variables	*β*	*SE*	CI (95% l.)	CI (95% u.)	*Z*
Treatment	0.27	0.47	-0.65	1.18	0.58
Male	0.08*	0.47	-0.09	1.74	1.76
Constant	-1.99***	0.42	-2.81	-1.18	-4.80

*Note. ***p<.001, **p<0.05, *p<0.10. CI=confidence interval of β.*

5. Discussion

The findings of this experimental research suggest that happiness does influence the effectiveness of urgency and framing marketing tactics. However, these effects differ amongst marketing tactics. An effect of happiness on the effectiveness of marketing tactics, i.e., attribute framing and urgency discounting, is found within this experimental research. For model 2, the hypothesis "*Individuals with lower happiness levels are more likely to buy discounted products than individuals with higher happiness levels*." can be rejected on at least a 90% confidence level as a vice versa relationship between happiness levels and the discount ratio was found. The confidence level suggests that if the experiment were rerun, the exact estimates would be found 90% of the time. Thus, 90% of the time, higher happiness would relate positively to a higher discount ratio. Conclusively, this result does not support the hypothesis. Model 3 suggests that the hypothesis "*Pro-social attribute framing increases the willingness to buy an identical product more at higher happiness levels*" cannot be rejected on at least a 95%

confidence level. 95% of the time, higher happiness would increase the effectiveness of pro-social attribute framing as an identical product is more likely to be bought when being attribute framed. Here, the results do support the hypothesis.

Happiness also significantly positively affected the effectiveness of subscription-based discounting within model 1.1. However, causal inference between the two variables would be an extravagant conclusion as model 1.2 did not prove the same results. The data used consisted of two hypothetical questions, thus of low statistical power. Conclusively, the hypothesis "*Individuals with higher happiness are more likely to sign up for a subscription-based discount sales than unhappier individuals*" needs further exploration as mixed evidence was found. Model 4 examines the hypothesis "*Sample discounting will have a greater impact on happier individuals compared to unhappier individuals.*". The results drawn from the collected data were highly insignificant, suggesting no effect between happiness and sampling discount.

Despite the significance levels of the results, the power of the experiment may be in question for external implications. Firstly, the relatively small difference in happiness means between the treatment and control groups (Cohens d <0.5) is a limiting factor. Then, the hypothetical questions pointed out that the topic of subscription-based discounting questions played a part. Therefore, these results presumably have low implication power. Furthermore, the experimental design leaves room for improvement. Within the descriptive statistics, it is seen that randomisation in age and gender could be improved when this experiment is repeated. Lastly, the demand effect played a massive role within the sample discounting hypothesis, resulting in a considerable limitation. Customers of the store were showing rejective behaviour towards the sample. Whenever sample discounting was explained, individuals would point out to be in no need of such a product. Other individuals returned that they felt obligated to buy the sample discounting or thought they were helping the research by buying such an item. Ideally, further exploration would be necessary on subscription-based discounting and sample discounting. Nonetheless, the study provides evidence on how happiness influences the effectiveness of the tested marketing tactics. The limitations should be a precaution of abrupt introduction before further research on a larger scale is done.

The finding of the opposite effect for hypothesis 3 was an interesting result. However, a possible explanation could lie within the total amount spent within the store. The highest discount ratios within the data arose from individuals who consumed less in total. If participants bought little groceries and happened to buy discounted products, the discount they received made up a more significant portion of the ratio. It could be that happier individuals spent less money on average inside the store, which resulted in higher discount ratios. Such a claim

would need to be verified with further research. The mixed evidence on subscription-based discounting could be mixed due to the demand effect or the lack of rationality in choice behaviour. Question one and question two of the questionnaire represented the same discount percentage, but not more than a few participants answered the same way in both questions. Remarks on online shopping or going to the gym were made when filling out the questionnaire, pointing out that participants were not all interpreting the question as intended, and the demand effect played a part. Moreover, answers seem to be based upon preferences rather than rationality in the outcomes.

The findings of this study do contribute to the little research that has been done on connecting happiness as mood to buying-behavioural choices of consumers. Patti Williams (2014) reviewed literature within the Journal of Consumer Research concerning the role of emotions and moods on consumer behaviour. Here, the choices one makes considering the relegation of their mental state are discussed. Moreover, the usefulness of moods and emotions to consumers is discussed. Consumers make choices that are compatible with their current mood (Di Muro & Murray, 2012). Practically, this connects exciting purchases to individuals within higher moods and justifies purchases with high arousal for the more negative moods. This paper contributes by adding further evidence to the discussion of the usefulness of moods in buying behaviour. Here, additional evidence on buying decisions compatible with the current mood is given in the negative relationship between a positive mood and the discount ratio.

Additionally, the outcomes of this experimental research contribute to the purpose of studying happiness within the field of economics. Piekalkiewics (2017) discussed happiness as a describing factor of economic output and mentioned how personality traits might play a part in this link. Happiness has thus far been discussed as a desirable output variable of consumer behaviour and as an output driver of marketing tactics and strategies. I.e. Belanche, Casaló, & Guinalíu (2013) discussed how higher happiness is desirable to increase the effectiveness of relationship marketing and Desmeules (2002) examined the impacts of marketing strategies on general happiness. This research gives an additional purpose to studying happiness. Here, happiness is the determinant of the effectiveness of marketing tactics, whereas the output variable happiness measured the effectiveness of marketing tactics previously. This adds value to the link between happiness, personality traits and economic output by adding the effectiveness of marketing tactics regarding happiness to the existing literature.

These topics were just some examples of the academic relevance on the theme and outcomes of this research. The practical relevance would lie with the policymakers of marketing strategies and executors of marketing tactics. Higher sales could be expected if

the effectiveness of used marketing tactics is higher. However, the power of the experiment is limited. Only the general trends of happiness levels are available to the public, not individual ones. Asking individual happiness levels and acting correspondingly would be very costly. Manually manipulating happiness levels before customers enter the store could be a solution to increase the effectiveness of tactics. However, some practical implications also arise here. Higher discount ratios are presumably not preferred by producers. It would be unethical to consciously lower happiness levels to decrease the discount ratio of the customers. Increasing happiness would be costly as well, but research must point out if doing so is worth it. Further exploration with the intention of seeing happiness as a determinant of marketing tactics is recommended to increase the implication power of the\is research.

