

Non-alcoholic specialty beer: The Virgin Blonde

A study on the effects of design choices for non-alcoholic specialty beer on the taste perception and the purchase intention of the product

Master's Thesis by:

Lynn Roelofs

2022

UNIVERSITY
OF TWENTE.

Non-alcoholic specialty beer: The Virgin Blonde

A study on the effects of design choices for non-alcoholic specialty beer on the taste perception and the purchase intention of the product

Master's Thesis

Student name: Lynn Esther Roelofs
Student number: s1804731
Study: M-COM Digital Marketing Communication & Design
Supervisors: Dr. M. Galetzka and dr. T. J. L. van Rompay
University: University of Twente
Date: July 6, 2022

Abstract

Objective

The interest in living an alcohol-free life is getting bigger through the years for several reasons. Some people stopped drinking because of medical reasons and some people just want to live a healthier life. The fact that alcohol can damage your brain can also be a reason for people to be more interested in non-alcoholic drinks. But these people need to know that these non-alcoholic beverages exist and therefore, these drinks need to stand out more. This study aims to find out what colour changes and differences in weight of cans can do to the visual attention, purchase intention and tastiness of non-alcoholic specialty beers and what the roles of embodied processes and visual processes are within this research.

Method

To be able to answer the research question in this study, a 2 by 2 (brighter vs. darker label and heavier vs. lighter can) between-subjects taste experiment was done among visitors of a local specialty beer café, where participants (N = 100) were confronted with one out of four conditions in a field study and are asked to react to statements that measure purchase intention, tastiness, refreshment, intensity, visual attention, and perceived quality. A broad audience of people visiting specialty beer café Het Uurwerk in Hengelo were asked to participate in this study. No specific group was targeted apart from 18 years and older.

Results

This study shows that the differences in weight of the can has a larger effect on purchase intention and taste perceptions than differences in brightness. Results of the experiment in this research reveal that a heavier can resulted in a better taste experience, a higher intensity of taste, a higher purchase intention and higher quality. Most of the results concerning the brightness of the colours, were found to be non-significant. However, the brightness of the label does influence the perceived refreshment of the non-alcoholic specialty beer.

Conclusion

The use of different levels of brightness in the label of the can mostly affects the level of refreshment people will experience while drinking the beer. The brighter the label is, the more refreshment people experience and the less bitter they perceive the beer. The weight of the can mostly influences other experiences. When drinking from a heavier can, people experience a greater taste intensity, they like the non-alcoholic specialty beer better, think the product is of higher quality and they are more likely to buy it. Beer breweries could therefore consider, depending on what they want to achieve with their non-alcoholic specialty beers, to use different levels of brightness and weights in their product. But in this research, weight had the most effect and created embodied processing that strengthened the visual processing that brightness brought.

Keywords: non-alcoholic specialty beer – purchase intention – tastiness – quality perception – brightness – heaviness – intensity – refreshment

Table of Contents

| | |
|------------------------------------------------------------------|----|
| Abstract..... | 2 |
| Table of Contents..... | 3 |
| 1. Introduction..... | 5 |
| 1.1 AN ALCOHOL-FREE LIFE..... | 5 |
| 1.2 BRAIN DAMAGE BECAUSE OF ALCOHOL..... | 5 |
| 1.3 THIS STUDY..... | 6 |
| 1.4 RESEARCH QUESTION..... | 7 |
| 2. Theoretical framework..... | 8 |
| 2.1 COLOURFUL LABELS..... | 8 |
| 2.2 THE HEAVIER THE BETTER?..... | 9 |
| 2.3 DARK LABEL AND HEAVY CAN VS. BRIGHT LABEL AND LIGHT CAN..... | 11 |
| 2.4 THIS RESEARCH..... | 12 |
| 2.5 RESEARCH MODEL..... | 13 |
| 3. Method..... | 15 |
| 3.1 PRE-STUDIES..... | 15 |
| 3.2 STIMULUS MATERIALS..... | 19 |
| 3.3 RESEARCH DESIGN AND PROCEDURE..... | 19 |
| 3.4 COVARIATES..... | 20 |
| 3.5 PARTICIPANTS..... | 20 |
| 3.6 MEASUREMENTS..... | 21 |
| 4. Analyses and results..... | 25 |
| 4.1 RESULTS CONCERNING THE TASTE..... | 25 |
| 4.2 RESULTS CONCERNING THE PURCHASE INTENTION..... | 28 |
| 4.3 RESULTS CONCERNING THE VISUAL ATTENTION..... | 28 |
| 4.4 RESULTS CONCERNING THE QUALITY..... | 28 |
| 4.5 OVERVIEW OF THE RESULTS OF THE HYPOTHESES TESTED..... | 29 |
| 4.6 ADDITIONAL RESULTS..... | 29 |
| 5. Discussion..... | 31 |
| 5.1 SUMMARY OF THE RESULTS..... | 31 |
| 5.2 REFLECTION ON THEORETICAL IMPLICATIONS..... | 32 |
| 5.3 REFLECTION ON METHODS AND INSTRUMENTS..... | 34 |
| 5.4 LIMITATIONS..... | 34 |
| 5.5 FUTURE RESEARCH..... | 35 |
| 6. Conclusion..... | 37 |
| Reference list..... | 38 |
| Appendices..... | 42 |

| | |
|-----------------------------------------------------------------------------------------------------------|----|
| APPENDIX 1 OPINIONS ON THE DESIGN (PRE-TEST) | 42 |
| APPENDIX 2 POSITIVE AND NEGATIVE TASTE ASSOCIATIONS WITH NON-ALCOHOLIC SPECIALTY BEER (PRE-TEST) | 43 |
| APPENDIX 3 QUESTIONNAIRE INTRODUCTION | 44 |
| APPENDIX 4 DEMOGRAPHICS | 45 |
| APPENDIX 5 QUESTIONNAIRE | 46 |

1. Introduction

1.1 AN ALCOHOL-FREE LIFE

The interest among many people in living an alcohol-free life is getting bigger through the years. It seems that people are willing to live healthier, and an alcohol-free life could be an important part of that. Nevertheless, people still want to enjoy cosy nights with friends, and a tasty drink seems to still be part of that experience. Also, people might not be able to drink alcohol because of a medical condition, pregnancy, or the partaking in for example “Dry January” and are therefore craving for an alternative, which could be a non-alcoholic specialty beer (Salanta et al., 2020).

Specialty beers have also been making more of an appearance in the last few years. And beer apps like Untappd are making it more interesting to try different kinds of them. With the social app Untappd, users can ‘check-in’ all different beers they are consuming, and they can share their ratings with their friends (Chorley et al., 2016). With Untappd, it is also possible to share non-alcoholic beers the users have been drinking.

The combination of interest in specialty beers and the interest in 0.0% drinks resulted in a bigger offer of 0.0% specialty beers on the market. The last ten years, Dutch beer breweries have shown that consumers continue to drink a lot, but they vary more in their choice. Specialty beers like blond beers, IPAs, and triples have seen a grow from 3.6% in 2020, compared to 2018 and the buying of non-alcoholic beers have been growing with 6.5% (RTL Nieuws, 2020). So, it can be concluded that the interest in non-alcoholic specialty beers in the Netherlands has been growing. But how can non-alcoholic specialty beer be made even more interesting for the public? For that to happen, non-alcoholic specialty beers need to look more attractive for potential buyers to think these beers will be high of quality and similar in taste to real specialty beers, because the ‘real’ beer experience still is an important part. This can then result in a higher willingness to buy.

Within this study, it is investigated what differences in weight and brightness of the label can do with the tastiness of non-alcoholic specialty beers, the purchase intention of it and the quality perception. It is investigated how non-alcoholic specialty beers can be made even more attractive to the public and what the underlying processes are regarding the differences in weight and brightness experienced.

1.2 BRAIN DAMAGE BECAUSE OF ALCOHOL

It is a good thing that people are getting more and more interested in 0.0% beers, because alcohol brings a lot of damage to your brain, which is an important matter, especially for people at a young age. Research by Crews et al. (2000) showed that brain damage was found by both adolescents and adults who consume alcohol, but that this damage was more severe at a younger age. So, it is important, especially for younger people, to be aware of the possible damage that can come with alcohol consumption. But this same research showed that, also at an older age, alcohol can still cause more damage than one initially might think. In their study, McCreanor et al. (2013) described short-term damage from alcohol, like accidents, poisoning, and

more, but also the longer-term issues that come with it, like heart, liver, and brain damage, which are very common when consuming lots of alcohol.

There are already many actions that promote an alcohol-free life, like for example Dry January. But it is also important that these people are aware of the alternatives for alcoholic drinks. The experience that comes along with drinking an alcoholic drink is not the same as the experience when drinking a non-alcoholic drink. Non-alcohol content on beer labels is often associated with expectations that relate to experiences regarding beer tasting (Rodríguez et al., 2021). The benefits of not drinking alcohol do not always seem to outweigh the experience people get from drinking alcoholic drinks. Therefore, it is important to make non-alcoholic specialty beers attractive for this public, for them to consider these types of beers an option.

1.3 THIS STUDY

What is written above makes it even more important to create non-alcoholic specialty beers with attractive designs, to make these beers an option for people who are willing to drink one of these beers sometimes. These non-alcoholic specialty beers need to stand out to the public for them to consider buying the product, as they are still competing with regular specialty beers. People often do not know what to think about non-alcoholic specialty beers and sometimes even have negative emotions towards the product (Silva et al., 2016). People sometimes were disappointed with the taste and there were less positive emotional responses on non-alcoholic beers (they were missing the fun, the desire). This makes it important that the package is designed the right way, so it can make the difference and strengthen the beer experience. The package design of a product is the carrier of a message to the consumer (Madar, 2015) and therefore very important to think about when designing a package label.

The designs for non-alcoholic specialty beers need to attract attention, because it is important for people to be aware of different options next to alcoholic drinks. One of the factors that attracts attention is the use of colour. One can see this from a distance, and this can make a difference in standing out. The use of different brightness in colours can also result in different taste experiences. A study by Ezan et al. (2017) showed that when brighter colours were used in syrup packaging, as opposed to less brighter options, taste expectations and experiences were being more refreshing and fruitier. This could also be the case for non-alcoholic specialty beers. Adding to that, does the non-alcoholic specialty beer need an intense taste or is it okay if the beer tastes waterier? Within this study it will be investigated what is important for a non-alcoholic specialty beer to be liked and what differences in colour brightness can do to change the perception of intensity of taste or, on the other hand, a watery taste.

Therefore, this research is necessary, and these changes in colour brightness in packaging design will hopefully result in more people being interested in choosing these non-alcoholic specialty beers as an alternative. It is interesting to see whether brighter designs are the better choice or whether darker variations should be used, as research shows that the colour brightness of a package is an important tool to gain customers' attention (Rex et al., 2004). The difference in colours is chosen because people can see these design choices from a distance. A study by Monteiro et al. (2020) suggested that when people paid more attention to a product, it often resulted in a higher purchase intention. This was the case for buying wine, so it will be investigated within this study if this is also the case for non-alcoholic specialty beers.

Something that will also be explored within this research, is the effect of the use of heavier materials on the taste perceptions and purchase intentions. Using heavier materials for a non-alcoholic specialty beer can be helpful to create positive changes in quality perception and taste experience. Using heavier materials was used in several studies and industries, but not yet in the beer industry. For example, heavier plate ware can result in a more intense flavour and the product can be perceived as more expensive (Piqueras-Fizman et al., 2011). Another example where heavy materials are used to create a positive effect, was with wine bottles. When wine bottles weigh more, the price of wine is usually higher, but that does not necessarily mean that the wine is liked better (Piqueras-Fizman & Spence, 2012).

The hypotheses that will be discussed in the theoretical framework, are mainly based on previous research on designs for regular beers and other products, food, and non-food, because non-alcoholic specialty beers are not yet studied enough. The current study will demonstrate whether this is also applicable for the non-alcoholic specialty beers.

1.4 RESEARCH QUESTION

Because specialty beers are rising in popularity and non-alcoholic beers are as well, this study will focus specifically on non-alcoholic specialty beers. Within this research, the better choices regarding the looks and weight of a non-alcoholic specialty beer are investigated to grab attention from potential customers and to influence their taste perceptions, quality expectations and beer experience. Therefore, with a taste test using beer cans with differences in brightness and weight, the research question that will be attempted to answer within this research will be:

To what extent do the choices of brightness in labels and the weight of the can of non-alcoholic specialty beers influence the taste experience and purchase intention of the product?

2. Theoretical framework

In this section, information that is given by prior studies is organized to provide material for the current study. Based on these studies, hypotheses for this research are stated, with respect to the choices of different labels and the use of weight in non-alcoholic specialty beers.

