

# Master thesis

How personality influences customers' choice for food labels



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## Abstract

Our knowledge of personality traits and how they relate to food labels is largely based on very limited data. Previous studies have only focused on one type of food label for one type of product. The aim of the present study was consequently to have a broader focus, so multiple labels and multiple products were included. The food labels used in this study, Fairtrade Labelling, Country of Origin Labelling, and Brand Labelling, are all seen as a quality cue. Customers value quality differently, based on individual convictions and beliefs. In order to identify these individual differences, Gill and Hodgkinson (2007) introduced the theory of personality traits. Based on Grebitus and Dumortier (2014), it was hypothesized that personality traits can predict which label a participant would choose. To test this, an experiment was conducted in which the 138 participants had to choose their preferred label for 12 types of products. To make a more realistic and natural comparison with a real-life situation, participants were shown an image of a supermarket shelf, in which 6 products were positioned. Participants then chose their preferred label. Consequently, participants filled in 4 of the 5 Big Personality traits (Gill & Hodgkinson, 2009). The analyses showed that personality traits are significant predictors but that they can only minimally predict the number of chosen labels, which limits the practical implications that can be drawn from the results. Consequently, other factors such as the product position on the shelf, gender, age, and education are more relevant factors for marketers with which to target specific groups of customers. Future research should include other sustainable food labels in the analysis and should additionally examine more systematically the differences per food label in relation to personality traits.

*Keywords:* food labels, fairtrade, country of origin, Brand equity, personality traits

## **Introduction**

Attracting customers to products and persuading these customers to buy these products are critical concepts in any marketing plan. In order to make more profit as a company, it is relevant to optimally integrate these two concepts: attraction of customers and persuasion to buy products. A way to attract customers is by the label of the product, as a label can display the brand name, for example. These labels can persuade customers if they have a positive attitude towards the brand, as they may be enticed to buy the product, rather than a competitor's product (Tonioni, Serra & Di Stefano, 2019).

However, not every customer perceives the label in the same way, which means that the label does not affect every customer in the same way. The attitude towards a label could be positive for one customer but could be negative for a different customer. To categorize and compare customers, the behavior of customers is examined based on traits, known in the literature as personality traits (Gill & Hodgkinson, 2007). Based on a number of personality characteristics, every individual can be defined and segmented to a certain group. Vinson, Scott and Lamont (1977) suggested that personality traits can help marketers to effectively segment groups of customers. According to these authors, in-depth knowledge of personality traits of customers can be used to predict a preference of a customer by appealing to his personality traits (Vinson, Scott & Lamont, 1977). If a segment of customers is known to be caring about sustainability and social welfare, then a promotional campaign regarding the introduction of a new range of fairtrade products, specifically aimed at this segment of customers, could be very effective.

Although there are promising possibilities of segmentation based on personality traits, research on the effect of personality traits on the choice of food label has remained scarce. There is no conclusive evidence that shows that personality traits can predict the choice of food labels for a variety of products. Consequently, the present study aims to examine to what extent personality traits can predict the choice of label.

## **1. Literature review**

### **1.1 Food labels as a quality cue**

One key reason to use food labels on products from a marketing perspective is that customers perceive food labels as a cue for quality. A food label, such as Fairtrade Labelling (FTL), Country of Origin Labelling (COOL), and Brand Labelling (BL) generally increases the willingness to pay for a product (Gao et al., 2018). According to Gao et al. (2018), customers relate favorable sentiments to a specific (attribute of a) label and that is why customers prefer that label over a different label. These sentiments are constructed by how customers perceive a product, thus, how the label is cognitively processed. A considerable amount of literature has been published on how customers cognitively perceive food labels. In their seminal paper, Caswell and Mojduszka (1996) showed that food labels can be perceived as a quality cue in three different ways. The first relates to attributes that can be defined before purchasing the product, by research or inspection of the product, these are called search attributes. An example of a search attribute is the logo of a brand. Customers perceive the logo before they buy the product and the logo is cognitively processed as a cue for quality. The second way is by experience attributes. The label reminds the customer of previous experiences with the product and customers may have developed a positive or a negative attitude towards the product. The last way is by credence attributes, The last type is credence attributes, which relates to quality that cannot be directly judged by before or after buying the product, such as how sustainable a product is. Credence attributes benefit other people and other dimensions (Olynk, 2012). They relate to benefits that could be tangible or intangible, such as better working conditions or belonging to a certain group (Caswell & Mojduszka, 1996). A fairtrade label is a good example of this, as fairtrade relates to better working conditions for the producers and a more sustainable product. A customer who values sustainability can interpret the fairtrade label as a cue for quality in terms of sustainability.

These three attributes as described by Caswell and Mojduszka (1996) apply to most food products. An example of this theory can be illustrated by fairtrade coffee. Customers initially perceive the search attributes of the fairtrade coffee, as they see the fairtrade label, for instance. Subsequently, customers perceive the credence attributes of fairtrade coffee. Customers may want to buy fairtrade coffee because they value the fairness of the trade, or in other words, the intangible ethics associated with the product. And lastly, customers may

equally relate to the experience attributes of the product, as they have tried the coffee before and appreciated the taste, for example (De Pelsmacker, Dries & Rayp, 2005). All three attributes play a role in how a food label serves as a cue for quality in the eyes of customers: a food label is the visual representation of these three attributes.