6. Conclusion

The findings in this experimental research suggest a relationship between happiness and the effectiveness of urgency and framing marketing tactics. Where the attribute framing tactic and the urgency discounting tactic show causation towards happiness and the effectiveness of the corresponding tactic, subscription-based discounting merely displays mixed evidence. The data on sampling discounting concluded no effect between happiness and this marketing tactic. The relationship found in this research implies that happiness as mood should be considered a determinant of the effectiveness of applied marketing tactics. It functions as an additional reason for economics to study happiness.

Furthermore, the contribution of this research opens the necessity to investigate more applications of happiness as a determinant. Mainly, creators of marketing- or policy-related designs within the economic field could have sparked an interest. If the explored urgency and framing tactics are more or less effective due to the happiness levels, can it be assumed that these are the only affected tactics? In the same line, these results could also open room for discussion of happiness as a determinant of output in other fields.

In the end, happiness levels are not constants. These fluctuating levels result in higher and lower moods that policymakers have to cope with. Life events explain these mood changes, and a crisis or winning the Football World Cup can cause extremes within such fluctuations. Individuals strive to be happy, and behavioural choices differ among happiness levels. Thus far, not all choices can be explained. Still, the congruence between behavioural choices and how happy an individual is feeling at the moment is a concept that finds its applications beyond the hitherto studied area.

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8. Appendices

8.1 Appendix A: Experimental Design

A1: Lottery scratchcard

Figure 1 - Incentive in form of a Scratchcard.

A2: Statement (Original Dutch version)

Beste deelnemer,

Als eerste wil ik u hartelijk bedanken voor het meedoen met mijn onderzoek. Hiervoor krijgt u nadat het onderzoek voorbij is twee krasloten. Uw deelname helpt mij academische data te verzamelen! Dit onderzoek is gesplitst in twee delen. In het eerste deel vult u een vragenlijst in bestaande uit vijf vragen waaronder enkele hypothetische vraagstukken. In het tweede deel gaat u de winkel in om uw normale boodschappen te doen. Hier komt u langs exclusieve sampling korting waar alleen u gebruik van kunt maken. Achteraf vraag ik u uw kassabon bij mij in te leveren in ruil voor de twee krasloten.

De vragenlijst duurt ongeveer twee minuten. U wordt gevraagd zich in te beelden in de specifieke situatie. Vervolgens vult u het meest passende antwoord in bestaande uit: zeer waarschijnlijk, waarschijnlijk, niet waarschijnlijk noch onwaarschijnlijk, onwaarschijnlijk en zeer onwaarschijnlijk. Dit experiment zal compleet anoniem zijn. Het nummer onder aan de vragenlijst zal gekoppeld worden aan uw kassabon.

Veel success!

A3: Statement (Translated English version)

Dear participant,

Firstly, your participation in this research is deeply appreciated. Therefore, you are thanked in advance by receiving these lottery tickets, to be collected after the experiment. Your contribution will help provide academic evidence. This research is divided into a hypothetical part and will be followed with your regular shopping! The hypothetical part will be in the form of five survey questions, and when you are doing everyday shopping, there will be exclusive sampling discounts that you can take advantage of. After you finish your regular shopping, we ask you to hand in the receipt in exchange for the lottery tickets!

The hypothetical questionnaire will take around two minutes. Within these questions, you are asked to imagine yourself in certain situations. Here you are asked to give the most fitting answer. This will be on a scale base consisting of: very likely, likely, not likely nor unlikely, unlikely and very unlikely. This experiment will be anonymous. The number of the questionnaire will be added to your receipt.

Good luck!

A4: Questionnaire (Original Dutch version)

1) Stelt u zich voor dat u wilt beginnen met sporten en een abonnement voor de sportschool wilt afsluiten. Na zorgvuldig zoeken komt u een sportschool tegen die u zeker ziet zitten: AlwaysFitness. U bent positief gestemd en bent van plan 3x per week te gaan sporten. U weet alleen niet zeker of u dit vol blijft houden. AlwaysFitness heeft nu een deal: een jaarlijks abonnement waar u 20 euro's per maand betaald. Hier bent u vrij zo vaak te gaan als u wilt. U kunt 40 euro per maand betalen en dan zit u niet vast aan een abonnement. Hoe groot acht u de kans dat u een jaarlijks abonnement afsluit?

- Zeer waarschijnlijk
- waarschijnlijk
- Om het even
- Onwaarschijnlijk
- Zeer onwaarschijnlijk

2) Stelt u zich voor dat u wekelijks online boodschappen doet en deze laat bezorgen. De bezorgkosten die per rit worden gevraagd zijn 4.99. Nu heeft de website een deal: u betaald 9.99 per maand om zo vaak te laten bezorgen als u wilt. U bespaard 50%, echter is dit wel een jaar abonnement. Hoe groot acht u de kans dat u een jaarlijks abonnement afsluit?

- Zeer waarschijnlijk
- waarschijnlijk
- Om het even
- Onwaarschijnlijk
- Zeer onwaarschijnlijk

3) Wat is uw geslacht?

- Vrouw
- Man
- Geen commentaar

4) Binnen welke leeftijdscategorie valt u?

- Onder de 18
- 18-34
- 35-49
- 50+

5) Op een schaal van 1 t/m 10, waar 1 het aller minst is en 10 het allerhoogst, hoe gelukkig bent u op dit moment?

- 1 – Ik voel mij vreselijk
- 2 – Ik voel me heel slecht
- 3 - Ik voel me slecht
- 4 – Ik voel me een beetje slecht
- 5 – Ik voel me niet goed noch slecht
- 6 – Ik ben een beetje gelukkig
- 7 – Ik ben gelukkig
- 8 – Ik ben heel erg gelukkig
- 9 – Ik ben extreem gelukkig
- 10 – Ik ben in mijn hele leven nog nooit zo gelukkig geweest.