2.1 COLOURFUL LABELS

Research has shown that bright colours get people's attention and people are more likely to reach out to bright-coloured goods (Motoki et al., 2019). But of course, a beer still needs to be tasty, because studies have shown that packages that attract the most attention, are not always the most likeable (Husic-Mehmedovic et al., 2017). Muggah and McSweeney (2017) investigated the effects of packaging brightness on the liking of beer among women. Their study showed that darker packaging as opposed to brighter packaging resulted in more negative effects regarding the liking of the beers. Customers often relied on the appearance of beers and made assumptions based on colours. Muggah and McSweeney described that humans are very reliant on their sight and that this can result in colours being able to cover up other sensory information. In their study, it has been found that bright colours also influenced the perception of quality of the beer, as the users perceived the brighter colour packaging as a higher quality option, and it often resulted in an overall better taste. And a perception of higher quality can, in turn, often lead to a higher purchase intention (Barnett & Spence, 2016).

Within this research, it is also tested what different levels of brightness on a label do with the visual attention and what the visual attention in turn does to the purchase intention of the product. Camgöz et al. (2003) found that maximum brightness resulted in the most visual attention of participants. And Monteiro et al. (2020) described that visual attention can lead to a higher purchase intention. These results lead to the expectation that visual attention will be a mediator within this research and this mediator will explain why brightness leads to a higher purchase intention (H1c).

As can be seen, brightness of colours used can be of large influence on taste and quality perception when it comes to regular beers. Therefore, in this research, it is investigated if this is also the case for non-alcoholic specialty beers. To test the different effect of colours, the hues will be kept consistent within this research, but the effects of variation between different levels of brightness are tested. The difference in brightness refers to the amount of black or white added to the hue that is kept consistent (Spence & Velasco, 2018).

Within this study, it is also investigated what is perceived as a 'tasty' non-alcoholic specialty beer. The question remains if a good non-alcoholic specialty beer needs to have an intense taste or whether it can be a bit more lemonade-like. Opinions on this are still divided and there are still lots of negative associations with non-alcoholic beers (Staub et al., 2022).

Based on the several studies described and discussed previously, the following hypotheses are proposed. The hypotheses regarding the brightness of colours are integrated in H1a, H1b and H1c:

H1a: Non-alcoholic specialty beer will be perceived as tastier when the package design (label) has brighter colours in it (as opposed to when a dark label is used).

H1b: Participants will indicate a higher purchase intention when the package design (label) has brighter colours in it (as opposed to when a dark label is used).

H1c: The non-alcoholic specialty beers with a brighter label (as opposed to when a dark label is used) will result in more visual attention, and therefore in a higher purchase intention.

As described above, brighter colours seem to be a better choice concerning the liking of the beer. However, when do people like a (non-alcoholic specialty) beer? Does the taste need to be intense or is it okay if the beer tastes lighter and waterier? Several studies emphasized the importance of an intense taste in a good beer (Cao et al., 2011; Rudnitskaya et al., 2009). However, not everyone might rate intensity as the most important factor for non-alcoholic specialty beer. These different opinions and different studies make it difficult to find out what people really like and expect from a good non-alcoholic specialty beer. It is believed that non-alcoholic specialty is liked most when it is hard to tell it apart from a real alcoholic specialty beer, so the fact that real beer is mostly liked best when it tastes intense. This will be assumed for non-alcoholic specialty beer as well. However, to make sure that this is the case within this study, this will also be investigated during a pre-test in section 3 of the current research.

Although a brighter label seems to work better in many studies with regards to taste experience, it can also result in a more watery, less intense taste. As mentioned in the introduction, Ezan et al. (2017) described in their study that bright colours were associated with a refreshing taste and Tijssen et al. (2017) said that bright (low saturated) colours were associated with a lighter taste and were also expected to be healthier. People associate different colours with different flavours (De Villiers, 2008) and in several studies it was found that people associate the colour blue with water (Ngo et al., 2012) and that especially bright blue is associated with clean water (Tham et al., 2020).

Keeping this in mind, it will be investigated if these brighter colours will result in a watery taste and a sense of refreshment. The following hypotheses regarding the watery (and less intense) taste (H2a) and the refreshment (H2b) of the non-alcoholic specialty beers are proposed:

H2a: Non-alcoholic specialty beer will be perceived as waterier when the package design (label) has brighter colours in it (as opposed to when a darker label is used).

H2b: Non-alcoholic specialty beer will be perceived as more refreshing when the package design (label) has brighter colours in it (as opposed to when a darker label is used).

2.2 THE HEAVIER THE BETTER?

Not only the colour brightness that is used within the packaging design is important within this research. But it will also be investigated what a heavier can does to the taste experience of the non-alcoholic specialty

beer-drinkers. Research has been done with food and wine previously. Piqueras-Fiszman et al. (2011) described in their study that the weight of a dish can impact people's perceptions of the food they consume from it. Within their study, they used three bowls that were identical and filled with the exact same amount of yoghurt, except the bowls they used had different weights. Results showed that as the weight went up, larger effect sizes were observed for the expected price. But there were also effects found for flavour intensity and overall liking, although these effects were a bit smaller. These results are relevant for the current study, as weights could be used to enhance or change the way participants and consumers experience their drinks and foods. Also, this explains why a heavier can could result in a more intense, and thus less watery taste.

Piqueras-Fiszman & Spence (2012) did another research, but this time on the heaviness of wine bottles. There was a correlation between the weight of the wine bottle and the price. Mostly, the heavier the wine bottle, the higher the price. This study concluded that consumers often believed in a positive correlation between the quality of the wine and the weight of the bottle. Weight can make people believe that the product is of higher quality. There were more studies from which can be concluded that heavy products resulted in a higher quality perception. There were clear connections found between weight and quality perceptions in many categories (Lindstrom, 2006). Furthermore, Jostmann et al. (2009) found in their study that heavier clipboards resulted in a higher quality perception than lighter clipboards. They also described that weight resulted in people investing more physical and cognitive effort in dealing with issues. A link with embodied cognition was made. Theories about embodied cognition posited that cognitive representations are based on systems in the brain. Cognitive processes are rooted within a person's interaction with the world (Wilson, 2002). This means, for this study, that when holding a heavier version of the can, it can result in an embodied process and people will experience the process in a different way as opposed to when looking at the different brightness used in the labels.

Because of these previous studies, where heavier products mostly have a positive influence on taste experience and quality perceptions, it is expected that, within this study, this will also be the case for non-alcoholic specialty beers. There is no evidence found that suggests that less weight results in a better taste experience and a higher quality. Therefore, it is assumed that the 'heavier' can within this research will result in better taste experience (H3a), an overall higher taste intensity (H3b) and will be perceived as the higher quality option (H3c).

Because of the assumption that many customers have that the quality will be better from a heavier product, as opposed to a lighter product, customers might think they have a great deal when believing the quality is better with a heavy product. Because of this, their purchase intention might increase as well (H3d). For these reasons, the following hypotheses are proposed:

H3a: Non-alcoholic specialty beer will be perceived as tastier when the can is heavier (as opposed to when a lighter can is used).

H3b: Non-alcoholic specialty beer will be perceived as more intense when the can is heavier (as opposed to when a lighter can is used).

H3c: Non-alcoholic specialty beer will be perceived as a higher quality option when the can is heavier (as opposed to when a lighter can is used).

H3d: Participants will indicate a higher purchase intention when the can is heavier (as opposed to when a lighter can is used).

2.3 DARK LABEL AND HEAVY CAN VS. BRIGHT LABEL AND LIGHT CAN

The choices of brightness in colours, combined with the choices of heaviness of the cans, can result in different taste perceptions and purchase intentions among customers. As mentioned above, Ezan et al. (2017) described in their study that a brighter package can result in a less intense taste. But an intense taste was often (not always) found to be preferred for a 'good beer'. The combination of difference in weight and difference in brightness of colour is not yet studied well, so it is not easy to draw conclusions from previous research.

However, because of the studies that were discussed before, which said that the heavier versions of for example bowls or wine bottles were liked better and were also often perceived as more intense (Piqueras-Fizman et al., 2011), it can be concluded that, when adding the fact that a brighter package can result in a waterier taste, the next hypothesis will be that the combination of darker colours with a heavier can will result in a more intense taste. When participants of this research indeed like to drink a more intense non-alcoholic specialty beer, this together can result in a better overall liking of the non-alcoholic specialty beer (H4a). In turn, on the contrary, the combination of a brighter colour with a lighter can will result in a waterier and more refreshing taste.

Furthermore, when customers are holding a heavier can, they will possibly think the quality of the non-alcoholic beer will be better than a lighter version, and they will probably have a higher purchase intention (as proposed in hypothesis 3d). Also, darker colours are often associated more with richness (Aslam, 2006), and therefore people can assume that the darker non-alcoholic specialty beer is worth more than the lighter version. This is not necessarily in line with the expectation that brighter colours create more visual attention and therefore a higher purchase intention, but in combination with holding the heavier version, participants within this study can possibly indicate a higher purchase intention for the heavier, darker version, because they could perceive this option as the more expensive option (H4b).

Because of these assumptions, the following hypotheses are proposed:

H4a: Non-alcoholic specialty beer will be perceived as more intense when the non-alcoholic specialty beer is served in a heavier can and the package design (label) has darker colours in it (as opposed to when it is served in a lighter can and when a brighter label is used).

H4b: Participants will indicate a higher purchase intention when the non-alcoholic specialty beer is served in a heavier can and the package design (label) has darker colours in it (as opposed to when it is served in a lighter can and when a brighter label is used).

Overall, it is expected that the brightness of the label of the non-alcoholic specialty beer on itself will make the beer tastier and more refreshing for the participants within this research. And therefore, comparing the results of the brighter and darker versions with each other, the brighter version is expected to deliver a better taste experience for consumers. However, when adding the weight to the research, this could have a different outcome, as the darkness in the labels can strengthen the feeling and taste of intensity of the non-alcoholic specialty beer served to the participants.

It is expected that the bright colour and the added 'lighter version' weight-wise will strengthen the expectations and will strengthen the outcomes and results. Likewise, it is expected that the dark version will strengthen the taste experiences with the heavier material. So, when comparing the light and bright version with the dark and heavy version, these differences are expected to be the largest, in terms of taste intensity and refreshment.

2.4 THIS RESEARCH

In the present research, the answer to the question "To what extent do the choices of brightness in labels and the weight of the can of non-alcoholic specialty beers influence the taste experience and purchase intention of the product?" is attempted to answer. In Table 1, the different hypotheses that will be tested in this research are shown. Apart from giving a clearer idea to beer breweries on how they could make non-alcoholic specialty beers more attractive for their (future) consumers, this study will also give an idea on what has the bigger effect regarding taste experiences: embodied processes (what people will experience with the differences in weight) or visual processes (what people will experience with the differences in brightness), when people are confronted with the different cans.

Table 1

Hypotheses

| Hypotheses |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| H1a: Non-alcoholic specialty beer will be perceived as tastier when the package design (label) has brighter colours in it (as opposed to when a dark label is used). |
| H1b: Participants will indicate a higher purchase intention when the package design (label) has brighter colours in it (as opposed to when a dark label is used). |
| H1c: The non-alcoholic specialty beers with a brighter label (as opposed to when a dark label is used) will result in more visual attention, and therefore in a higher purchase intention. |
| H2a: Non-alcoholic specialty beer will be perceived as waterier when the package design (label) has brighter colours in it (as opposed to when a darker label is used). |
| H2b: Non-alcoholic specialty beer will be perceived as more refreshing when the package design (label) has brighter colours in it (as opposed to when a darker label is used). |
| H3a: Non-alcoholic specialty beer will be perceived as tastier when the can is heavier (as opposed to when a lighter can is used). |
| H3b: Non-alcoholic specialty beer will be perceived as more intense when the can is heavier (as opposed to when a lighter can is used). |
| H3c: Non-alcoholic specialty beer will be perceived as a higher quality option when the can is heavier (as opposed to when a lighter can is used). |
| H3d: Participants will indicate a higher purchase intention when the can is heavier (as opposed to when a lighter can is used). |
| H4a: Non-alcoholic specialty beer will be perceived as more intense when the non-alcoholic specialty beer is served in a heavier can and the package design (label) has darker colours in it (as opposed to when it is served in a lighter can and when a brighter label is used). |
| H4b: Participants will indicate a higher purchase intention when the non-alcoholic specialty beer is served in a heavier can and the package design (label) has darker colours in it (as opposed to when it is served in a lighter can and when a brighter label is used). |

2.5 RESEARCH MODEL

To gain more understanding of the different variables that will be tested, a research model is presented. In Figure 1, the relationships between the independent variables ('label on can' and 'weight of can'), the dependent variables ('purchase intention', 'tastiness': 'watery; refreshing' & 'intensity' and 'quality perception'), the mediator variable ('visual attention') and hypotheses one to four are visualized with arrows. The effects that will be tested are the ones of brightness used in the packaging design and weight of the can on the purchase intention, tastiness, and quality perception of the non-alcoholic specialty beers. Because visual attention will come along with the level of brightness used, 'visual attention' is seen as a mediator variable, since this will possibly influence the purchase attention, but not necessarily the tastiness.