## **1.2 Differences between food labels as quality cues**

However, even although food labels use the same three types of attributes and are all seen as a cue for quality, it is impossible to ignore all distinctions between the different types of food labels. Especially among very common types of labels in a supermarket, such as Fairtrade Labelling (FTL), Country of Origin Labelling (COOL), and Brand Labelling (BL), there are distinct differences, which is why it is relevant to outline the differences between these three labels, as they are all seen as a cue for quality, but for different reasons.

### **1.2.1 Country of Origin Labelling (COOL)**

COOL is seen as a quality cue, as it shows that a product has been produced in a certain country or region. There are two types of COO labels (Aichner, 2014). The first type is the legally regulated COO labels. These types include the "*made in ...*" and other COO labels such as *Protected Designation of Origin*. Both types of labels are regulated by an institution and are only awarded if certain criteria are met. The second type of COO label is the unregulated COO labels. These labels include portraying flags or symbols, the use of stereotypical people, and the use of COO language. An example of how language use may persuade customers can be illustrated by the Dutch brand *Parrano*. *Parrano* is a Dutch type of sprinkle cheese that is often found in Dutch supermarkets. The Netherlands as the COO of *Paranno* is not mentioned on the package, because *Parrano* is advertised as an Italian type of cheese as its name and -presumably- its taste, are very similar to the Italian *Padano* cheese. By using language, *Parrano* can be perceived as an Italian cheese in the eyes of a customer. This may result in evoking a positive reaction from customers.

This positive reaction can be explained by the country of origin (COO) effect. As defined by Diamantopoulos and Zeugner-Roth (2011), the COO effect is "any influence or bias on product evaluation resulting from COO information" (Diamantopoulos & Zeugner-Roth, 2011, p. 2). According to Hornikx et al. (2020), COO information on a product affects customers' evaluations of the product, particularly the quality of the product.

This means that customers are more positive about products if they originate from countries with a favorable image than from other countries with a less favorable image. The customer thus values the product more because he was influenced by COO information. In the case of *Parrano*, the name *Parrano* evokes a positive reaction, as customers believe that *Parrano* originates from a country with a favorable image. In addition, the COO effect was also examined in the study carried out by Mueller and Snolzoki (2010), who investigated the influence of COOL on customers' perceived value of white wine. Participants first rated the white wine without any information about the wine. In the second round of the experiment, participants had to evaluate the wine again but, this time they were able to view the country of origin label and the grape variety. Mueller and Snolzoki (2010) found significant differences in the preferred choice between the two rounds: COOL contributed to a more favorable attitude towards the wine. The effect of COOL was especially influential when it came to participants who were less familiar with wine. This conclusion by Mueller and Snolzoki (2010) is in line with the three types of attributes of Caswell and Mojduszka (1996). Considering that the participants were less experienced, they relied on search attributes in order to make a decision. The Country of Origin Label is a search attribute, so participants relied upon the COOL in order to make their decision. COOL can thus be seen as a cue for quality as it evokes a positive reaction because the product originates from a country with a favorable image.

### **1.2.2 Brand Labelling (BL).**

The main quality cue for customers to buy a product of a specific brand is related to brand equity, according to Anselmsson et al. (2015). Brand equity is the value endowed by the brand to the product with the goal of establishing brand loyalty (Farquhar, 1989). There are two ways in which a brand can transfer value to a product (Anselmsson et al., 2015). The first is by its brand image, which is the associations and beliefs that the customer has regarding the brand (Keller, 1993). These associations and beliefs can be either experience attributes or credence attributes. A customer may have developed a positive attitude towards the brand because the customer liked the taste of the product which is an example of an experience attribute. Credence attributes are also relevant, as a customer may prefer a certain brand because of its sustainable reputation, for instance. These two attributes serve as a quality cue that is transmitted via the brand label.

The other way brand equity transfers value is by its brand strength (Anselmsson et al., 2015). Brand strength is frequently described by a number of practices, such as paying a premium for a BL product (Netemeyer et al. 2014). By demanding a premium, brands transmit that their product is worth more: more expensive products are considered to be of a higher quality. Paying a premium can thus be seen as a quality cue. Another example of brand strength is the allocation of products on the shelves in a supermarket. Tonioni and Di Stefano (2018) have shown that the design of the shelves in supermarkets has an effect on the value of the brand. Products of brands placed at eye-sights and in the center of the shelf are perceived to be of higher value than at other positions. The effectiveness of both brand image and brand strength was investigated by Anselmsson et al. (2014). In their study, by conducting a survey, they analyzed which way was most influential on the willingness to pay for a premium brand product. They concluded that both ways were effective in order to increase the willingness to pay for a product. BL is therefore primarily a marketing tool, but unlike COOL it focuses on brand image and brand strength as quality cues in order to persuade customers to purchase the product.