A5: Questionnaire (Translated English version)

Demographics and happiness question:

1. Imagine yourself getting back into fitness of some kind. You are looking for a new gym and come across the following gym: AlwaysFitness. You assume you will go to the gym at least three times a week; however, you do not know how long you will sustain this three times a week. AlwaysFitness offers a subscription of 20 euro's a month, with an unlimited visiting possibility. However, this subscription is for at least one year. Without this subscription, you would pay 40 euros per month. How likely are you to get a year-long subscription?
    - Very likely
    - Likely
    - Not likely nor unlikely
    - Unlikely
    - Very unlikely

2. Imagine yourself shopping for groceries online regularly. You do this once a week. The delivery charges are 4.99 per delivery. Now the grocery website has added a new feature. You can get a subscription on delivery charges where you pay a monthly fee. This fee would be a month 9.99. This would save you 50% per month. However, this subscription will last for one year. How likely are you to get a subscription?
    - Very likely
    - Likely
    - Not likely nor unlikely
    - Unlikely
    - Very unlikely

3. What is your gender?
    - Female
    - Male
    - I would rather not say

4. What is your age?
    - Younger than 18
    - 18-34
    - 35-49
    - 50+

5. On a scale of 1 to 10, with 1 being the absolute lowest and 10 being the absolute highest, how happy do you feel right now?

    - 1 - I feel terrible
    - 2 – I feel very bad
    - 3 - I feel bad
    - 4 – Kind of bad
    - 5 - Not bad/nor good
    - 6 – Kind of happy
    - 7 – I feel happy
    - 8 – Very happy
    - 9 – Extremely happy
    - 10 – I have never been happier in my life

A6: Sample discount lay-out.

Figure 2 - Sample discounting. When the participant bought one of these products, a free sample was given at the reception of the experiment.

A7: Biological and vegan attribute framing

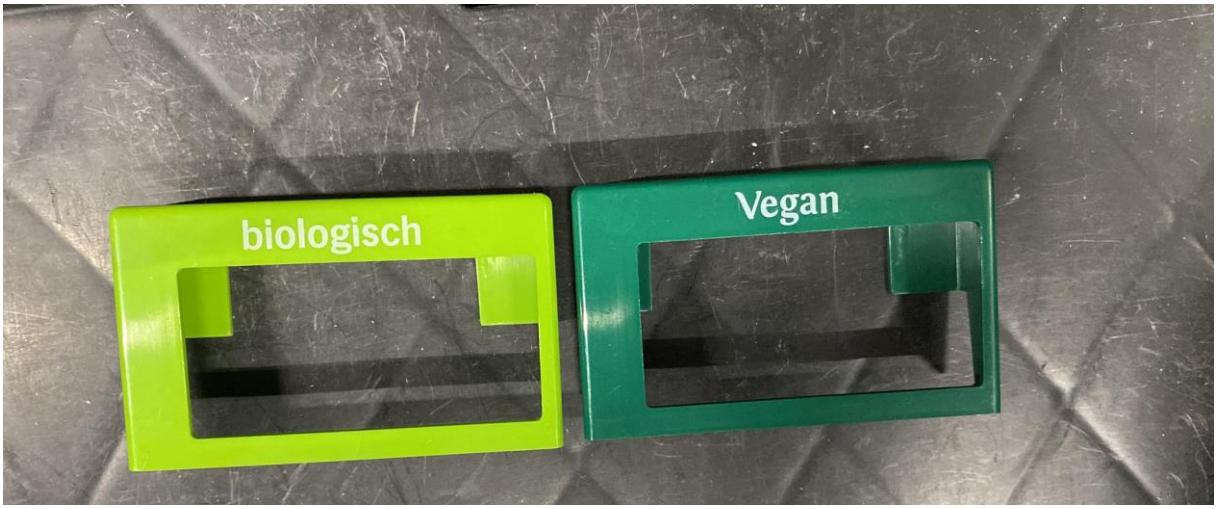

Figure 3 - Biological and Vegan attribute framing shelf card covers

A8: Reception of experiment: Experimental layout

Figure 4 - Experimental reception. Here, the participant filled out the questionnaire. Receipts went into the left basket, and survey questions into the right basket. The sample items were claimed at this spot, and the scratchcards were handed out from here.

Figure 5 - A display of the items on the standing table.

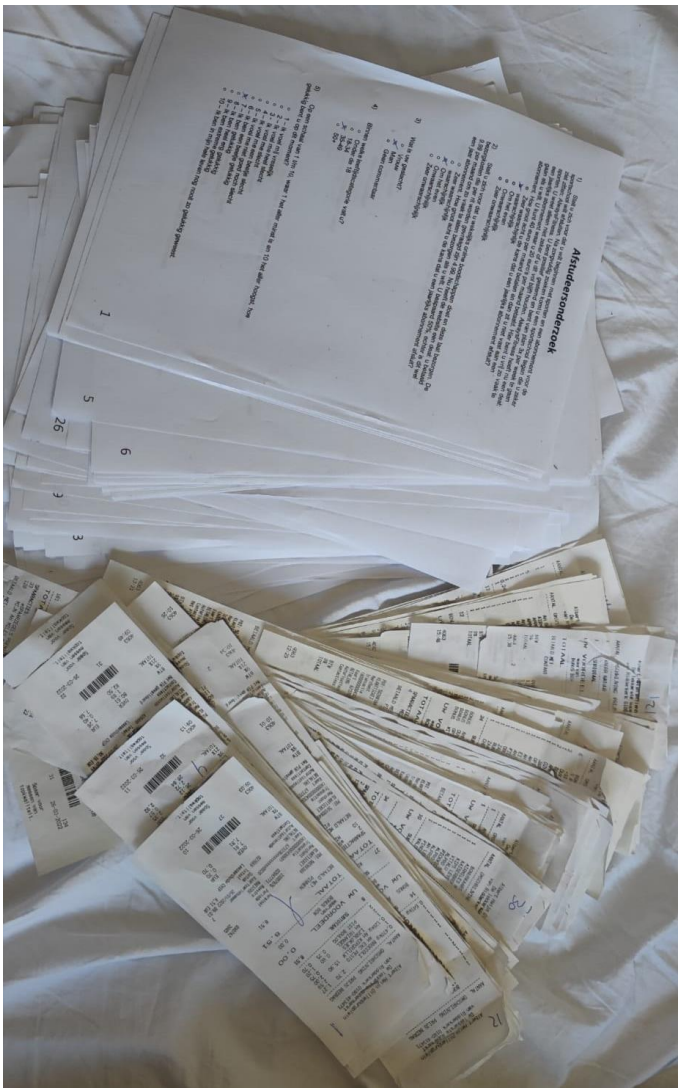

Figure 6 - An overview of the data of the experiment

8.2 Appendix b: Scatter plots ordinal logistic regression

B1: Scatterplot Treatment on Categorical Variable subscription discount outcomes separately (Q1)