3. Method

In this chapter, the design of the method will be shown: the pre-study, the package design for the study, the stimulus materials, the research design and procedure, the control variables, the participants, and new constructs are described.

3.1 PRE-STUDIES

To investigate the influence of package design choices on purchase intention and taste perception, the different heaviness of materials and colour brightness in the non-alcoholic specialty beers were to be designed. To check these materials, several pre-studies were done. The first pre-test was done to find out which colours were to be used and if the designs looked real enough for the research, where the participants indicated which colours of the designs looked most realistic and in line with the theme of the beer. Furthermore, the materials were validated to see if the differences in brightness that were used within the designs were perceived by the participants as they were intended by the researcher. Within this same focus group, it was investigated what the participants found to be important for a good non-alcoholic specialty beer. And in the final pre-test, the weight of the cans was tested. It was tested whether the difference in weights have the desired effects and what weight was the 'just-notable difference'.

3.1.1 PRE-STUDY 1: DESIGN

3.1.1.1 PARTICIPANTS AND CONTEXT

For the first pre-study, participants were selected from the personal network. The participants invited for the pre-study all had experience with drinking beer, specialty beer, and non-alcoholic specialty beer and therefore they knew the taste of beer and knew what a good beer should taste like. Seven individuals were asked to participate, three of them were male and four of them were female, with the age ranging between 23 and 30 ($M = 25$, $SD = 2.38$). The pre-study was done at "Het Uurwerk", a specialty beer café in Hengelo, which is the place where the main research is conducted as well.

3.1.1.2 'THE VIRGIN BLONDE'

The fictitious non-alcoholic specialty beer that was chosen was a blonde beer, so the first name that came to mind was 'The Boneless Blonde'. 'Boneless' then referred to the 'non-alcoholic part' of this specialty beer. The participants were asked what they thought of the name, and they were enthusiastic: "The 'double' B sounds very catchy!" – "Nice to already say in the name what beer you will be receiving." – "The name catches your attention and makes you interested, it sounds very cool." – "Easy to pronounce, which is also important when you want to order it in a bar or restaurant.". Concerns were that the name would result in a less intense taste, because 'boneless' can be perceived as too negative. Therefore, it was decided to keep it simple and call the fictitious beer within this research 'Virgin Blonde'. The name was not the most important

part of this research. However, it should feel real for participants when they were trying the beer, so the name had to be catchy enough for them to be willing to try the non-alcoholic specialty beer for the research.

3.1.1.3 COLOUR CHOICE

The participants were then asked to evaluate which colour worked best for the designs: the blue, green, or black version. The options for the labels are shown in Figure 2, 3 and 4. For the bright option, a lighter shade of the colour was used and for the other option, a darker shade of the colour was used, so more black or white was added, but the colour hue was constant in both options.

The options that were shown were similar in realism and overall appeal and only varied in the colours that were used. Participants were asked which combination of labels they found most suitable for the non-alcoholic specialty beer, and which option they found most appealing overall. The results were that they found the black option ‘too harsh for a blonde beer’ and the green option was ‘very aesthetically pleasing’ but was associated too much with a regular beer like Heineken or Grolsch, as these beers also use green as their main colour. The blue option was perceived as the best option, because the colour combination with the touch of yellow came out as the most realistic and suitable for a blonde beer and overall, the best one to look at. Also, this design was said to be suitable with the name and overall appearance of the design.

Figure 2

Bright and Dark Blue Labels



Figure 3

Bright and Dark Green Labels



Figure 4

Bright and Dark Black Labels



3.1.1.4 OPINIONS ON THE DESIGN

Appendix 1 shows a small questionnaire the participants were asked to fill in and the means of the results. On the question ‘I think this is a beautiful can’, the participants indicated that they agreed on this statement (M = 4.71, SD = 0.49). Furthermore, they indicated that they would order or buy this beer if they saw it somewhere (M = 4.57, SD = 0.54). Most of them thought the beer was of high quality (M = 4.43, SD = 0.54). Not one participant said to think the overall design was unattractive (M = 1.00, SD = 0.00). And lastly, ‘the design is striking or remarkable’ scored a mean of 4.14 (SD = 0.38). Therefore, based on the reactions of the participants, it was decided that this design was good enough to use during the actual research.

The design that was chosen upon – the blue version – was finalized, printed, and pasted upon an empty beer can. How that turned out, can be seen in Figure 5.

Figure 5

The Final Cans



3.1.2 PRE-STUDY 2: THE BEER EXPERIENCE

3.1.2.1 PARTICIPANTS

For the second pre-test, the same participants were used as in the first pre-test.

3.1.2.2 THE EXPERIENCE OF DRINKING NON-ALCOHOLIC SPECIALTY BEER

Three non-alcoholic beers were tasted test during the pre-test to see what was liked in a non-alcoholic specialty beer and what not. Some beers were described as ‘too sour’ and ‘too watery’. What was perceived as positive about one of the beers, was that it had a good amount of carbonic acid in it, that it tasted like a real IPA, and it had an intense taste.

Participants were asked to write down what they thought was important in the experience of drinking non-alcoholic specialty beer. Participant 1 said that a non-alcoholic beer should not be too light of taste and should not taste too lemonade-like or watery. She added: “It should feel like you are drinking a real specialty beer, with alcohol”. The rest of the participants also agreed that it should taste like a real beer. This was the main thing that was said during the pre-test.

3.1.2.3 IMPORTANT FOR A LIKEABLE NON-ALCOHOLIC BEER

Lastly, the seven participants were asked to fill in another short questionnaire, where most taste associations were incorporated in statements like 'Non-alcoholic beer should taste bitter' (Appendix 2). The results showed that it was important that the non-alcoholic beer had an intense taste ($M = 4.71$, $SD = 0.49$), a powerful, strong taste ($M = 5.00$, $SD = 0.00$), a full taste ($M = 4.71$, $SD = 0.49$), a hoppy taste ($M = 4.57$, $SD = 0.54$), and a natural taste ($M = 4.43$, $SD = 0.54$). What was also perceived as important is that the non-alcoholic beer tasted refreshing ($M = 4.00$, $SD = 0.58$), *not* lemonade-like ($M = 1.14$, $SD = 0.38$) and *not* watery ($M = 1.29$, $SD = 0.49$). Lastly, it was important that the non-alcoholic specialty beer tasted like a specialty beer with alcohol ($M = 4.71$, $SD = 0.49$) and that it was hard to separate it from a specialty beer with alcohol ($M = 4.86$, $SD = 0.38$). The means and standard deviations for every statement are also shown in Appendix 2.

3.1.3 PRE-STUDY 3: THE WEIGHT OF THE CAN

3.1.3.1 PARTICIPANTS

For the third and final pre-test, two participants were asked to help to find out what weight difference the cans were supposed to have and what associations a heavier can brought up. Two participants were asked to close their eyes in a room without distractions. Two cans were filled and without them knowing, step by step weight was added to one can. The participants were asked separately to take both cans in their hands and feel the difference. More weight was added until they finally could tell which can was heavier.

3.1.3.2 THE WEIGHT OF THE CAN

To find out whether the associations with a heavier can were the ones that were aimed for, another, final, small focus group was conducted, where three people were asked to hold two different cans. Both cans were opened and one of the cans was filled with plummet. Questions were asked to them to find out what associations they had with the heavier can as opposed to the lighter can, that did not have any additions to it. The participants did feel the difference in weight and comments were made like: 'This can feels heavier than the other one, what am I supposed to think now?'

After letting them feel the cans, they were asked what their thoughts were of the one beer in comparison to the other beer. By all three participants, the heavier can was perceived as thus heavier and therefore also more powerful and more tasteful. They were asked if they had any thoughts of the heavier can being more outdated or old-fashioned and the answer was: 'No, that it not what I thought of at first, this feels more expensive then outdated'. The participants did not have an explicit opinion on the sustainability of the heavier can, they were not really into that, so they could not express how they felt about that.

Eventually, the 'lighter' version of the can was made 300 grams and the 'heavier' version was made 400 grams. This difference in weight was, according to the participants in this pre-test, exactly enough to feel a difference and therefore hopefully to result in a remarkable outcome.

3.2 STIMULUS MATERIALS

After the pre-study, four different options of the non-alcoholic specialty beers were created. The first option is the brighter label option and is served in a heavy can. The second option has the darker label option and is also served in a heavy can. Option three has the bright label and is served in a lighter can. And for the final option, the darker label is used on a lighter can. The four options are shown in Table 2.

Table 2

Representation of the Experimental Conditions

| Experimental condition | Weight of can | Label on can |
|------------------------|---------------|--------------|
| 1 | Heavy | Bright |
| 2 | Heavy | Dark |
| 3 | Light | Bright |
| 4 | Light | Dark |

3.3 RESEARCH DESIGN AND PROCEDURE

To give an answer to the research question and see if the hypotheses can be accepted or not, the effect of brightness of the label and heaviness of the can on visual attention, purchase intention and taste experience was investigated in this study. A quantitative research design was chosen for this study, to have a larger data sample, so the data collected were more explicit and less influenced by bias (Dottin, 2018). In the study, a 2 by 2 between-subjects experimental design, where a brighter versus darker label is used and heavy versus a lighter can, was used. The participants of the study were randomly assigned to one of the four experimental conditions in Table 2.

Data collection took place offline, at a specialty beer-café in Hengelo, the Netherlands: “Het Uurwerk”. People visit this café, mostly to drink specialty beer, so the target group was already in line with this research. A random non-alcoholic blonde beer (Leffe Blond 0.0%) was purchased, and the possible participants were the people visiting the café.

The participants were asked to hold the can (one of the four conditions in Table 2) and have a good look at it. Then they tried the beer (already poured by the researcher) and were asked to fill in a short questionnaire, which was designed based on the pre-test. The questionnaire was handed out to the participants on paper.

The start of the questionnaire contained a short introduction that explained the procedure, but the researcher was also present to explain and answer questions (Appendix 3). The Appendix shows both a Dutch version and an English version. In this case, the Dutch version was used because all visitors were Dutch. However, an English version of the whole questionnaire was available, just in case someone who did not speak Dutch wanted to participate as well. The research was approved by the Ethics Committee, which was communicated to the participants as well.

Then, the participants were asked to fill in their demographics, which were basic demographics: their age, gender and experience with drinking beer were asked. This is shown in Appendix 4, again both Dutch and English versions. After that, they tasted the non-alcoholic specialty beer and started filling in the

questionnaire. They initially got two or three sips, but they could have asked for more if they wanted in case they did not taste the non-alcoholic specialty beer well enough. Some participants did.

They received questions about the visual attention of the product, their purchase intention and about the tastiness of the non-alcoholic specialty beer. Most questions contained statements and the participants had to indicate their answers with a 5-point Likert scale, with 1 representing 'completely disagree' and 5 being 'completely agree'. Likert scales are used to see participants' agreement with a statement (Bertram, 2007). An additional question in this questionnaire was "How much would you pay for this beer?" and participants were able to indicate how much they thought is an appropriate price to ask for the non-alcoholic specialty beer, which then was another indicator for the purchase intention. The questionnaire presented to the participants and filled in by them is shown in Appendix 5 (Dutch and English version).

For this study to be reliable, 100 participants needed to fill in the questionnaire (Brybaert, 2019). So, for this research, 25 participants per condition were needed. Het Uurwerk gets many visitors on Wednesdays and Thursdays, without it being too busy to not be able to conduct the research. So, these evenings were used for this research. Furthermore, the personal network was used to gather more participants. These people were asked to visit Het Uurwerk and participate in this research.

3.4 COVARIATES

According to several studies, men drink more beer than women (Slade et al., 2016). However, women did get more interested in drinking beer through the years (Haver et al., 2009). These days, beer companies want (and need) to attract more women to sustain the beer industry (Muggah & McSweeney, 2017). Although this might be one of the goals for beer breweries, the fact that men drink more beer than women can influence outcomes in this study. Therefore, in this study, gender was seen as a covariate and to compare these outcomes, participants were asked to fill in their gender when gathering the data.

Another covariate within this research was the experience with drinking beer. Research by Aquilani et al. (2015) showed that people who drink beer at least once a week, were more likely to try different beers. Therefore, the expectation is that people who drink beer on a regular basis, will react different to the non-alcoholic specialty beers than people who are not the biggest admirers of beer. Therefore, this was asked before filling in the questionnaire as well.