#### **1.2.4 Fairtrade labelling (FTL)**

Two perspectives illustrate why Fairtrade Labelling is considered a quality cue. The first perspective incorporates the fact that FTL is different from COOL and BL in that it is not strictly a marketing label, but additionally benefits the producer of the product and the environment. The fairtrade logo is awarded to products that help producers in developing countries. Governed by the organization Fairtrade International, the fairtrade label ensures better trading conditions, social development, improved labor conditions, and environmental development for its producers. Whereas both COOL and BL could be — theoretically — seen on any product as there are no regulations, this is impossible for FTL.

The second perspective is more customer-focused: FTL also allows customers to express their own social identity (Klintman, 2006). This means that customers prefer a certain product because it matches their beliefs and convictions. This assumption was examined by Kossman and Gomez-Suarez (2019), who investigated the effectiveness of FTL in their meta-study. The objective of their study was to identify extant literature on the words-deeds gap for the purchase of fairtrade products. The primary incentives to purchase fairtrade products were analyzed by comparing the results of 32 recent studies. Kossman and

Gomez-Suarez (2019) found that the fairtrade label enhances product valuation: "Morality tastes good and could be seen as a main driver of the purchase intention of fairtrade products" (Kossmann & Gomez-Suarez, 2019, p.10). Constructing a social identity is consequently a primary incentive for customers to buy FTL. For a customer, a fairtrade label can be seen as a quality cue, as it relates to credence attributes. A customer who values equality or sustainability may perceive the fairtrade logo as a cue for quality because of the societal and environmental benefits and because it matches with his own personal convictions. Societal and environmental benefits as well as the ability to express a personal identity are the major incentives why FTL is seen as a quality cue.

### **1.3 Food labels and personality traits**

There are distinct differences between FTL, COOL, and BL, but they share one property: all three labels are seen as a quality cue. However, the value of a label differs per person. *Perceived quality* is subjective. Customers who do not value sustainability and equality may not prefer FTL, whereas customers who do value these concepts may prefer FTL over other labels. The same holds true for COOL, a favorable image of a country is dependent on how a customer perceives this country. If a customer has had a negative experience with Spanish oranges, it is unlikely that this customer will be persuaded to buy the oranges if they have a Spanish COOL. For BL, if a customer is unfamiliar with the brand, the brand's strength is unlikely to persuade this customer to buy a product of the brand. To be able to characterize and segment a group of customers, the theory of personality traits was introduced (Gill & Hodgkinson, 2007). The theory of personality is employed to characterize how people genuinely feel, think, and act, which helps to understand and interpret the different behavior of customers. As Heckman, Ferguson & Corr (2011) pointed out: "Personality traits might explain preference because they provide a pool of stable constructs that can be used to understand heterogeneity in customer behavior". This means that personality traits can offer a more systematic approach to comparing customer behavior.

Prior research has shown that differences in personality traits do impact customers' preferences for food labels. A study carried out by Grebitus and Dumortier (2015) analyzed to which extent personality traits and personal values influenced customers buying behavior of organic food. Their research featured a choice experiment, in which they asked participants how many conventional tomatoes and how many organic tomatoes they would



buy for a certain price. In addition, to be able to compare the personalities between the participants, participants had to answer questions related to the Big Five Personality traits. This model, developed by Gill and Hodgkinson (2007), incorporates five personality traits: conscientiousness, extraversion, agreeableness, neuroticism, and openness to experiences. Grebitus and Dumortier (2015) hypothesized that personality traits, next to the price, can be significant predictors for how likely customers were to buy organic tomatoes. Their analysis showed that their hypothesis was supported: personality traits were significant predictors in determining how many organic tomatoes participants would buy. Participants that cared more about the environment and their personal health, were more likely to buy organic tomatoes. Personality traits outperformed personal values as a predictor, as personal values did not have a significant effect on the preference for the organic label. In addition, However, Grebitus and Dumortier (2015) found that agreeableness, conscientiousness, extraversion, and openness were the most significant predictors, as neuroticism did not play a significant role. This means that conscientiousness, openness, extraversion, and agreeableness are important personality traits with regards to food labels. Therefore, the current study will focus on these personality traits.

As described by Gill and Hodgkinson (2007), agreeableness describes the degree of kindness and trustworthiness of an individual. Persons with a high degree of agreeableness tend to be more cooperative and care more about others. They are usually caring, sympathetic, and good-natured. Therefore, considering that fairtrade has environmental and societal benefits for its producers, it could be hypothesized that personas with a high degree of agreeableness would prefer Fairtrade Labelling.

Extraversion is a trait that describes how social and active a person is (Gill & Hodgkinson, 2007). It distinguishes active, social individuals from more passive individuals. Extraverts prefer products because they possess some unique attributes; because they stand out. This personality trait matches well with both COOL and BL, as COO information and BL are used as marketing labels that differentiate the product from its competition. Thus, it could be expected that customers with a high degree of extraversion related characteristics are more prone to favor COOL and BL.

Conscientiousness describes the level of organization, reliability, and impulse control of a person (Gill & Hodgkinson, 2007). This personality trait relates to the extent to which an individual is organized, careful, hard-working and responsible. An individual with a high

degree of conscientiousness is very organized and who pays attention to details. According to De Pelsmacker, Driesen and Rayp (2005) fairtrade could be seen as a responsible type of label. Therefore, given that responsible behavior is a key focus of both conscientiousness and FTL, it can be hypothesized that conscientiousness is mostly linked to FTL.