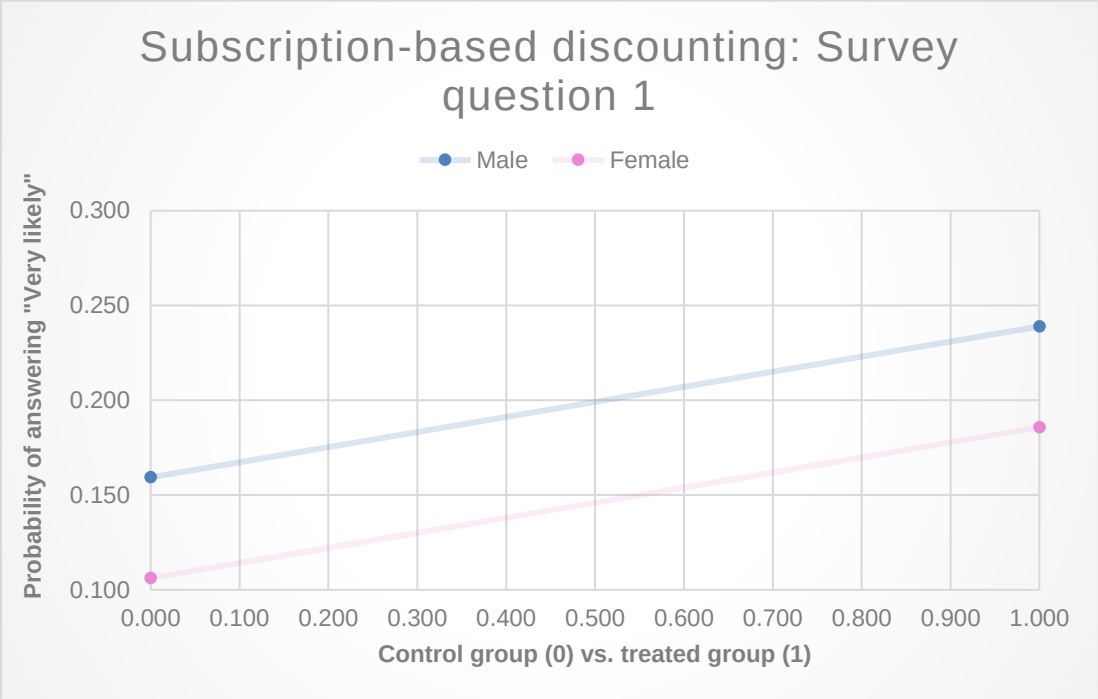

Figure 7 - The probability that the treated/control group chooses "Very Likely" as their answer of choice.

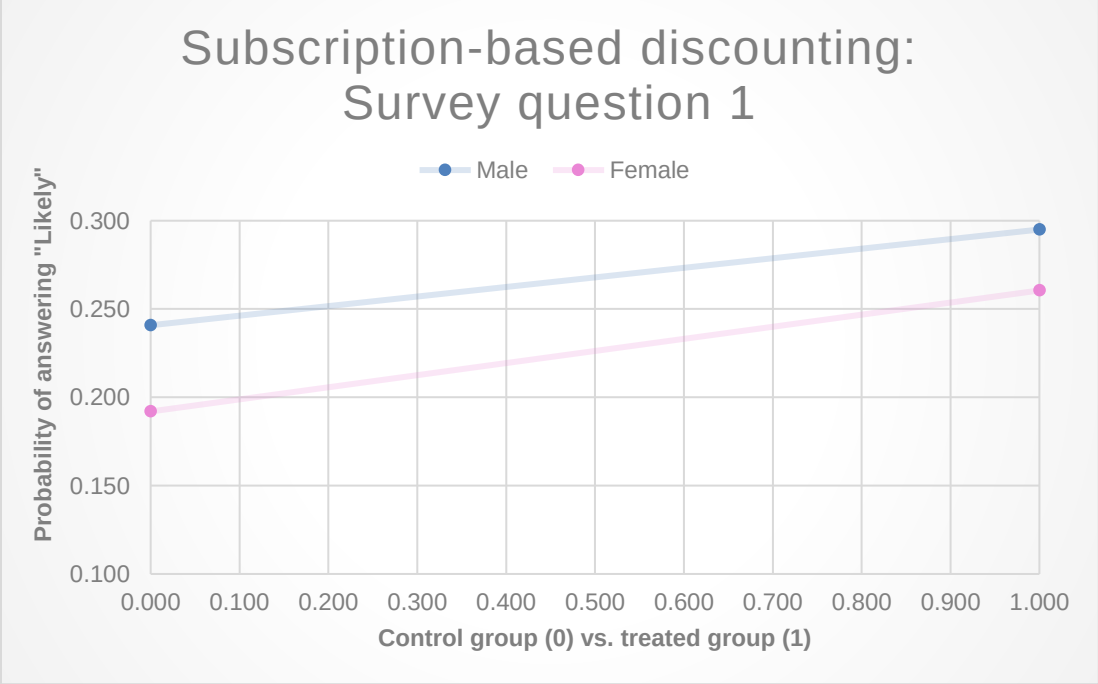

Figure 8 - The probability that the treated/control group chooses "Likely" as their answer of choice.