3.5 PARTICIPANTS

In total, 100 participants – 25 per condition – participated in this study, from which 51 were female and 49 were male. Everyone who participated came from the Netherlands and the youngest participant was 18 years old, whereas the oldest was 64 years old. The average age of the participants was 34 (SD = 13.29). 17 participants indicated that they did not like to drink beer, but they were willing to fill in the questionnaire anyway. The other 83 people did enjoy drinking beer. 37 participants stated they like lighter beers over darker beers, 15 participants stated to prefer darker beers and 32 participants said to like both. Lastly, the participants were asked how often they drink beer if they indicated to do so, and 14 participants stated to

drink beer daily, most people (58) stated to drink beer weekly, 11 participants said to drink beer on a monthly basis and only one person said to drink beer once a year.

All participants were enjoying themselves at Het Uurwerk in Hengelo or walked by and were asked to fill in a short questionnaire. Everyone participated voluntarily and was able to ask questions to the researcher. All of them completed the study and filled in every question. Table 3 gives an overview of all demographics of the participants per condition.

Per condition, the participants were divided quite evenly. For the first condition (heavy vs. bright), 11 participants were male, 14 were female and the age ranged between 22 to 59 (M = 33.96, SD = 10.58). 21 participants said to like to drink beer. The questionnaire with the second condition (heavy vs. dark) was filled in by 12 men and 13 women, with an age ranging from 18 to 64 (M = 38.88, SD = 18.07) and 20 of them stated to like to drink beer. The third condition (light vs. bright) was filled in by 15 men and 10 women, with an age ranging from 20 to 58 (M = 33.76, SD = 12.17). 22 of them filled in 'yes' to the question 'Do you like to drink beer?'. And the final condition (light vs. dark) was filled in by 11 men and 14 women, with an age ranging from 21 to 54 (M = 30.52, 10.23). 20 of them stated to be beer drinkers. So, it was not the case that one of the conditions was presented by beer-drinkers and the other was presented by non-beer-drinkers. The demographics were well divided.

Table 3

The Division of Demographics of the Participants per Condition

| Participants | Age | | | Gender | | | Residence | | Beer consumption | | | | |
|--------------|-----|-------|-------|--------|--------|-------|-----------|-------|------------------|----|---|---|---|
| | N | M | SD | Male | Female | Other | NL | Other | A | B | C | D | E |
| Condition | N | M | SD | N | N | N | N | N | N | N | N | N | N |
| Bright label | 50 | | | | | | | | | | | | |
| - Heavy can | 25 | 33.96 | 10.58 | 11 | 14 | 0 | 25 | 0 | 3 | 16 | 2 | 0 | 4 |
| - Light can | 25 | 33.76 | 12.17 | 15 | 10 | 0 | 25 | 0 | 3 | 16 | 4 | 0 | 2 |
| Dark label | 50 | | | | | | | | | | | | |
| - Heavy can | 25 | 38.88 | 18.07 | 12 | 13 | 0 | 25 | 0 | 5 | 11 | 3 | 1 | 5 |
| - Light can | 25 | 30.52 | 10.23 | 11 | 14 | 0 | 25 | 0 | 3 | 15 | 2 | 0 | 5 |

Note. NL = the Netherlands; A = Daily; B = Weekly; C = Monthly; D = Yearly; E = Never.

3.6 MEASUREMENTS

The questionnaire that was used within this study mostly contained questions using a 5-point Likert scale. Apart from the obvious demographic questions, like age (open question), gender and country (multiple choice), two questions were added at the end that required a number as an answer. Also, the last question, to find out if there are any additional comments on this research, was added. To measure the dependent variables to test the hypotheses, several constructs were created. The Cronbach's alphas were calculated for the constructs, to test their consistencies. The consistencies are the best when this number is closest to 1.0 (Gliem & Gliem, 2003). For a construct to be reliable, the Cronbach's alpha should be above 0.70 (Taber, 2018). The Cronbach's alphas are shown in Table 4 and as can be seen, all Cronbach's alphas are above 0.70

and apart from the construct 'beer experience', all constructs were above 0.90, which showed high coherence.

3.6.1 TASTE

18 questions were asked concerning the taste of the non-alcoholic specialty beer. Some of them were categorised within the constructs, others were added to create the bigger picture and to see what other interesting results came from changing the weight and brightness in the cans.

3.6.1.1 TASTINESS

The overall tastiness participants experienced were measured through the following items: "This beer is tasty", "I would order this beer if I would want something non-alcoholic", and "This is not a tasty bear" ($\alpha = .93$). The last item was asked in a negative way, so this item was reverse coded. Other taste indications were measured as well. However, it was still difficult to fill in what people find important for a good beer, so these were measured separately.

3.6.1.2 INTENSITY

The intensity of the non-alcoholic specialty beer was measured filling in the following items: "This beer tastes intense", "This beer tastes powerful" and "This beer is full of flavour" ($\alpha = .98$).

3.6.1.3 WATERY

For the wateriness of the non-alcoholic specialty beer, there was only one item: "This beer tastes watery". The beer being watery or not could also be defined by the intensity, because a watery taste is often not perceived as a very intense taste. So, these constructs were added together and were investigated together, by reverse coding the 'watery' question ($\alpha = .91$). In the table that shows the Cronbach's alphas (Table 4), the items from the 'intense' construct were reverse coded, and it can be seen that the watery item fits well with the intense items.

3.6.1.4 REFRESHING

As for the refreshing construct, the following items were asked: "This beer tastes refreshing", "This beer is thirst-quenching", "This beer is sparkling" and "This beer contains lots of carbonic acid" ($\alpha = .92$).

3.6.1.5 BEER EXPERIENCE

Items that helped measure the beer experience were the following items: "This beer tastes like a real specialty beer with alcohol", "This beer tastes hoppy" and "I would order this beer if I would want something non-alcoholic" ($\alpha = .77$).

3.6.1.5 REMAINING ITEMS

The remaining items that were asked to check other interesting results were: “This beer tastes lemonade-like”, “This beer contains a natural flavour”, “This beer tastes sweet”, “This beer tastes sour”, and “This beer tastes bitter”.

3.6.2 PURCHASE INTENTION

The purchase intention was measured through the following five items: “I would buy this beer”, “I would order this beer in a restaurant”, “I would buy this beer from a supermarket”, “If I was at a bar and I could order this drink, I would do it” and “I would not buy this beer” ($\alpha = .98$).

Furthermore, purchase intention was also measured through the questions “How much do you think this beer will cost on a terrace?” and “How much would you pay for this beer on a terrace?”. These questions were asked to indicate whether participants were willing to pay more drinking from one can, compared to when they were drinking from another can.

3.6.3 VISUAL ATTENTION

The construct visual attention was measured through six items: “This beer stands out to me”, “This beer would catch my attention when I would see this in the bar”, “This beer would catch my attention when I would see this in a supermarket”, “This beer would catch my attention when I would see this in a restaurant”, “This beer would catch my attention when I would see this on a terrace” and “This product does not stand out to me” ($\alpha = .97$).

3.6.4 QUALITY

Lastly, the construct quality was created, and five statements were added to measure this construct. These were the following: “This beer is of good quality”, “This is specialty beer”, “This beer brand is a quality brand”, “This is a fancy brand”, and “This is an exclusive beer” ($\alpha = .94$).

Table 4*Constructs and their Cronbach's alphas*

| Construct | Cronbach's alpha | Items |
|--------------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tastiness | .93 | 1. This beer is tasty 2. I would order this beer if I would want something non-alcoholic 3. This is <u>not</u> a tasty bear (reverse coded) |
| Intensity | .98 | 1. This beer tastes intense 2. This beer tastes powerful 3. This beer is full of flavour |
| Watery | .91 | 1. This beer tastes intense (reverse coded) 2. This beer tastes powerful (reverse coded) 3. This beer is full of flavour (reverse coded) 4. This beer tastes watery |
| Refreshing | .92 | 1. This beer tastes refreshing 2. This beer is thirst-quenching 3. This beer is sparkling 4. This beer contains lots of carbonic acid |
| Beer experience | .77 | 1. This beer tastes like a real specialty beer with alcohol 2. This beer tastes hoppy 3. I would order this beer if I would want something non-alcoholic |
| Purchase intention | .98 | 1. I would buy this beer 2. I would order this beer in a restaurant 3. I would buy this beer from a supermarket 4. If I was at a bar and I could order this drink, I would do it 5. I would <u>not</u> buy this beer (reverse coded) |
| Visual attention | .97 | 1. This beer stands out to me 2. This beer would catch my attention when I would see this in the bar 3. This beer would catch my attention when I would see this in a supermarket 4. This beer would catch my attention when I would see this in a restaurant 5. This beer would catch my attention when I would see this on a terrace 6. This product does <u>not</u> stand out to me (reverse coded) |
| Quality | .94 | 1. This beer is of good quality 2. This is specialty beer 3. This beer brand is a quality brand 4. This is a fancy brand 5. This is an exclusive beer |

4. Analyses and results

To test the hypotheses, a factorial multivariate analysis of variance (MANOVA) was completed. Results showed that brightness has a significant effect on the different constructs ($F(8,89) = 11.35, p < .01, \text{Wilks}' \Lambda = .50, \text{partial } \eta^2 = .51$). The effect of weight was also significant ($F(8,89) = 7.28, p < .01, \text{Wilks}' \Lambda = .60, \text{partial } \eta^2 = .40$). The interaction effect of weight and brightness also brought significant effects ($F(8,89) = 2.36, p = .024, \text{Wilks}' \Lambda = .83, \text{partial } \eta^2 = .18$).

4.1 RESULTS CONCERNING THE TASTE

4.1.1 TASTINESS

The effect of brightness on the tastiness was not significant ($F(1,96) = .24, p = .628, \eta^2 = .00$). Because of this non-significant effect, hypothesis 1a could not be supported. On the contrary, the difference in weight of the cans did have a significant effect on the perceived tastiness ($F(1,96) = 11.99, p < .001, \eta^2 = .11$). The heavier cans resulted in a tastier non-alcoholic specialty beer ($M = 3.48, SD = 1.08$) as opposed to the lighter cans ($M = 2.67, SD = 1.23$). Because of this significant result, hypothesis 3a was supported. The interaction effect of weight and brightness was not significant ($F(1,96) = .51, p = .476, \eta^2 = .01$) and therefore hypothesis 4a could not be supported.

4.1.2 INTENSITY

As for the perceived intensity of the non-alcoholic specialty beer, the brightness did not have a significant effect ($F(1,96) = .01, p = .929, \eta^2 = .00$). However, the weight of the cans did have a significant effect on the perceived intensity ($F(1,96) = 55.09, p < .001, \eta^2 = .37$). These effects showed that the heavier cans resulted in a more intense taste ($M = 3.79, SD = 1.06$) than the lighter cans ($M = 2.04, SD = 1.15$) and therefore hypothesis 3b was supported. There was no interaction effect found ($F(1,96) = .11, p = .744, \eta^2 = .00$).

4.1.3 WATERY

The effect of brightness on the perceived wateriness of the non-alcoholic specialty beer was found to be non-significant ($p = .115$), neither was the interaction effect of brightness and weight on the perceived wateriness ($p = .284$). Hypothesis 2a was therefore not supported. However, the effect of difference of weight was found to be significant ($F(1,96) = 57.71, p < .001, \eta^2 = .38$). Participants who drank the non-alcoholic specialty beer from the heavier can found the drink less watery ($M = 2.34, SD = .93$) than the participants who drank the beer from the lighter can ($M = 3.82, SD = 1.04$).

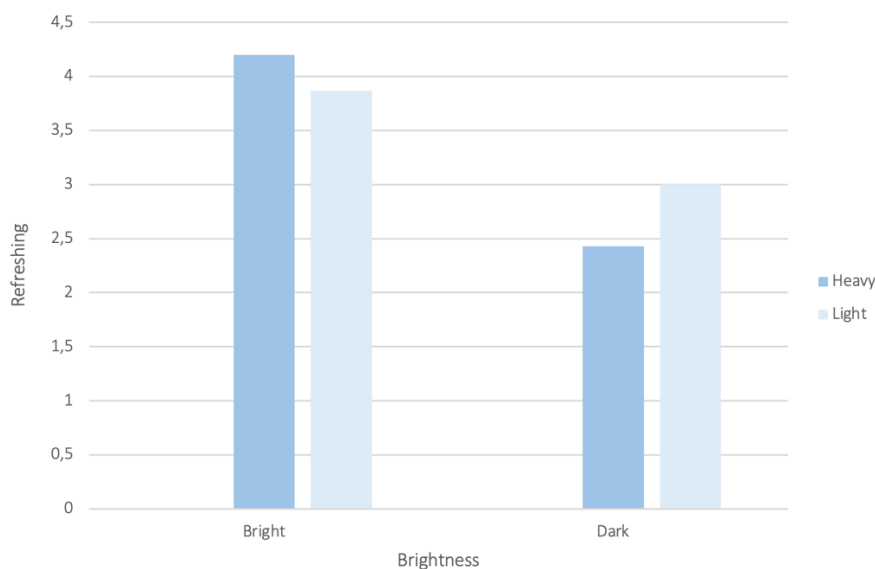
4.1.4 REFRESHING

The test of between subjects showed a main effect of brightness on the 'refreshing' component ($F(1,96) = 60.76, p < .001, \eta^2 = .39$). The participants within this research experienced the brighter version as more refreshing ($M = 4.04, SD = .92$) than when they were confronted with the darker version ($M = 2.71, SD = .81$).