Openness relates to a strong intellect and a high sense of originality (Gill & Hodgkinson, 2007). Persons with a high level of openness prefer novelty to convention. Someone who is low in openness dislikes needless complexity and prefers the familiar to the unusual (Almlund et al., 2011). COOL is a marketing tool used to mark a certain degree of specialty to the product. Customers with a high level of openness could, therefore, prefer COOL. Customers with a low level of openness are more prone to opt for the safe choice, which in terms of food labels would be BL. A low level of openness could therefore theoretically predict a preference for BL.

#### **1.4 Research question**

It is hypothesized that personality traits can predict the choice of a food label, as customers interpret these labels as quality cues based on search, experience, and credence attributes (Caswell & Mojduszka, 1996). The study of Grebitus and Dumortier (2015) has shown that personality traits can predict a preference for an organic label. Their study was limited, however, as it only took 1 label into account for only 1 product. An organic label is seen as a quality cue, similarly like FTL, COOL, and BL (Grebitus & Dumortier, 2015). Based on these similarities and the findings of Grebitus and Dumortier (2015), it is reasonable to hypothesize that personality traits are able to predict the choice of a food label. The findings of this study are relevant for marketers, as they want to segment and appeal to specific groups of customers with their labels.

In addition, prior research has not yielded conclusive evidence that personality traits can predict the choice of label. This is underlined by Thøgersen et al., (2017): "there is a need for research that more systematically investigates the possible interactions between COOL and FTL and the buying behavior of customers". On the basis of these two arguments, the present study will examine to what extent personality traits can predict the choice of food label of customers. This leads to the following research question and hypotheses:

*RQ: To what extent can personality traits predict the choice of food label (FTL, COOL, and BL) of customers?*

H1: Personality traits are significant predictors of the choice of a label of customers.

H2: A customer defined by a high score on agreeableness and conscientious, tends to prefer a FTL product

H3: A customer defined by a high score on extraversion and openness, tends to prefer a COOL product

H4: A customer defined by a low score on openness, tends to prefer a BL product

## **2. Method**

### **2.1 Materials**

An online experiment was carried out to assess to which extent personality traits can predict the choice of a food label. The goal of the experiment was to measure to what extent personality traits can predict the chosen label. To make a more realistic and natural comparison with a real-life situation, participants were shown an image of a supermarket shelf. This image consisted of 3 shelves, an upper, a middle, and a lower shelf. On each shelf, there were 2 positions, left and right. Therefore, there were 6 positions on the images. These 6 images were filled by 6 identical products which only differed in their food label. These food labels were: 1) Fairtrade Labelling, displayed by the Fairtrade Symbol used in the Netherlands; 2) Country of Origin Labelling, displayed by a country flag based on Aichner (2014); 3) Brand labeling, displayed by the logo of the brand; 4) private labeling, displayed by the logo of the supermarket and 5) and 6) non-labeled products, displayed by an image of the product or another design element. For example, the image of a tomato was added to the non-labelled image of canned tomatoes. Private labeling (PL) and the non-labeled products were added so that the participant would have more choice, to represent a real-life situation.

A total of 12 types of products were used, ranging from tea and orange juice to chocolate and rice. All products are displayed in table 1. All products were selected on the basis that they could have COOL, FTL, and BL, so real-life examples were taken from the Dutch supermarket Albert Heijn. This variety of products was chosen to generalize the findings of the current study across different product categories. To further enhance the realism of the design, participants were given a limited number of seconds to pick their labels. However, it should be made clear that even although this image tries to mimic a real-life situation, it is not completely comparable to a real-life situation. Participants had to use a computer or a mobile phone in order to answer, for instance. In addition, prizes were not a factor in the current study, therefore, prices of the products were not displayed.

Table 1: an overview of the different types of products and the COOL and BL labels used to display these products in the experiment. FTL is not displayed in this table, as every FTL product had the same fairtrade logo in the experiment.

Product type	COOL	BL
Black beans	Mexico	Bonduelle
Orange Juice	Spain	Appelsientje
Rice	India	Lassie
Sugar	Brasil	Jozo
Salt	the Netherlands	van Gilse
Chocolate Sprinkles	the Netherlands	de Ruijter
Couscous	Morocco	Lassie
Coffee	Brasil	Douwe Egberts
Chocolate	Brasil	Milka
Canned Tomatoes	Italy	Heinz
Tacos	Mexico	Santa Maria
Tea	India	Pickwick

With this design the position of the product could be a factor, therefore 3 different versions were made. The variable Position consisted of 1 element: the location of the product, for which, all 6 positions were coded, 1=lower left, 2=lower right, 3=middle left, 4=middle right, 5=upper left and 6=upper right. Following Tonioni, Serra, and Di Stefano (2019), the shelf at eye-sight has the biggest effect on the decision-making progress of a customer. In this experiment, the middle shelf best represented the shelf at eye-sight. Therefore, two of the three target labels (FTL, COOL, and BL) were allocated on this shelf. The remaining target label was positioned on the upper shelf, next to a PL product. This was done as Tonioni et al. (2019) suggest that familiar labeled products, such as PL, usually were positioned on the upper shelf. The non-labeled products were located on the lower shelf. This was consistent with every version. For the other labels, however, the 3 versions were designed in a way that per version, the same label was never positioned twice in the same position in a row. If FTL was positioned on the middle left position for black beans, then it was not positioned on the middle left position again for the consecutive product, in this case, orange juice. Not only did the position of a label differ per product, it also differed per version. If FTL was positioned on the middle left position in version 1, it was located on a different position in version 2. This way, every label was exposed to a similar degree to the location variable. The entire experiment and layout of the images can be found in Appendix C.