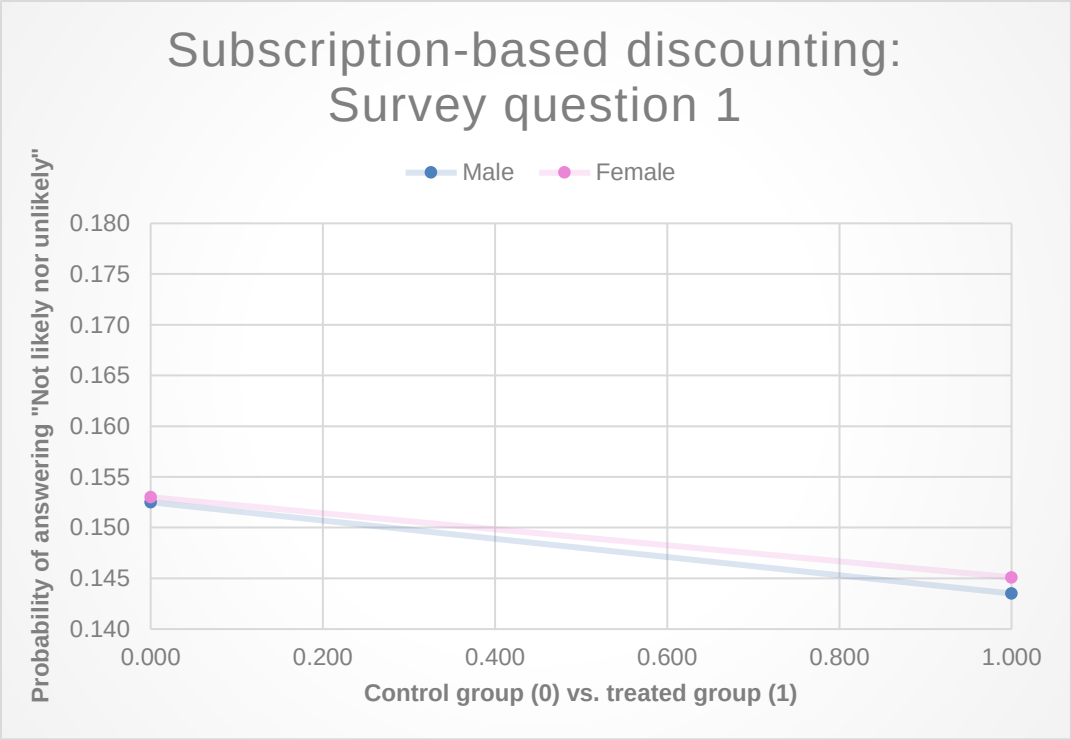

Figure 9 - The probability that the treated/control group chooses "Not Likely nor Unlikely" as their answer.

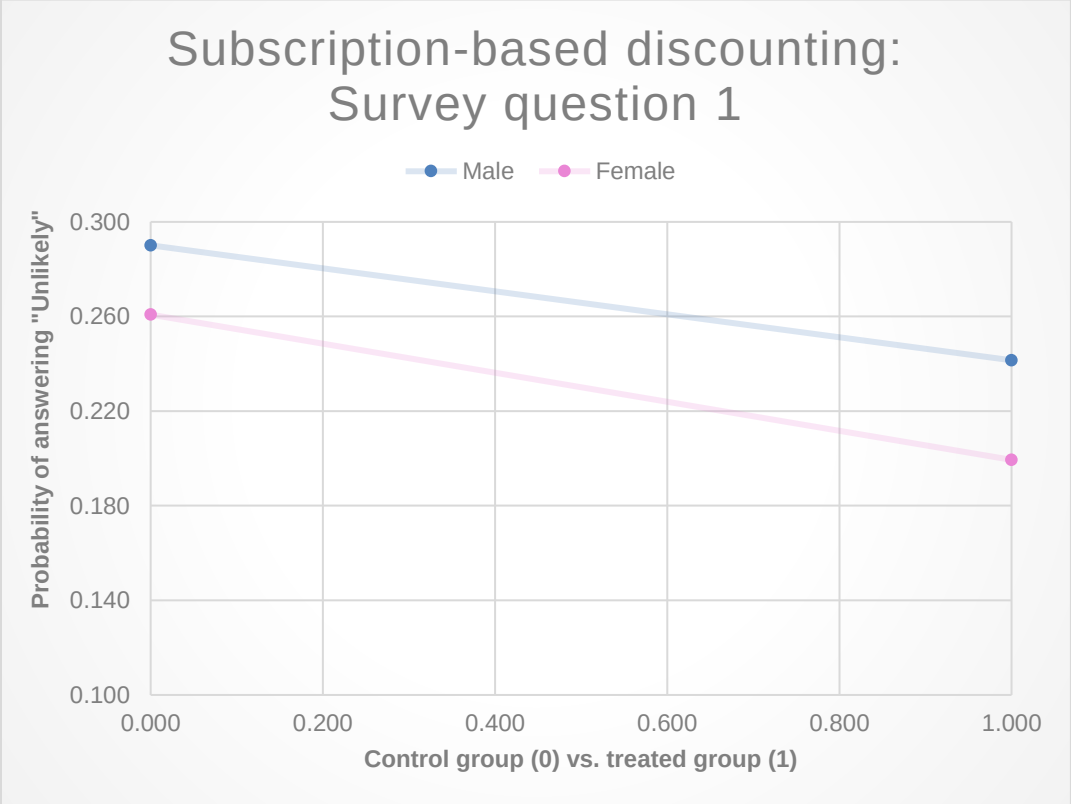

Figure 10 - The probability that the treated/control group chooses "Unlikely" as their answer of choice.