The main effect of weight on the perception of a refreshing taste when drinking the non-alcoholic specialty beer was not significant ($F(1,96) = 57.71, p = .48, \eta^2 = .01$). However, the interaction effect was significant ($F(1,96) = 7.06, p = .009, \eta^2 = .07$). There was a difference of significance between weight in the brighter condition and in the darker condition. In the brighter condition, the effect of weight was not significant ($p = .17$). However, in the darker condition, a lighter weight resulted in a more refreshing taste ($p = .019$). These differences can be seen in Figure 6. When drinking from the can with the darker label, participants found the lighter version more refreshing than the heavier version.

Figure 6

Interaction Between Weight and Brightness on Refreshment



4.1.5 BEER EXPERIENCE

The brightness used in the label of the non-alcoholic specialty beer did not have a significant effect on the beer experience ($F(1,96) = .03, p = .857, \eta^2 = .00$). Furthermore, the interaction effect between brightness and weight also did not have a significant effect on beer experience ($F(1,96) = .30, p = .588, \eta^2 = .00$). However, weight did have a significant effect on the beer experience ($F(1,96) = 32.29, p < .001, \eta^2 = .25$). The participants who received a heavier can in the test said to be closer to a real beer experience ($M = 3.32, SD = 1.00$) than the participants who received a lighter can ($M = 2.27, SD = .81$).

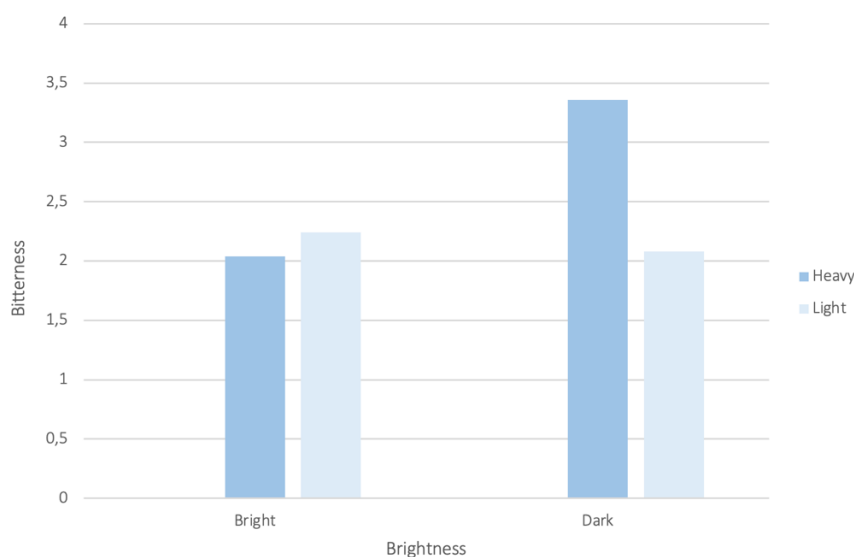
4.1.6 OTHER TASTE EXPERIENCES

The effect of weight on sweetness of the non-alcoholic specialty beer was found to be significant ($F(1,96) = 8.91, p = .004, \eta^2 = .09$). Participants rated the beer from the lighter can sweeter ($M = 3.52, SD = 1.15$) than when they drank from the heavier can ($M = 2.90, SD = .93$). There was no significant effect found for brightness on sweetness ($F(1,96) = 2.09, p = .152, \eta^2 = .02$) and no significant effect for the interaction effect on sweetness ($F(1,96) = 1.12, p = .292, \eta^2 = .01$).

As for the effects on the sourness of the non-alcoholic specialty beer, there were no significant effects found. There was no significant effect found for weight on sourness ($F(1,96) = .75, p = .390, \eta^2 = .01$), no significant effect found for brightness ($F(1,96) = .02, p = .902, \eta^2 = .00$) and no significant effect found for the interaction effect ($F(1,96) = .75, p = .390, \eta^2 = .01$).

The effects on the perceived bitterness did bring some interesting results. There were effects found from brightness, weight, and an interaction effect was found. The effect of weight on bitterness was found to be significant ($F(1,96) = 5.96, p = .016, \eta^2 = .06$). When participants drank from the heavier can, they found the beer more bitter ($M = 2.70, SD = 1.31$) than when they drank from the lighter can ($M = 2.16, SD = 1.06$). The effect of brightness on the perceived bitterness was also significant ($F(1,96) = 6.89, p = .010, \eta^2 = .07$). When drinking from the darker can, participants perceived the non-alcoholic specialty beer as more bitter ($M = 2.72, SD = 1.36$) than when they drank from the brighter can ($M = 2.14, SD = .99$). Finally, there was a significant effect found for the interaction effect of weight and brightness on bitterness ($F(1,96) = 11.22, p = .001, \eta^2 = .11$). The interaction effect can be seen in Figure 7. When drinking from the can with the darker label, participants indicated a higher difference in bitterness between the heavier and the lighter can. For the can with the brighter label, participants did not seem to indicate differences in bitterness when drinking from a heavier can and drinking from a lighter can.

Figure 7
Interaction Between Weight and Brightness on Bitterness



4.2 RESULTS CONCERNING THE PURCHASE INTENTION

The differences in brightness did not have a significant effect on the purchase intention of the participants ($F(1,96) = .00, p = .960, \eta^2 = .00$). Therefore, hypothesis 1b could not be supported. Also, the interaction effect of brightness and weight did not lead to a significant effect ($F(1,96) = .02, p = .882, \eta^2 = .00$) and thus, hypothesis 4b could not be supported. However, the difference in weight did lead to a significant effect on purchase intention ($F(1,96) = 16.18, p < .001, \eta^2 = .14$). The purchase intention was highest when the cans were heavier ($M = 3.87, SD = .99$) than when the cans were lighter ($M = 2.98, SD = 1.11$), therefore, hypothesis 3d was supported.

In the only open questions, participants were asked what they think the non-alcoholic specialty beer would cost and how much they would pay for it themselves. The amount of money that is mentioned here, is the average amount of money the participants would think the beer cost or how much they would spend on it themselves. The means were calculated. Participants indicated that they thought the non-alcoholic beer was served in a heavy can with the dark label was the most expensive on the terrace, namely €4,51 ($M = 4.51, SD = 1.36$) and they would also pay the highest amount (€4,03) for this beer ($M = 4.03, SD = 1.73$). For the other heavy option, but with the brighter label, participants thought the average price of this non-alcoholic specialty beer on the terrace was €3,87 ($M = 3.87, SD = .98$) and they would pay €2,99 themselves ($M = 2.99, SD = 1.50$). The participants thought the lighter versions were the cheaper options. For the lighter can with the darker label, participants thought it would cost €3,29 ($M = 3.29, SD = .85$) and they would pay €2,50 themselves ($M = 2.50, SD = 1.29$). And the non-alcoholic specialty beer that participants indicated to be the cheapest on the terrace is the lighter can with the brighter label. Participants thought this beer will cost €3,00 on the terrace ($M = 3.00, SD = 1.03$) and they would only pay €1,78 themselves ($M = 1.78, SD = 1.11$).

4.3 RESULTS CONCERNING THE VISUAL ATTENTION

As for the visual attention of the non-alcoholic specialty beers, the brightness did not bring a significant effect ($F(1,96) = .24, p = .625, \eta^2 = .00$), which meant that hypothesis 1c could not be supported. In turn, the weight did have a significant effect on visual attention ($F(1,96) = 17.79, p < .001, \eta^2 = .16$). Participants who were confronted with the heavier option said that the product caught their eye more ($M = 3.87, SD = .99$) than when they were confronted with the lighter version of the can ($M = 2.98, SD = 1.11$). There was no significant interaction effect found ($F(1,96) = 1.06, p = .307, \eta^2 = .01$).

4.4 RESULTS CONCERNING THE QUALITY

The effects of brightness on the quality of the non-alcoholic specialty beer were found not to be significant ($F(1,96) = 2.55, p = .113, \eta^2 = .03$). However, the weight did have a significant effect on perception of quality of the non-alcoholic specialty beer ($F(1,96) = 22.58, p < .001, \eta^2 = .19$). The quality was perceived as better when the can that was given to the participants was heavier ($M = 3.72, SD = .96$) than when the can was

lighter ($M = 2.84$, $SD = .90$), therefore hypothesis 3c was supported. There was again no significant interaction effect found ($F(1,96) = .07$, $p = .796$, $\eta^2 = .00$).

4.5 OVERVIEW OF THE RESULTS OF THE HYPOTHESES TESTED

Coming from all the results above, an overview is made of the hypotheses that were tested and the results thereof. The results can be found in Table 5.

4.6 ADDITIONAL RESULTS

Because, as explained in the method section, other factors could have influenced the results within this study, an additional and explorative effect was investigated. The effect of experience with beer on the results was not being investigated here, as there was only a small number of participants who did not drink beer regularly. Therefore, it was only explored what the difference was between the female and male respondents of this study.

The results showed that women reported a higher overall liking of the beer ($F(1,92) = 9.01$, $p = .003$, $\eta^2 = .09$). There were also significant effects found for perceived intensity ($F(1,92) = 19.02$, $p < .001$, $\eta^2 = .17$), watery ($F(1,92) = 21.59$, $p < .001$, $\eta^2 = .19$), beer experience ($F(1,92) = 22.03$, $p < .001$, $\eta^2 = .19$), purchase intention ($F(1,92) = 9.17$, $p = .003$, $\eta^2 = .09$), visual attention ($F(1,92) = 21.70$, $p < .001$, $\eta^2 = .19$) and perceived quality of the non-alcoholic specialty beer ($F(1,92) = 26.18$, $p < .001$, $\eta^2 = .22$). Only the perceived refreshment was not significant ($F(1,92) = .54$, $p = .466$, $\eta^2 = .00$).

Overall, women reported a higher tastiness ($M = 3.42$, $SD = 1.24$) than men ($M = 2.72$, $SD = 1.10$). Women also globally reported a higher intensity ($M = 3.35$, $SD = 1.24$) than men ($M = 2.37$, $SD = 1.35$). Men found the non-alcoholic specialty beer to be waterier ($M = 3.54$, $SD = 1.23$) than women ($M = 2.64$, $SD = 1.06$). When drinking the non-alcoholic specialty beer, women said to have a greater beer experience ($M = 3.22$, $SD = .96$) than men ($M = 2.36$, $SD = .97$). Women were more likely to buy the beer ($M = 3.30$, $SD = 1.35$) and overall, the male participants reported a lower purchase intention ($M = 2.55$, $SD = 1.11$). The women within this study reported a higher visual attention ($M = 3.87$, $SD = 1.12$) than the men ($M = 2.96$, $SD = .97$). And finally, the female participants reported a higher perception of quality of the beer ($M = 3.73$, $SD = .83$) than the male participants ($M = 2.82$, $SD = 1.01$).

Because it was expected that men were more likely to report a higher overall liking, because they were already familiar with the taste of beer, these results were against the expectations.

Table 5*Overview of the Results of the Tested Hypotheses*

| Hypotheses | Results |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| H1a: Non-alcoholic specialty beer will be perceived as tastier when the package design (label) has brighter colours in it (as opposed to when a dark label is used). | Not supported |
| H1b: Participants will indicate a higher purchase intention when the package design (label) has brighter colours in it (as opposed to when a dark label is used). | Not supported |
| H1c: The non-alcoholic specialty beers with a brighter label (as opposed to when a dark label is used) will result in more visual attention, and therefore in a higher purchase intention. | Not supported |
| H2a: Non-alcoholic specialty beer will be perceived as watery when the package design (label) has brighter colours in it (as opposed to when a darker label is used). | Not supported |
| H2b: Non-alcoholic specialty beer will be perceived as refreshing when the package design (label) has brighter colours in it (as opposed to when a darker label is used). | Supported |
| H3a: Non-alcoholic specialty beer will be perceived as tastier when the can is heavier (as opposed to when a lighter can is used). | Supported |
| H3b: Non-alcoholic specialty beer will be perceived as more intense when the can is heavier (as opposed to when a lighter can is used). | Supported |
| H3c: Non-alcoholic specialty beer will be perceived as a higher quality option when the can is heavier (as opposed to when a lighter can is used). | Supported |
| H3d: Participants will indicate a higher purchase intention when the can is heavier (as opposed to when a lighter can is used). | Supported |
| H4a: Non-alcoholic specialty beer will be perceived as tastier when the non-alcoholic specialty beer is served in a heavier can and the package design (label) has darker colours in it (as opposed to when it is served in a lighter can and when a brighter label is used). | Not supported |
| H4b: Participants will indicate a higher purchase intention when the non-alcoholic specialty beer is served in a heavier can and the package design (label) has darker colours in it (as opposed to when it is served in a lighter can and when a brighter label is used). | Not supported |

5. Discussion

This study aimed to find out what design and material choices for non-alcoholic specialty beers can do with the taste perception and purchase intention of consumers. When confronting an audience with different designs of a non-alcoholic specialty beer, their opinions regarding the taste of the beer and the purchase intention and visual attention were gathered. With these results, the following research question was aimed to answer:

To what extent do the choices of brightness in labels and the weight of the can of non-alcoholic specialty beers influence the taste experience and purchase intention of the product?