### 2.1.1. Pretest

A pretest was used in order to establish three elements: the amount of time per image, the shown flag on COOL products and the shown brand logo on BL products. 21 participants in total participated in the pre-test. The pretest itself is presented in Appendix A and all the results of the pretest were reported in Appendix B.

The first element was the limited amount of time. Based on Temple and Fraser (2014), it takes the average American customer 20 seconds to pick a product. The pretest tested if this assumption also sustained for the Dutch markets by showing 3 images of shelves. In the first image participants had 20 seconds, in the second they had 30 seconds and in the third they had 40 seconds. Then, participants were asked the question: *Did you have enough time to make a choice?*. A 5-point Likert scale was used, ranging from 1) far too little time, to 5) far too much time. The majority of participants (71.4%) thought that 20 seconds was enough time. Therefore, in the experiment, each image was shown 20 seconds.

The second element was related to the country of origin of a product. Participants were shown the name of four countries and they had to choose which countries best represented the product. In addition, participants were then shown a number of flags, which corresponded with the countries. In an open question, participants were asked if they knew which country belonged to the flag. By combining these results, it was clear which countries were most associated with which country and if participants knew the flag of the country. If participants knew the flag and the country was most associated with the product, then this flag was featured in the experiment. In most cases, the most-associated country was used, as shown in Appendix B. However, in the case of rice, Indonesia was most associated with rice, but only 19% of all participants knew what the flag of Indonesia looked like. Therefore, the second most associated country, India, was used, as shown in table 1.

The third element was the preferred brand label for the products. According to Anselmsson et al. (2014), familiar brands are more often seen as a quality cue. Therefore, the most familiar brand was shown in the experiment. In order to test which brand was the most familiar, participants were shown 4 brand logos and they were asked to choose which brand they preferred. Brands that were preferred the most featured in the experiment, as shown in table 1.

## 2.2 Subjects

Dutch consumers older than 18 were approached for the main experiment. In total, 138 participants completed the questionnaire. The mean age was 39.73 ( $SD = 13.48$ ; range 18 - 71); 69.6 percent were female. Education ranged from primary school to university and had 5 levels: 1) primary school; 2) secondary school; 3) MBO; 4) HBO and 5) WO. Most participants (43.5%) had the second-highest level of education, HBO. In total, all 138 participants indicated that they had the Dutch nationality. The three different versions were distributed as follows: version 1 was filled in by 38 participants (27.54%); version 2 was filled in by 44 participants (31.88%) and version 3 was filled in by the remaining 56 participants (40.58%).

To analyze the differences per version, a Chi-square analysis was carried out. The Chi-square test showed a significant relation between gender and version ( $\chi^2(2) = 23.76, p < .001$ ). Participants of version 1 were relatively less often female (39.5%) than in version 2 (75.0%) or than in version 3 (85.7%). Consequently, participants of version 1 were relatively more often male (60.5%) than in version 2 or than in version 3 (14.3%). However, there were no significant differences in gender between versions 2 and 3, as shown in table 2.

For education, the Chi-square analysis showed a significant relation between education and version ( $\chi^2(6) = 29.01, p < .001$ ). Participants of version 1 had relatively more often a MBO level of education (47.4%) than participants from version 2 (9.1%) or from version 3 (19.6%). In addition, participants of version 3 had relatively more often a HBO level of education (58.9%) than participants from version 2 (45.5%) and from version 1 (18.4%). Furthermore, participants from version 2 had relatively more often a WO level of education (43.2%) than participants from version 1 (26.3%) and from version 3 (17.9%). Moreover, participants from version 1 had relatively more often a WO level of education compared to participants from version 3. However, there were no significant differences between the versions for the high school level of education, as shown in table 2.

Table 2: Observed count and column percentages (between brackets) of the differences between gender and educational level across the 3 versions

Variable	Version 1	Version 2	Version 3
Female	15 (39.5%)	33 (75%)	48 (85.7%)
Male	23 (60.5%)	11 (25.0%)	8 (14.3%)
High School	3 (7.9%)	1 (2.3%)	2 (3.6%)
MBO	18 (47.4%)	4 (9.1%)	11 (19.6%)
HBO	7 (18.4%)	20 (45.5%)	33 (58.9%)
WO	10 (26.3%)	19 (43.2%)	10 (17.9%)

For age, a one-way analysis of variance showed a significant effect of age on version ( $F(2, 135) = 8.228, p < .001$ ). The mean age of participants in version 2 was significantly lower ( $M = 33.64, SD = 13.91$ ) than the mean age of participants in version 3 ( $M = 44.11, SD = 10.01$ ). However, there were no significant differences between version 1 ( $M = 40.34, SD = 15.10$ ) and 2 and version 1 and 3.