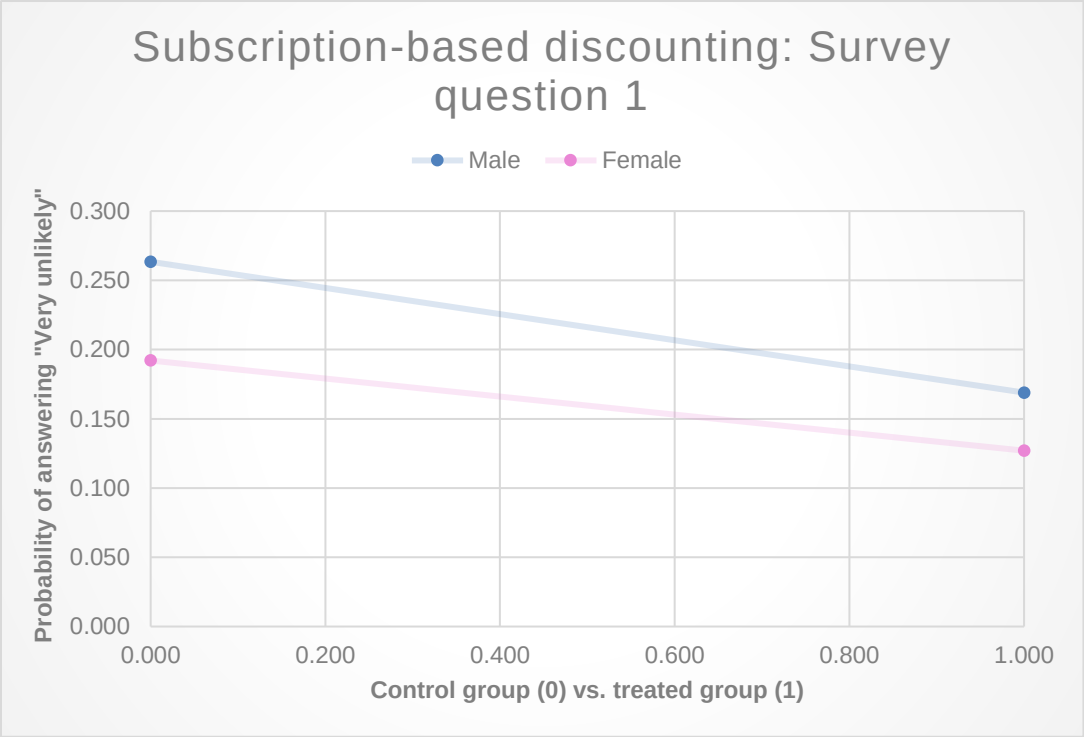

Figure 11 - The probability that the treated/control group chooses "Very unlikely" as their answer of choice.

B2: Scatterplot Treatment on Categorical Variable subscription discount outcomes separately (Q2)

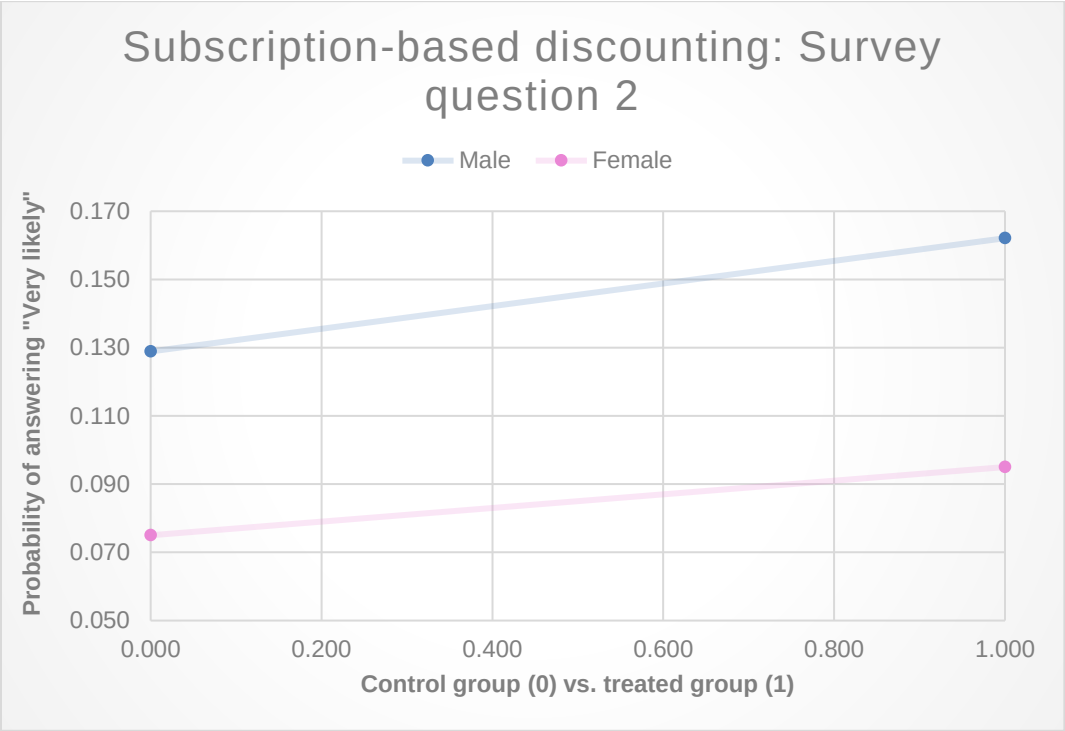

Figure 12 - The probability that the treated/control group chooses "Very Likely" as their answer.

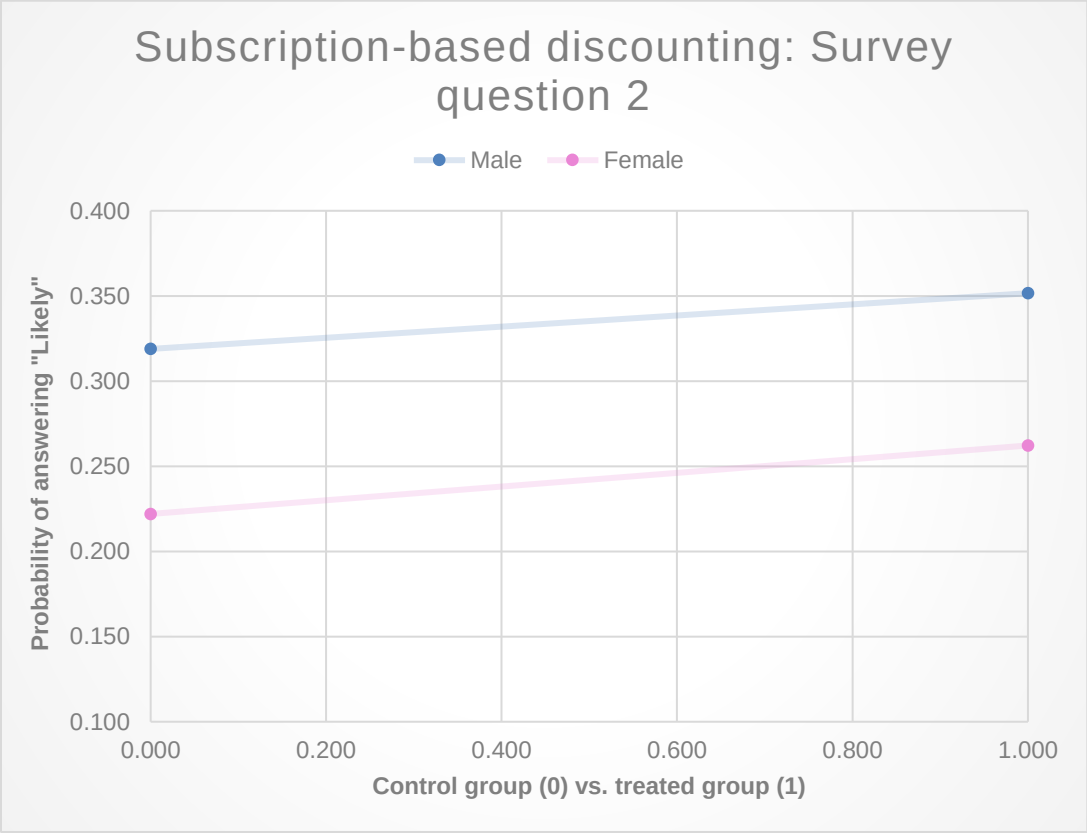

Figure 13 - The probability that the treated/control group chooses "Likely" as their answer of choice.