5.1 SUMMARY OF THE RESULTS

The effect of weight was found to be significant on almost all constructs, except for the perception of refreshment, while brightness had a significant effect on refreshment and not on the rest of the constructs that were measured. Furthermore, there was an interaction effect found on brightness from weight and brightness and an interaction effect on bitterness. All results are summarized within this section.

Overall, the effects of brightness of the colour used, were found to bring less results than expected within this study. The first hypotheses (H1a, H1b and H1c) were not supported. Hypothesis 1a, which expected that non-alcoholic specialty beer will be perceived as tastier when the label has brighter colours in it (as opposed to when a darker label is used) did not bring significant results and was therefore not supported. Hypothesis 1b, which stated that participants will indicate a higher purchase intention when the label has brighter colours in it (as opposed to when a darker label is used), also did not have significant results and was therefore also rejected. Furthermore, hypothesis 1c, which stated that the brighter variant would result in more visual attention and therefore in a higher purchase intention, also did not have significant results and therefore was also rejected. All hypotheses can be found in Table 1 and Table 5.

Hypothesis 2a, which stated that the non-alcoholic specialty beer will be perceived as watery when the label has bright colours in it, was not supported, as the results of this test were not significant. However, the non-alcoholic specialty beer with the brighter label was perceived as more refreshing. Because of these significant results, hypothesis 2b, which stated that non-alcoholic specialty beer is perceived as refreshing when the label has brighter colours in it, was supported.

There were no hypotheses for brightness and weight on other taste experiences like sweetness, sourness, and bitterness. However, some results were found concerning these taste experiences. Bitterness even brought a significant interaction effect. Participants found the non-alcoholic specialty beer the most bitter when they drank from the heavy can with the dark label.

The hypotheses that were supported, were the hypotheses concerning the weight of the cans. Hypothesis 3a, which stated that non-alcoholic specialty beer will be perceived as tastier when the can is heavier (as opposed to when a lighter can is used), brought significant results and was therefore supported. The second hypothesis concerning the weight, hypothesis 3b, which stated that non-alcoholic specialty beer will be perceived as more intense when the can is heavier (as opposed to when a lighter can is used), was

also supported, as this brought significant results as well. The third hypothesis, concerning the weight on quality perception, hypothesis 3c, was also supported. And the final hypothesis concerning weight, hypothesis 3d, was supported as well. This hypothesis stated that participants will indicate a higher purchase intention when a heavier can is used.

Finally, hypothesis 4a and 4b were not supported, as the interaction effects of weight and brightness did not bring any significant results regarding the tastiness of the non-alcoholic specialty beers and the purchase intention of it. The only significant effects for the interaction effects were found for the refreshing taste of the non-alcoholic specialty beer.

5.2 REFLECTION ON THEORETICAL IMPLICATIONS

As described in the theoretical framework, weight was expected to have effects on tastiness, perceived intensity, and purchase intention. It was argued that a heavier product often brought these results when using extra weight in the serving of wine and foods. This research demonstrated that this is the case for non-alcoholic specialty beers as well. The differences in weight of the cans had a significant effect on the tastiness of the non-alcoholic specialty beer. Participants within this study said to like the non-alcoholic specialty beer better when they drank it from a heavier can as opposed to when they drank it from a lighter can. This corresponded with what was written in the introduction and theoretical framework and in other studies that were investigated. Another significant effect was found of the difference in weight on intensity of the non-alcoholic specialty beer. It was expected that the participants would find the non-alcoholic specialty beer more intense and powerful when they would drink it from the heavier can and this study proved that this was indeed the case. Another expectation that was found to be true was the expectation that the heavier can would result in a higher purchase intention. Participants who drank from the heavier can stated that they would buy the product more than the participants who drank from the lighter can. Also, from the open question that asked how much they would pay or how much they think it would cost, it was found that the heavier options were expected to be the most expensive and participants would pay the most for these variants. So, the results concerning the weight of the product were in line with the theory that was found.

An interesting finding within this study is the significant effect of weight on visual attention. The expectation was that brightness would influence visual attention, but this effect did not occur. It could be that the difference in weight was that remarkable that the participants were surprised by it. The statements within the questionnaire that were supposed to measure the visual attention, could also be interpreted by the participants as regular attention. The weight could have been so noticeable to the participants that they answered the questions in a way that the non-alcoholic specialty beer would grab their attention because of that, rather than because of the differences in brightness. Regardless of this result, it is an interesting outcome, as it is different from what was expected.

On the contrary, the difference in brightness on the label of the non-alcoholic specialty beer did not bring as many significant results as expected. As described in the theoretical framework, it was expected that the brighter version of the label would result in a better taste experience. However, within this study, this did not bring any significant results. One possible explanation for this is that the area where the tests were executed was rather dark. This could have resulted in a lesser alertness on the differences in brightness that were used in the label. Weight is something that is noticed, no matter how dark it is somewhere, because it

can be felt and even be recognized when the eyes are closed. The alertness on brightness can be reduced when the participants are in a darker area. Billger (1999) shows in her study that people judge objects differently in a darker room and can see colours differently than they would when the room is lighter. This could explain why there were not many significant results concerning the effects of brightness, although in the pre-test of this study, the colours were tested in the same café as where the experiment took place, and the differences were clear to all participants. Another explanation could be that the participants were not focused enough on the brightness of the can and that, when they were confronted with the heavy can, the weight was highly noticeable. Unfortunately, this was not tested through a validity question.

A result the brightness did bring was a significant effect on the refreshing taste of the non-alcoholic specialty beer. This was already expected and discussed in the theoretical framework and the results of this study showed that participants did find the non-alcoholic specialty beer from the can with the brighter label more refreshing than the non-alcoholic specialty beer from the can with the darker label. Furthermore, as described in the results section, an interaction effect of the weight and brightness was found for the refreshment the drink brought with it. This interaction effect showed that when drinking from the can with the darker version of the label, participants said that they found the non-alcoholic specialty beer overall less refreshing. However, there is a clear difference in results concerning the weight of the can here. When participants drank from the lighter can, they found the non-alcoholic specialty beer more refreshing than when they drank from the heavier can. This effect can be seen in the results section in Figure 6. A possible explanation for that could be that participants first notice the brightness of the can before touching it. When seeing the brighter can, people might already feel like the can is more refreshing than when they are confronted with a darker version. That could explain why the brighter version resulted in many participants finding the drink refreshing. But when they are confronted with the darker version, it could be the case they are paying attention to other elements, when answering the questions that measured the refreshment. For example, in this case, the weight of the can. When confronted with a lighter can, participants might think the drink is also 'lighter' and they experienced a more refreshing taste compared to when the can is both heavy and the label is darker.

The other effect brightness brought, was the effect on bitterness. Participants found the cans with the darker labels more bitter than the cans with the brighter labels. There was no hypothesis on this effect, but this is an interesting result. Wei et al. (2012) described in their study that dark colours were often rated as more bitter than lighter colours, when it comes to juices. The current study shows the same result concerning non-alcoholic specialty beers. In another research, concerning coffee shop interiors, it was also the case that darker colours resulted in more bitter expectations (Motoki et al., 2021). So, it seems that darker colours in general result in a more bitter experience. There was also an interaction effect found on bitterness. The dark label in combination with the heavy can brought the most bitterness with it. The bitterness in regular beers comes from the use of hops in it and is often known as a descriptive for beer (Schönberger, 2006). So, if a non-alcoholic specialty beer tastes bitter, this could better the beer experience and makes the non-alcoholic specialty beer tastes more like a real beer. If beer breweries find bitterness important for the beer experience when drinking a non-alcoholic beer, they could consider using darker colours in the design of the label and use heavier materials with it. But especially colour brightness seems to influence the bitterness that is experienced.

Concerning the processes the participants went through, the embodied process was more present during this experiment. The visual process, what participants went through seeing the different cans, resulted in a perception of refreshment and bitterness, but when holding the cans, the embodied process seemed to be more apparent. For example, when holding the darker can and rating the refreshment of the non-alcoholic beer, it looked like participants did not focus on the colour brightness anymore, but only on the weight of the can. That would explain why there were more effects found of weight on the dependent variables than there were found of brightness. Fountain (2010) described that with embodied processes, people use their own bodies to make sense of objects and that visual processes are more on the surface where people look at objects and figure them out this way. Other research talks about embodied processing as an addition to visual processing (Miellet et al., 2012): they often go hand in hand and can support each other. Because visual processes seem to be more superficial than embodied processes, it could explain why weight had more effect on the independent variables within this study than the brightness had.

5.3 REFLECTION ON METHODS AND INSTRUMENTS

The current study used a questionnaire the participants had to fill in during the experiment. The questionnaire was quite extensive, and it took the participants around five minutes to complete. All constructs were represented by several statements in the questionnaire and the Cronbach's alphas that were measured (see Table 4), showed that the constructs were reliable enough to find possible effects. The questionnaire that was used, covered almost everything that was necessary for this research to succeed. However, one important element that this questionnaire was lacking, was a validity question. This was simply forgotten by the researcher. On the other hand, there were several pre-tests done within this study, concerning the differences of the weight and of the brightness. But for future research, a validity question should be implemented to check whether the participants are confronted with the condition that was meant for them.

5.4 LIMITATIONS

This study brought a few points that could have been improved. First of all, there was not a set target group for this study, except for being eighteen years or older. It would have been interesting to find a target group where people were interested in an alcohol-free life or have other reasons to be interested in drinking a non-alcoholic specialty beer. The people who participated in this research were often not interested enough in non-alcoholic specialty beer, as they were heavy beer drinkers already.

Adding to that, the people that were asked to participate in this study, were already enjoying their evenings and this was often accompanied by an alcoholic drink. Although it was at the beginning of the evening that the participants filled in the questionnaire, it could have influenced the results, as they might have been under influence of alcohol already. However, it was conscious decision to do the research at a bar because the atmosphere should be the similar as to when people drink the non-alcoholic specialty beer.

Furthermore, because it is slightly dark at Het Uurwerk, the difference in colour brightness might not have come across as intended. The tests were done inside of the café, when comparing the two cans it was obvious that there was a difference between the two brightness options. However, because of the lack

of light inside the café, this could result in a smaller difference between the two options. This might explain why there was a lack of significant results on the brightness side of this research. Therefore, for another research about non-alcoholic specialty beer, the experiment could also be executed on a terrace outside, so there is enough light to see these differences more clearly.

Additionally, choices were made regarding the serving of the non-alcoholic specialty beers. These choices were based on budget, time, and other conveniences. The non-alcoholic specialty beers were served in paper cups. This was chosen, because this was the cheapest option, and the servings could be prepared in a fast pace. However, participants mentioned that it detracted from the nice taste of the non-alcoholic specialty beer. If there is more time and money to prepare taste tests, it could be an option to use glass, because it looks better and it might give participants a better beer experience. Within this study, it was not an option, because it was rather busy at Het Uurwerk, and this would have resulted in unnecessary chaos at that moment.

Lastly, because of time constraints, there were only 25 people per condition participating in this study. That is enough to find some results, however, it would be beneficial to have more respondents than this. The results would be more reliable if there were more respondents and maybe in that case, brightness would have brought significant results as well. According to Button et al. (2013), studies with a smaller sample size reduce the likelihood that a significant result is also a real effect. An online study would have made it easier to reach more participants at the same time. However, because this experiment was done in a real bar, it brought the atmosphere that would otherwise be lacking if it was done online. So, this was a conscious choice within this research.

5.5 FUTURE RESEARCH

As explained in the limitations, it would be more interesting for beer companies who want to produce non-alcoholic specialty beer to find out what potential consumers find more attractive in the designs. Within this study, random people above the age of eighteen were asked to participate, which resulted in a large group that was not necessarily interested in drinking an alcohol-free specialty beer. It could be more beneficial to find respondents who could potentially be consumers of the product.