Table 3: Mean and standard deviations (between brackets) of age across the different versions

Variable	Version 1	Version 2	Version 3
Age	40.34 (15.10)	33.64 (13.91)	44.11 (10.01)

### 2.3 Design<sup>1</sup>

The independent variable of this study was the preferred food label, thus the selection of a participant. The preferred food label was measured by how many times these different types of food labels were chosen. The variable Food label had six levels: 1) FTL; 2) COOL; 3) BL; 4) PL; 5) filler 1 and 6) filler 2. Considering all participants were exposed to all levels, the study was based on a within-subjects design. The predictor variables are personality traits, with 4 levels in total: agreeableness, extraversion, neuroticism, and openness. The instruments section further elaborates on these predictor variables.

<sup>1</sup> In a strict sense, this study has a mixed design.



## 2.4 Instruments

The four personality traits, agreeableness, conscientiousness, extraversion, and openness, were adopted from Gill and Hodgkinson (2007), which were translated by Denissen et al. (2019) to Dutch. Every personality trait had 6 statements associated with it, making 24 statements in total. Participants ranked on a 6-point Likert scale to which degree they agreed or disagreed with the statement. This 6-point Likert scale ranged from totally disagree to totally agree. There was opted for a 6-point Likert scale, as Simms et al. (2019) pointed out that this scale would provide the best insights concerning the Big Five Personality Traits. This way, participants were forced to make a decision and could not choose a neutral option.

The personality trait Extraversion had statements associated with it such as *Ik ben die iemand hartelijk is, een gezelschapsmens is* (I am someone who is outgoing, sociable). The reliability of Extraversion comprising six items was good:  $\alpha = .81$ . Consequently, the mean of all six items was used to calculate the compound variable Extraversion, which was used in further analyses. The personality trait Agreeableness had statements associated with it such as *Ik ben iemand die behulpzaam, onzelfzuchtig is* (I am someone who is supportive, altruistic) ( $\alpha = .69$ ). The reliability of Agreeableness comprising six items was acceptable:  $\alpha = .69$ . Consequently, the mean of all six items was used to calculate the compound variable Agreeableness, which was used in further analyses. The personality trait Conscientiousness had statements associated with such as *Ik ben iemand die zich veel zorgen maakt* (I am someone who is often worried). The reliability of Conscientiousness comprising six items was poor:  $\alpha = .43$ , but would improve significantly if the third item, *Ik ben iemand die me regelmatig somber voelt* (I am someone who regularly feels down), was omitted. Therefore the third item for conscientiousness was removed and the reliability was good  $\alpha = .81$ . Consequently, the mean of all five items was used to calculate the compound variable Conscientiousness, which was used in further analyses. The personality trait Openness had statements associated with it as *Ik ben iemand die veel verbeeldingskracht heeft* (I am someone who is very imaginative). The reliability of Openness comprising six items was good:  $\alpha = .83$ . Consequently, the mean of all six items was used to calculate the compound variable Openness, which was used in further analyses.

In addition to the question regarding the personality traits, participants were also asked how frequently they bought the products from table 1 in a month. The answers ranged

from 0 to 10 times a month. Frequency was taken into account, as it could be a variable. Customers have already bought the products, so they have prior experiences and may thus prefer a label based on this experience. An example is displaying brand loyalty, for instance. As the frequency of the buying product could only predict the chosen label for that same product, the data was split by type of product. Therefore, each product had an associated label to it, making a total of 12 variables. This means that it was assumed that, for example, the frequency of buying tea could only predict the chosen label in the case of tea and not for a different product.

## **2.5 Procedure**

The online questionnaire was designed with the use of the program Qualtrics and participants were approached via social media and other types of networks. Participants were asked to fill in the questionnaire, which they could do on either their mobile phone or a computer. Before confirming their participation, the respondents were informed about the confidentiality of the experiment and that participation was voluntary. In addition, participants were informed of the topic of the study but were not informed of the specific goals, aims, or the variables. After confirming their participation, participants received basic instructions for the first part, which involved the images of the products. The second part involved the personality traits. The experiment ended with questions about age, gender, education, and nationality. The whole experiment took approximately 10 minutes in total. As this was a relatively short experiment, participants were not rewarded with an incentive, other than the gratitude of the researcher.

## **2.6 Statistical treatments**

Regression analyses were carried out to test to what extent personality traits can predict the preferred food label of a customer. In addition, regression analyses were carried out to test the effect of frequency and age. The position variable, gender, and education were analyzed by a Chi-square analysis.

### 3. Results

The first part of this result section examines the label choice of participants. The second section focuses on the prediction value of personality traits. The third section addresses the location of the product in the image featured in the experiment. The final section examines other factors, such as the effect of age, education, and the frequency of buying products. The effects of the aforementioned variables were also analyzed on a product type level, which is shown in Appendix E.