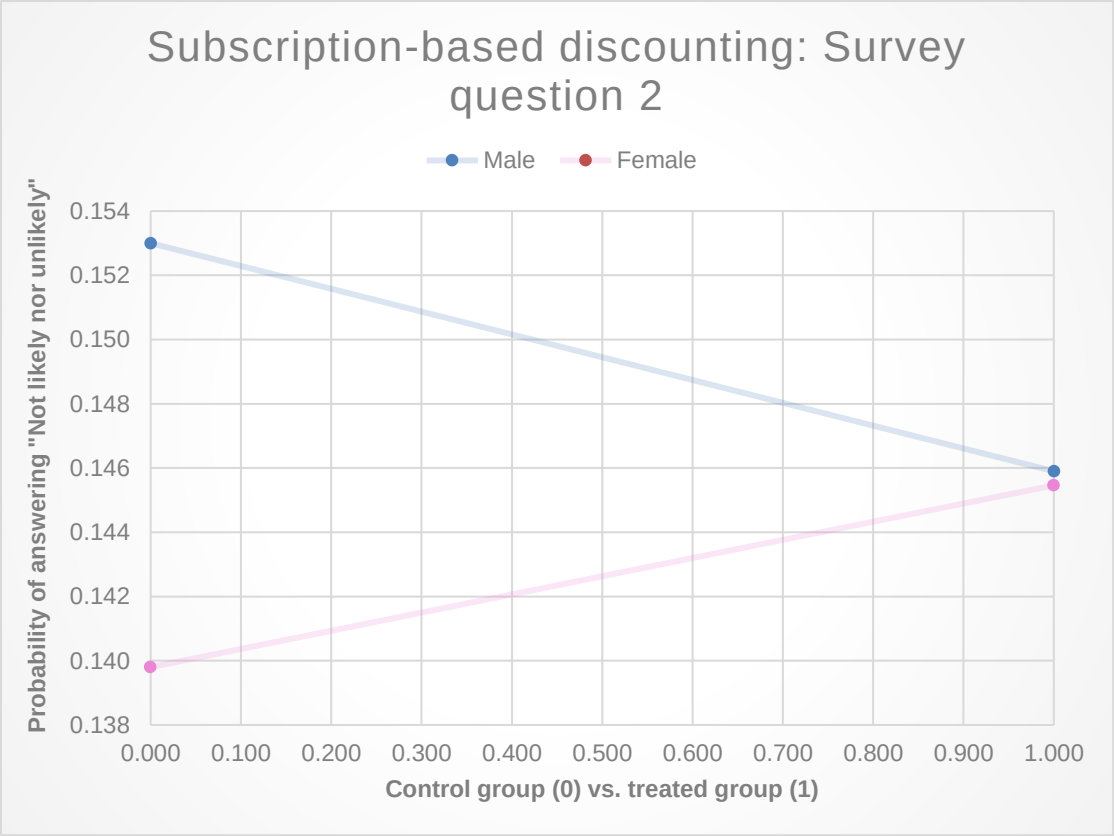

Figure 14 - The probability that the treated/control group chooses "Not Likely nor Unlikely" as their answer.

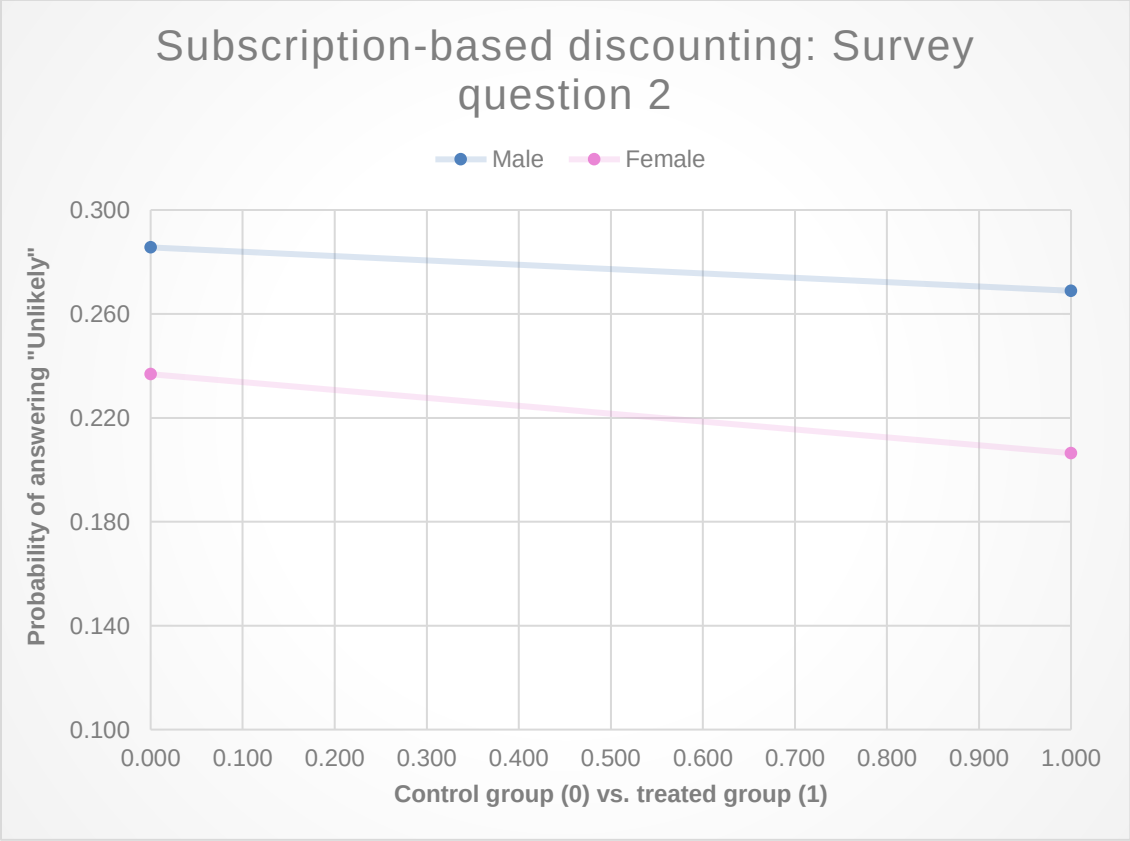

Figure 15 - The probability that the treated/control group chooses "Unlikely" as their answer of choice.