Furthermore, as mentioned in the limitations, using glass for the taste test could bring better results. Some participants mentioned that they did not like the serving in paper cups. And by using glass, researchers can also choose a heavier glass versus a lighter glass, so that they do not have to change the cans themselves, but only the glasses. This might result in even more realistic results, as people drink directly from the glass, and they hold the glass while drinking and tasting the non-alcoholic specialty beer.

Finally, another factor could be added to the package design of the non-alcoholic specialty beer. Not only brightness and weight are interesting to study, but there are so many other factors that could be changed in a design for a non-alcoholic specialty beer to make the product more attractive. For example, the font used in the design, from more round letters and characters to angular ones. Researchers can aim to find out differences in the name of the beer: a 'stronger' name or a 'weaker' name (like almost happened in this study: 'the Blonde Bone' (stronger) versus 'the Boneless Blonde (weaker)) or a name that is pronounced 'softer' versus a name that is pronounced in a 'harsher' manner. This effect is known as the "Bouba-Kiki" effect and this effect can also have an influence on taste perceptions (Fryer et al., 2014). Or a busy can, where

a lot of colours and pictures are used and where a lot is happening, versus a calmer can, where for example only the logo is presented. Another option is producing the non-alcoholic specialty beer in a can versus producing it in a bottle. There are many options and all of them are interesting.

Especially combining some of these with researching the weight of the can, because some factors might strengthen these effects. As can be seen in the current study, the differences in weight were experienced through embodied processing. And since embodied processing strengthens the visual processing, it would be interesting to see another version of this research.

6. Conclusion

The aim of this research was to find an answer to the following research question: *“To what extent do the choices of brightness in labels and the weight of the can of non-alcoholic specialty beers influence the taste experience and purchase intention of the product?”*. Although there was a lack of significant results concerning the differences in brightness of the labels, there were some conclusions drawn within the current study. The choices of brightness in labels did not have a significant effect on the perceived tastiness and purchase intention of the participants. However, within this study it was found that a brighter label resulted in a higher perception of refreshment in the non-alcoholic specialty beers. This means that when beer producers want to achieve refreshment, it could be a good idea to consider using brighter colours within the design of the label of the non-alcoholic specialty beer. If beer producers want to create extra bitterness in their non-alcoholic specialty beers, they could consider choosing a darker label, as this study showed that darker labels resulted in more bitterness.

What seems to be even more crucial for changing non-alcoholic specialty beer experiences, is adding weight to the product. This study showed that when drinking from a heavier can, participants said to like the taste of the non-alcoholic specialty beer better than drinking from a lighter can, they said to have a higher purchase intention, the non-alcoholic specialty beer had a higher taste intensity, it seemed higher-quality and they had a better ‘beer experience’. So, using heavier materials in the can seems to make a large difference and should be considered when choosing materials for the non-alcoholic specialty beer. The embodied processing that was necessary to experience the difference in weight went hand in hand with the visual processing. The visual processing was more superficial, and the embodied processing made the experience more interesting, as the participants were specifically asked to hold the beer and have a good look at it.

Considering the results of this study, it can be said that the use of different levels of brightness in the label of the can mostly affects the level of refreshment and bitterness people will experience while drinking the beer. Furthermore, when using heavier materials for the can of the non-alcoholic specialty beer, this could bring several positive changes concerning the taste experience and purchase intention of consumers. When adding more weight to the can, people tend to experience a greater taste intensity, like the taste of the non-alcoholic specialty beer better, perceive the non-alcoholic specialty beer as a better-quality product and are more likely to purchase the product.

Reference list

- Aquilani, B., Laureti, T., Poponi, S., & Secondi, L. (2015). Beer choice and consumption determinants when craft beers are tasted: an exploratory study of consumer preferences. *Food Quality and Preference*, *41*, 214-224. doi:10.1016/j.foodqual.2014.12.005
- Aslam, M. M. (2006). Are you selling the right colour? A cross-cultural review of colour as a marketing cue. *Journal of Marketing Communications*, *12*(1), 15-30. doi:10.1080/13527260500247827
- Barnett, A., & Spence, C. (2016). Assessing the effect of changing a bottled beer label on taste ratings. *Nutrition and Food Technology*, *2*(4). doi:10.16966/2470-6086.132
- Bertram, D. (n.d.). *Likert scales*. Retrieved from <http://poincare.matf.bg.ac.rs/~kristina/topic-dane-likert.pdf>
- Billger, M. (1999). Colour combination effects in experimental rooms. *Colour Research & Application*, *24*(4), 230-242. doi:10.1002/(SICI)1520-6378(199908)24:4<230::AID-COL4>3.0.CO;2-G
- Brysbaert, M. (2019). How many participants do we have to include in properly powered experiments? A tutorial of power analysis with reference tables. *Journal of Cognition*, *2*(1). doi:10.5334/joc.72
- Button, K. S., Ionnidis, J., Mokrysz, C., Nosek, B. A., Flint, J., Robinson, E. S., & Munafò, M. R. (2013). Power failure: why small sample size undermines the reliability of neuroscience. *Nature Reviews Neuroscience*, *14*(5), 365-376. doi:10.1038/nrn3475
- Camgöz, N., Yener, C., & Güvenç, D. (2003). Effects of hue, saturation, and brightness: part 2: attention. *Colour Research & Application*, *29*(1), 20-28. doi:10.1002/col.10214
- Cao, L., Zhou, G., Guo, P., & Li, Y. (2011). Influence of pasteurising intensity on beer flavour stability. *Journal of the Institute of Brewing*, *117*(4), 587-592. doi:10.1002/j.2050-0416.2011.tb00508.x
- Chorley, M. J., Rossi, L., Tyson, G., & Williams, M. J. (2016). Pub crawling at scale: tapping Untappd to explore social drinking. In *Tenth International AAAI Conference on Web and Social Media*.
- Crews, F. T., Braun, C. J., Hoplight, B., Switzer III, R. C., & Knapp, D. J. (2000). Binge ethanol consumption causes differential brain damage in young adolescent rats compared with adult rats. *Alcoholism: Clinical and Experimental Research*, *24*(11), 1712-1723. doi:10.1111/j.1530-0277.2000.tb01973.x
- De Villiers, K. (2008). Colour au naturel. *Milk & Juice*, *3*(3), 44-45.
- Dottin, C. D. (2018). Admission of master's degree students with criminal backgrounds: implications for field directors. *Field Educator*, *8*(1). Retrieved from Field Educator.

- Ezan, P., Pantin-Sohier, G., & Lancelot-Miltgen, C. (2017). The bright colour of food: a vector for children's wellbeing? An empirical study on the colour of syrup. In *3rd International Colloquium on Kids and Retailing: "Wellbeing of the child"* (p. 61).
- Fountain, T. K. (2010). Anatomy education and the observational-embodied look. *Medicine Studies*, *2*(1), 49-69. doi:10.1007/s12376-010-0040-6
- Fryer, L., Freeman, J., & Pring, L. (2014). Touching words is not enough: how visual experience influences haptic-auditory associations in the "Bouba-Kiki" effect. *Cognition*, *132*(2), 164-173. doi:10.1016/j.cognition.2014.03.015
- Gliem, J. A., & Gliem, R. R. (2003). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education. Retrieved from Scholar Works.
- Haver, B., Gjestad, R., Lindberg, S., & Franck, J. (2009). Mortality risk up to 25 years after initiation of treatment among 420 Swedish women with alcohol addiction. *Addiction*, *104*(3), 413-419. doi:10.1111/j.1360-0443.2008.02479.x
- Husic-Mehmedovic, M., Omeragic, I., Batagelj, Z., & Kolar, T. (2017). Seeing is not necessarily liking: advancing research on package design with eye-tracking. *Journal of Business Research*, *80*, 145-154. doi:10.1016/j.jbusres.2017.04.019
- Jostmann, N. B., Lakens, D., & Schubert, T. W. (2009). Weight as an embodiment of importance. *Psychological Science*, *20*(9), 1169-1174. doi:10.1111/j.1467-9280.2009.02426.x
- Lindstrom, M. (2006). Brand sense: how to build powerful brands through touch, taste, smell, sight and sound. *Strategic Direction*, *22*(2). doi:10.1108/sd.2006.05622bae.001
- Madar, A. (2015). Elements of design and aesthetics on the beer market in Romania. Case study: Tuborg. *Economic Sciences. Series V*, *8*(2), 83.
- McCreanor, T., Lyons, A., Griffin, C., Goodwin, I., Moewaka Barnes, H., & Hutton, F. (2013). Youth drinking cultures, social networking and alcohol marketing: implications for public health. *Critical Public Health*, *23*(1), 110-120. doi:10.180/09581596.2012.748883
- Miellet, S., Hoogenboom, N., & Kessler, K. (2012). Visual and embodied perception of others: the neural correlates of the Body Gestalt effect. *Journal of Vision*, *12*(9), 824. doi:10.1167/12.9.824

- Monteiro, P., Guerreiro, J., & Loureiro, S. M. C. (2020). Understanding the role of visual attention on wine's purchase intention: an eye-tracking study. *International Journal of Wine Business Research*. doi:10.1108/ijwbr-03-2019-0017
- Motoki, K., Takahasi, A., & Spence, C. (2021). Tasting atmospheric: taste associations with colour parameters of coffee shop interiors. *Food Quality and Preference*, *94*, 104315. doi:10.1016/j.foodqual.2021.104315
- Motoki, K., Saito, T., Nouchi, R., Kawashima, R., & Sugiura, M. (2019). Light colors and comfortable warmth: crossmodal correspondences between thermal sensations and color lightness influence consumer behavior. *Food quality and preference*, *72*, 45-55. doi:10.1016/j.foodqual.2018.09.004
- Muggah, E. M., & McSweeney, M. B. (2017). Females' attitude and preference for beer: a conjoint analysis study. *International Journal of Food Science & Technology*, *52*(3), 808-816. doi:10.1111/ijfs.13340
- Ngo, M. K., Piqueras-Fiszman, B., & Spence, C. (2012). On the colour and shape of still and sparkling water: insights from online and laboratory-based testing. *Food Quality and Preference*, *24*(2), 260-268. doi:10.1016/j.foodqual.2011.11.004
- Piqueras-Fiszman, B., Harrar, V., Alcaide, J., & Spence, C. (2011). Does the weight of the dish influence our perception of food? *Food Quality and Preference*, *22*(8), 753-756. doi:10.1016/j.foodqual.2011.05.009
- Piqueras-Fiszman, B., & Spence, C. (2012). The weight of the bottle as a possible extrinsic cue with which to estimate the price (and quality) of the wine? Observed correlations. *Food Quality and Preference*, *25*(1), 41-45. doi:10.1016/j.foodqual.2012.01.001
- Rex, J., Wai, S., & Lobo, A. (2004). An exploratory study into the impact of colour and packaging as stimuli in the decision-making process for a low involvement non-durable product. IN *ANZMAC Wellington, conference paper*.
- Rodríguez, B., Arroyo, C., Reyes, L. H., & Reinoso-Carvalho, F. (2021). Promoting healthier drinking habits: using sound to encourage the choice for non-alcoholic beers in e-commerce. *Foods*, *10*(9), 2063. doi:10.3390/foods10092063
- RTL Nieuws. (2020). *We drinken meer speciaalbier en alcoholvrij, groei zet door*. Retrieved on December 2, 2021, from <https://www.rtlnieuws.nl/nieuws/artikel/5037136/bier-speciaalbier-alcoholvrij-drinken-nederlandse-brouwers-ipa>
- Rudnitskaya, A., Polshin, E., Kirsanov, D., Lammertyn, J., Nicolai, B., Saison, D., ... & Legin, A. (2009). Instrumental measurement of beer taste attributes using an electronic tongue. *Analytica Chimica Acta*, *646*(1), 111-118. doi:10.1016/j.aca.2009.05.008

- Salanta, L. C., Coldea, T. E., Ignat, M. V., Pop, C. R., Tofana, M., Mudura, E., ... & Zhao, H. (2020). Non-alcoholic and craft beer production and challenges. *Processes*, 8(11), 1382. doi:10.3390/pr8111382
- Schönberger, C. (2006). Bitter is better: a review on the knowledge about bitterness in beer. *Monatsschrift für Brauwissenschaft*, 3(4), 56-65.
- Silva, A. P., Jager, G., van Bommel, R., van Zyl, H., Voss, H. P., Hogg, T., ... & de Graaf, C. (2016). Functional or emotional? How Dutch and Portuguese conceptualise beer, wine and non-alcoholic beer consumption. *Food Quality and Preference*, 49, 54-65. doi:10.1016/j.foodqual.2015.11.007
- Slade, T., Chapman, C., Swift, W., Keyes, K., Tonks, Z., & Teesson, M. (2016). Birth cohort trends in the global epidemiology of alcohol use and alcohol-related harms in men and women: systematic review and meta-regression. *BMJ Open*, 6(10). doi:10.1136/bmjopen-2016-011827
- Spence, C., & Velasco, C. (2018). On the multiple effects of packaging colour on consumer behaviour and product experience in the 'food and beverage' and 'home and personal care' categories. *Food Quality and Preference*, 68, 226-237. doi:10.1016/j.foodqual.2018.03.008
- Staub, C., Contiero, R., Bosshart, N., & Siegrist, M. (2022). You are what you drink: Stereotypes about consumers of alcoholic and non-alcoholic beer. *Food Quality and Preference*, 104633. doi:10.1016/j.foodqual.2022.104633
- Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48(6), 1273-1296. doi:10.1007/s11165-016-9602-2
- Tham, D. S. Y., Sowden, P. T., Grandison, A., Franklin, A., Lee, A. K. W., Ng, M., Park, J., Pang, W., & Zhao, J. (2020). A systematic investigation of conceptual colour associations. *Journal of Experimental Psychology: General*, 149(7), 1311. doi:10.1037/xge0000703
- Tijssen, I., Zandstra, E. H., de Graaf, C., & Jager, G. (2017). Why a 'light' product package should not be light blue: Effects of package colour on perceived healthiness and attractiveness of sugar- and fat-reduced products. *Food Quality and Preference*, 59, 46-58. doi:10.1016/j.foodqual.2017.01.019
- Wei, S. T., Ou, L. C., Luo, M. R., & Hutchings, J. B. (2012). Optimisation of food expectations using product colour and appearance. *Food Quality and Preference*, 23(1), 49-62. doi:10.1016/j.foodqual.2011.07.004
- Wilson, M. (2002). Six views of embodied cognition. *Psychonomic Bulletin & Review*, 9(4), 625-636.