#### 3.1 Product choice

The frequency analysis showed that out of a total of 1656 products, Fairtrade Labelling was chosen 392 times (23.7%), Country of Origin Labelling was chosen 75 times (4.5%), Brand Labelling was chosen 392 times (23.7%), Private labeling was chosen 201 times (12.1%), Fillers 1 and 2 were chosen 297 (18%) and 299 (18%) times respectively, so the fillers combined were chosen 696 times (36%). See table 4 for the count and percentages per label.

Table 4. Count and percentages of the chosen labels (N=1656)

	Count	Percentage
FTL	392	23.7%
COOL	75	4.5%
BL	392	23.7%
PL	201	12.1%
NL	696	36%

#### 3.2 Influence of personality traits on the choice of label

In order to answer the main research question of this study, the personality traits in relation to the preferred product were analyzed. Considering that the results for PL and NL do not contribute to answering the research question, the results of these labels are moved to Appendix D. This section is structured by the three types of labels. See table 5 for an overview of the results.

##### 3.2.1 Fairtrade Labelling

The multiple regression analysis showed that the four compound variables entered,

extraversion, agreeableness, conscientiousness, and openness, explained 4.5% of the variance of the number of chosen FTL products ( $F(4,1651) = 19.60, p < .001$ ). Agreeableness was shown to be a significant predictor of the number of chosen FTL products ( $\beta = .08, p = .003$ ). The number of chosen FTL products increases with .08 *SD* for each increase of 1 *SD* of Agreeableness, given that all other variables are kept constant.

Moreover, Openness was a significant predictor of the number of chosen FTL products ( $\beta = .17, p < .001$ ). The number of chosen FTL products increases with .17 *SD* for each increase of 1 *SD* of Openness, given that all other variables are kept constant.

However, Extraversion was not a significant predictor of the number of chosen FTL products ( $\beta = -.02, p = .577$ ). In addition, Conscientiousness was not a significant predictor of the number of chosen FTL products ( $\beta = -.05, p = .06$ ).

### **3.2.2 Country of Origin Labelling**

The multiple regression analysis showed that the four variables entered, extraversion, agreeableness, conscientiousness, and openness, did not explain any of the variance, 0.0%, of the number of chosen COOL products ( $F(4,1651) = 1.08, p = .365$ , adjusted  $R^2 = .00$ ).

Extraversion was not shown to be a significant predictor of the number of chosen COOL products ( $\beta = -.03, p = .254$ ). In addition, Agreeableness was not shown to be a significant predictor of the number of chosen COOL products ( $\beta = .02, p = .542$ ). Moreover, Conscientiousness was not a significant predictor of the number of chosen COOL products ( $\beta = -.03, p = .234$ ). Furthermore, Openness was not a significant predictor of the number of chosen COOL products ( $\beta = -.03, p = .205$ ).

### **3.3.3 Brand Labelling**

The multiple regression analysis showed that the four variables entered, extraversion, agreeableness, conscientiousness, and openness, explained 1.1% of the variance of the number of chosen BL products ( $F(4,1651) = 5.15, p < .001$ ). Openness was shown to be a significant predictor of the number of chosen BL products ( $\beta = -.11, p < .001$ ). The number of chosen BL products decreases with .11 *SD* for each increase of 1 *SD* of Openness, given that all other variables were kept constant.

However, Extraversion was not a significant predictor of the number of chosen BL products ( $\beta = .02, p = .528$ ). In addition, Conscientiousness was not a significant predictor of the

number of chosen BL products ( $\beta = .04, p = .172$ ). Furthermore, Agreeableness was not a significant predictor of the number of chosen BL products ( $\beta = -.01, p = .886$ ).

Considering that personality traits can only minimally explain the variance, this analysis did minimally contribute to answering the research question. Therefore, other variables were analyzed, to explain more of the variance. The effect of these variables is explored in section 3.3 to section 3.6.

Table 5: The intercept,  $R^2$ ,  $F$  value,  $\beta$  value, standard error and the Beta for the prediction of the three personality traits on the number of chosen products per label

variable	$B$	$SE\ B$	$\beta$
<b>Fairtrade labelling</b>			
Intercept	-.34	.10	
$R^2$	.43		
$F$	19.60		
Agreeableness	.06	.02	.08*
Conscientiousness	-.02	.01	-.05
Extraversion	-.01	.01	-.02
Openness	.09	.01	.17*
<b>Country of Origin labeling</b>			
Intercept	.03	.05	
$R^2$	.00		
$F$	1.01		
Agreeableness	.01	.01	.02
Conscientiousness	-.01	.01	-.03
Extraversion	-.01	.01	-.03
Openness	.01	.01	.03
<b>Brand Labelling</b>			
Intercept	.44	.11	
$R^2$	1.1		
$F$	5.41		
Agreeableness	-.01	.02	-.01*
Conscientiousness	.02	.01	.04
Extraversion	.01	.01	.02
Openness	-.06	.01	-.11*

\* $p < 0.05$

### 3.3 The effect of the Location of the product on the shelf on the chosen label

The next item that could be a factor was the position of the product. The product could have six positions in total, however, filler 1 was always placed in the lower left position and filler 2 was always placed in the lower right position. Therefore, the 4 remaining

positions will be analyzed by conducting a Chi-square analysis. See table 6 for the observed count and percentages between the four different positions for the four different labels.