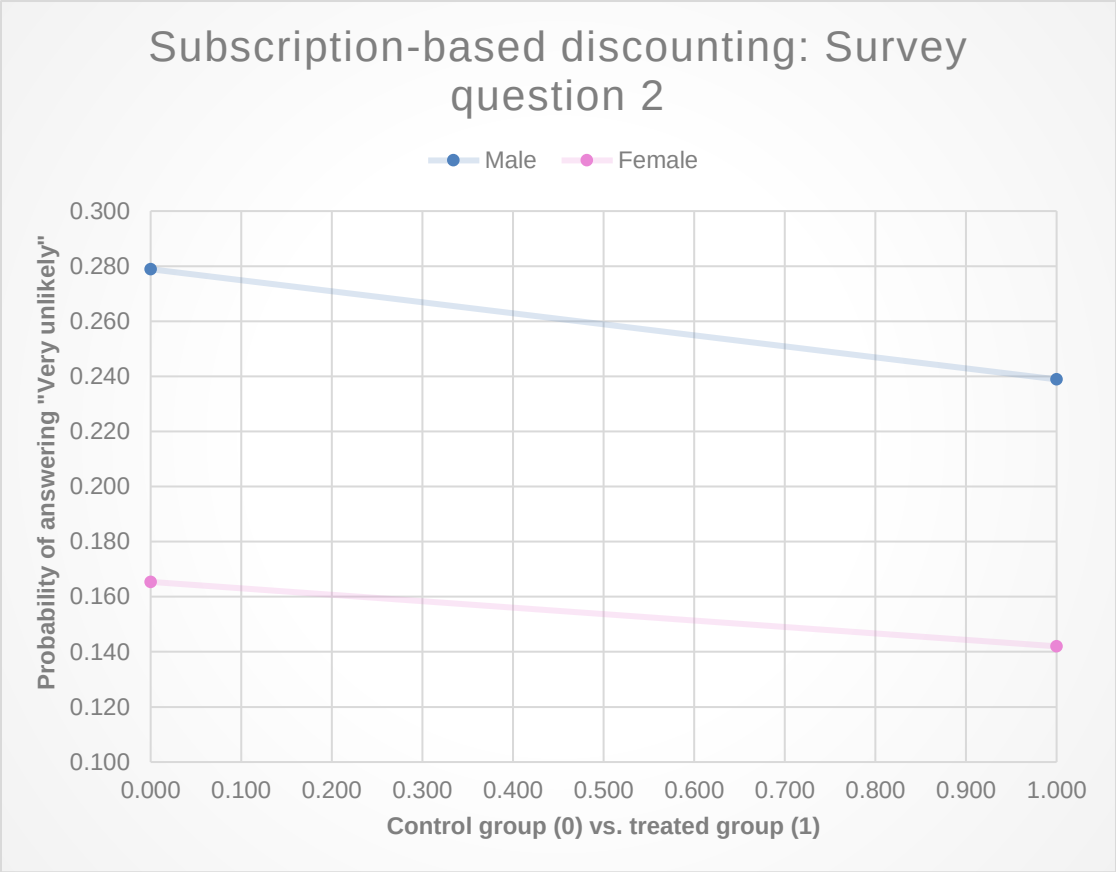

Figure 16 - The probability that the treated/control group chooses "Very unlikely" as their answer of choice.

8.3 Appendix C: Regressions and margins tables.

C1: Margins results model (1.1): Subscription-based discounting Question 1

Table 12

Margins results model (1.1): Subscription-based discounting Question 1

Variables	*dy/dx*	*SE*	CI (95% l.)	CI (95% u.)	*Z*
Treatment					
Predicted (1)	-0.09**	0.05	-0.18	0.00	-2.00
Predicted (2)	-0.05**	0.03	-0.10	0.00	-2.01
Predicted (3)	0,00	0.01	0.00	0.02	0.62
Predicted (4)	0.06**	0.03	0.00	0.12	2.04
Predicted (5)	0.08*	0.04	0.00	0.16	1.95

*Note. ***p<.001, **p<0.05, *p<0.10. CI=confidence interval of dy/dx.*

C2: Margins results model (1.2): Subscription-based discounting Question 2

Table 13

Margins results model (1.2): Subscription-based discounting Question 2

Variables	*dy/dx*	*SE*	CI (95% l.)	CI (95% u.)	*Z*
Treatment					
Predicted (1)	-0.05	0.05	-0.15	0.06	-0.90
Predicted (2)	-0.02	0.02	-0.07	0.02	-0.92
Predicted (3)	0.00	0.01	-0.01	0.01	0.74
Predicted (4)	0.04	0.04	-0.04	0.12	0.91
Predicted (5)	0.03	0.03	-0.03	0.08	0.91

*Note. ***p<.001, **p<0.05, *p<0.10. CI=confidence interval of dy/dx.*

C3: Margins results model (3): Attribute framing

Table 14

Regression results model (3): Margins attribute framing

Variables	*dy/dx*	*SE*	CI (95% l.)	CI (95% u.)	*Z*
Treatment	0.21**	0.07	0.08	0.35	3.08
Male	0.00	0.08	-0.16	0.15	-0.01

*Note. ***p<.001, **p<0.05, *p<0.10. CI=confidence interval of dy/dx.*

C4: Margins results model (4): Sampling Discounting

Table 15

Regression results model (4): Margins sampling discounting

Variables	*dy/dx*	*SE*	CI (95% l.)	CI (95% u.)	*Z*
Treatment	0.04	0.07	-0.09	0.17	0.58
Male	0.12*	0.07	-0.01	0.25	1.79

*Note. ***p<.001, **p<0.05, *p<0.10. CI=confidence interval of dy/dx.*