Appendices

APPENDIX 1 OPINIONS ON THE DESIGN (PRE-TEST)

1 = Helemaal mee oneens / 2 = Oneens / 3 = Neutraal / 4 = Eens / 5 = Helemaal mee eens

| | 1 | 2 | 3 | 4 | 5 | Mean | SD |
|--------------------------------------------------------------------|---|---|---|---|---|------|-----|
| Ik vind het een mooi blik. | 0 | 0 | 0 | 0 | 0 | 4.71 | .49 |
| Ik denk dat dit alcoholvrij speciaalbier van hoge kwaliteit is. | 0 | 0 | 0 | 0 | 0 | 4.43 | .54 |
| Ik zou dit blikje bestellen als ik hem zou zien staan. | 0 | 0 | 0 | 0 | 0 | 4.57 | .54 |
| Ik vind het een onaantrekkelijk design. | 0 | 0 | 0 | 0 | 0 | 1.00 | .00 |
| Het is een opvallend design. | 0 | 0 | 0 | 0 | 0 | 4.14 | .38 |

APPENDIX 2 POSITIVE AND NEGATIVE TASTE ASSOCIATIONS WITH NON-ALCOHOLIC SPECIALTY BEER (PRE-TEST)

1 = Helemaal mee oneens / 2 = Oneens / 3 = Neutraal / 4 = Eens / 5 = Helemaal mee eens

| | 1 | 2 | 3 | 4 | 5 | Mean | SD |
|-------------------------------------------------------------------------------|---|---|---|---|---|------|-----|
| Alcoholvrij speciaalbier moet bitter smaken. | 0 | 0 | 0 | 0 | 0 | 3.71 | .76 |
| Alcoholvrij speciaalbier moet intens smaken. | 0 | 0 | 0 | 0 | 0 | 4.71 | .49 |
| Alcoholvrij speciaalbier moet limonadeachtig smaken. | 0 | 0 | 0 | 0 | 0 | 1.14 | .38 |
| Alcoholvrij speciaalbier moet zoet smaken. | 0 | 0 | 0 | 0 | 0 | 2.86 | .90 |
| Alcoholvrij speciaalbier moet krachtig smaken. | 0 | 0 | 0 | 0 | 0 | 5.00 | .00 |
| Alcoholvrij speciaalbier moet echt naar een speciaalbier mét alcohol smaken. | 0 | 0 | 0 | 0 | 0 | 4.71 | .49 |
| Alcoholvrij speciaalbier mag waterig smaken. | 0 | 0 | 0 | 0 | 0 | 1.29 | .49 |
| Alcoholvrij speciaalbier moet vol smaken. | 0 | 0 | 0 | 0 | 0 | 4.71 | .49 |
| Alcoholvrij speciaalbier moet fris smaken. | 0 | 0 | 0 | 0 | 0 | 4.00 | .58 |
| Alcoholvrij speciaalbier moet goed sprankelend zijn (koolzuur). | 0 | 0 | 0 | 0 | 0 | 4.29 | .49 |
| Alcoholvrij speciaalbier moet hoppig smaken. | 0 | 0 | 0 | 0 | 0 | 4.57 | .54 |
| Alcoholvrij speciaalbier moet zuur smaken. | 0 | 0 | 0 | 0 | 0 | 2.14 | .38 |
| Alcoholvrij speciaalbier moet natuurlijk smaken. | 0 | 0 | 0 | 0 | 0 | 4.43 | .54 |
| Alcoholvrij speciaalbier moet licht smaken. | 0 | 0 | 0 | 0 | 0 | 2.86 | .90 |
| Alcoholvrij speciaalbier moet fruitig smaken. | 0 | 0 | 0 | 0 | 0 | 2.14 | .38 |
| Alcoholvrij speciaalbier moet kruidig smaken. | 0 | 0 | 0 | 0 | 0 | 3.86 | .38 |
| Alcoholvrij speciaalbier moet nauwelijks te onderscheiden zijn van echt bier. | 0 | 0 | 0 | 0 | 0 | 4.86 | .38 |

APPENDIX 3 QUESTIONNAIRE INTRODUCTION

Dutch version:

Beste participant,

Allereerst: Ontzettend bedankt dat je wil meewerken met dit onderzoek! Dit wordt zeer gewaardeerd. Het is belangrijk om te weten dat je niet getest wordt in dit experiment en dat geen enkel antwoord een verkeerd antwoord is. Denk vooral niet te lang na tijdens het beantwoorden van de vragen en kies voor het antwoord dat het eerst in je opkomt.

Het invullen van de vragenlijst zal ongeveer vijf minuten duren en bevat ongeveer 35 'eens-oneens'-vragen. Je mag stoppen met het onderzoek wanneer je wil en er is altijd ruimte voor vragen. Ook is het goed om te weten dat je antwoorden 100% anoniem zullen zijn. Deze studie is goedgekeurd door de Ethics Committee.

Bedankt voor je tijd!

Lynn Roelofs

English version:

Dear participant,

First: I would like to thank you for wanting to take your time to help me fill in this questionnaire! It is important for you to know that this questionnaire is not made to test you and you cannot answer any question in a wrong way. Do not think too long about your answers, because this is not necessary. I would like you to pick the answer that comes to mind first.

This questionnaire will take about five minutes of your time. The questionnaire contains about 35 multiple choice questions. You are free to quit this study at any point in time and all your answers will be 100% anonymously. This study was approved by the Ethics Committee.

Thank you for your time!

Lynn Roelofs

APPENDIX 4 DEMOGRAPHICS

Dutch version:

Geslacht:

Man Vrouw Anders

Leeftijd: _____

Land:

Nederland Anders, namelijk: _____

Drink je graag bier?

Ja Nee

Zo ja: Vind je donkere of lichtere biertjes lekkerder?

Donker Licht Allebei

Hoe vaak drink je bier?

Dagelijks Wekelijks Maandelijks Jaarlijks

English version:

Gender:

Male Female Other

Age: _____

Country:

Netherlands Other, namely: _____

Do you drink beer?

Yes No

If yes: Do you like dark beers or light beers?

Dark Light Both

How often do you drink beer?

Daily Weekly Monthly Yearly

APPENDIX 5 QUESTIONNAIRE

Dutch version

In hoeverre ben je het eens met onderstaande stellingen?

1 = *Helemaal mee oneens* / 2 = *Oneens* / 3 = *Neutraal* / 4 = *Eens* / 5 = *Helemaal mee eens*

| | 1 | 2 | 3 | 4 | 5 |
|-------------------------------------------------------------|---|---|---|---|---|
| Dit is een lekker biertje. | 0 | 0 | 0 | 0 | 0 |
| Dit biertje smaakt intens. | 0 | 0 | 0 | 0 | 0 |
| Dit biertje smaakt krachtig. | 0 | 0 | 0 | 0 | 0 |
| Dit biertje smaakt limonadeachtig. | 0 | 0 | 0 | 0 | 0 |
| Dit biertje smaakt naar een speciaalbiertje met alcohol. | 0 | 0 | 0 | 0 | 0 |
| Dit biertje smaakt waterig. | 0 | 0 | 0 | 0 | 0 |
| Dit biertje is vol van smaak. | 0 | 0 | 0 | 0 | 0 |
| Ik zou dit bestellen als ik iets zonder alcohol zou willen. | 0 | 0 | 0 | 0 | 0 |
| Dit biertje smaakt verfrissend. | 0 | 0 | 0 | 0 | 0 |
| Dit biertje bevat veel koolzuur. | 0 | 0 | 0 | 0 | 0 |
| Dit biertje smaakt hoppig. | 0 | 0 | 0 | 0 | 0 |
| Dit biertje bevat een natuurlijke smaak. | 0 | 0 | 0 | 0 | 0 |
| Dit biertje is dorstlessend. | 0 | 0 | 0 | 0 | 0 |
| Dit biertje is sprankelend. | 0 | 0 | 0 | 0 | 0 |
| Dit is <u>geen</u> lekker biertje. | 0 | 0 | 0 | 0 | 0 |
| Dit biertje smaakt zoet. | 0 | 0 | 0 | 0 | 0 |
| Dit biertje smaakt zuur. | 0 | 0 | 0 | 0 | 0 |
| Dit biertje smaakt bitter. | 0 | 0 | 0 | 0 | 0 |
| Ik zou dit biertje kopen. | 0 | 0 | 0 | 0 | 0 |
| Ik zou dit biertje bestellen in een restaurant. | 0 | 0 | 0 | 0 | 0 |
| Ik zou dit biertje kopen in een supermarkt. | 0 | 0 | 0 | 0 | 0 |

Als ik in een bar was en ik kon dit biertje bestellen, zou ik het doen.

Ik zou dit biertje niet kopen.

Dit biertje valt me op.

Dit biertje zou mijn interesse wekken als ik dit zou zien bij een bar.

Dit biertje zou mijn interesse wekken als ik dit zou zien in een
supermarkt.

Dit biertje zou mijn interesse wekken als ik dit zou zien in een
restaurant.

Dit biertje zou mijn interesse wekken als ik dit zou zien op het terras.

Dit product zou mij totaal niet opvallen.

Dit biertje is van goede kwaliteit.

Dit is speciaalbier.

Dit biermerk is een kwaliteitsmerk.

Dit is een sjiek merk.

Dit is een bijzonder biertje.

Hoeveel zou je denken dat dit biertje kost op het terras? € _____

Hoeveel zou je er zelf voor betalen op het terras? € _____

Heb je nog aanvullende opmerkingen voor/over dit onderzoek?

English version

Do you agree with the following statements?

1 = Totally disagree / 2 = Disagree / 3 = Neutral / 4 = Agree / 5 = Totally disagree

| | 1 | 2 | 3 | 4 | 5 |
|------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| This beer is tasty. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| This beer tastes intense. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| This beer tastes powerful. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| This beer tastes lemonade-like. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| This beer tastes like a real specialty beer with alcohol. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| This beer tastes watery. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| This beer is full of flavour. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I would order this beer if I would want something non-alcoholic. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| This beer tastes refreshing. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| This beer contains lots of carbonic acid. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| This beer tastes hoppy. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| This beer contains a natural flavour. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| This beer is thirst-quenching. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| This beer is sparkling. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| This is <u>not</u> a tasty bear. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| This beer tastes sweet. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| This beer tastes sour. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| This beer tastes bitter. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I would buy this beer. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I would order this beer in a restaurant. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I would buy this beer from a supermarket. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| If I was at a bar and I could order this drink, I would do it. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| I would <u>not</u> buy this beer. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

This beer stands out to me.

This beer would catch my attention when I would see this in the bar.

This beer would catch my attention when I would see this in a supermarket.

This beer would catch my attention when I would see this in a restaurant.

This beer would catch my attention when I would see this on a terrace.

This product does not stand out to me.

This beer is of good quality.

This is specialty beer.

This beer brand is a quality brand.

This is a fancy brand.

This is an exclusive beer.

How much do you think this beer will cost on a terrace? € _____

How much would you pay for this beer on a terrace? € _____

Do you have any comments on/for this study?