A Chi-square test showed a significant relation between the position of the product and the label choice ( $\chi^2(9) = 469.923, p = .001$ ). On the middle left position, BL was preferred significantly more often on the middle left position (40.3%) than FTL (30.9%) and COOL (32%). In addition, COOL was chosen significantly more often on the middle left position (32.0%) than FTL (30.9%).

On the middle right position, FTL was chosen significantly more often (47.2%) than COOL (20.0%) and BL (29.6%). However, the Location of the product did not contribute to a significant relation in the case of chosen COOL and BL products.

On the upper left position, COOL was chosen more often (34.7%) than FTL (14.0%), BL (15.3%), and PL (27.9%). In addition, PL was preferred on the upper left position significantly more often than BL and FTL. However, the Location of the product did not contribute to a significant relation in the case of chosen FTL and BL products.

On the upper right position, PL was chosen significantly more (72.1%) often than FTL (7.9%), COOL (13.3%) and BL (14.8%). However, the Location of the product did not contribute to a significant relation in the case of chosen FTL, COOL and BL products. See table 5 for the observed counts and percentages.

To conclude this section, it can be hypothesized that every type of label has a specific optimal position. FTL was chosen most often if it was located on a middle shelf. For COOL, the left side did statistically better than the right side. For BL, a position on the middle shelf was also the optimal position. For PL, the right side outperformed the left side.

Table 6. Observed count and column percentages (between brackets) between the four different positions for the four different labels

Position	FTL	COOL	BL	PL
Middle left	121 (30.9%)	24 (32.0%)	158 (40.3%)	0 (0.0%)
Middle right	185 (47.2%)	15 (20.0%)	116 (29.6%)	0 (0.0%)
Upper left	55 (14.0%)	26 (34.7%)	60 (15.3%)	56 (27.9%)
Upper right	31 (7.9%)	10 (13.3%)	58 (14.8%)	145 (72.1%)

Note: PL products were not present on the middle shelf, thus, the observed count is 0.

### 3.4 Frequency of buying a product as a predictor for the chosen label

The frequency that customers buy certain products could play a role, as customers could display brand loyalty for instance. For this analysis, only the significant results were reported, as frequency was not a good predictor for the other products.

A simple regression analysis showed that the one variable entered, Frequency of buying couscous, explained 3.6% of the variance of the number of chosen BL couscous ( $F(1,136) = 6.136, p = .014$ ). The Frequency of buying couscous was shown to be a significant predictor of the number of chosen BL couscous ( $\beta = -.21, p = .014$ ). The number of chosen BL couscous decreases with .21 *SD* for each increase of 1 *SD* of the Frequency of buying couscous, given that all other variables are kept constant. In addition, a simple regression analysis also showed that the one variable entered, Frequency of buying tea, explained 2.2% of the variance of the number of chosen BL tea ( $F(1,136) = 4.133, p = .044$ ). The Frequency of buying tea was shown to be a significant predictor of the number of chosen BL tea ( $\beta = .17, p = .044$ ). The number of chosen BL tea increases with .17 *SD* for each increase of 1 *SD* of the Frequency of buying tea, given that all other variables are kept constant.

However, a simple regression analysis showed that the one variable entered, frequency, was not a significant predictor for the number of chosen FTL products ( $\beta = .12, p = .563$ ). In addition, Frequency was not a good predictor for the number of COOL products ( $\beta = .06, p = .328$ ). See table 7 for an overview of the significant data.

Table 7. The intercept,  $R^2$ ,  $F$  value,  $\beta$  value, standard error and the Beta for the prediction of frequency of buying a product on the number of chosen BL products

variable	Intercept $B$	Intercept $SE B$	$F$	$R^2$	$B$	$SE B$	$\beta$
<b>Brand Labelling</b>							
Couscous	.30	.05	6.14	.036	-.05	.02	-.21
Tea	.38	.06	4.13	.022	.05	.02	.17

### 3.5 Age as a predictor for the chosen label

A simple regression analysis showed that the one variable entered, Age, explained 2.3% of the variance of the number of chosen FTL products ( $F(1,1654) = 39.38, p < .001$ ). Age was shown to be a significant predictor of the number of chosen FTL products ( $\beta = .15, p < .001$ ). The number of chosen FTL products increases with .15  $SD$  for each 1  $SD$  of Age, given that all other variables are kept constant.

In addition, the simple regression analysis showed that the one variable entered, Age, explained 0.8% of the variance of the chosen number of BL products ( $F(1,1654) = 13.682, p < .001$ ). Age was shown to be a significant predictor of the number of chosen BL products ( $\beta = -.91, p < .001$ ). The number of chosen BL products decreases with .91  $SD$  for each 1  $SD$  of Age, given that all other variables are kept constant.

However, Age was not a significant predictor in the case of COOL ( $\beta = -.12, p = .783$ ). See table 8 for an overview of the results.

To conclude this section, the predictor Age was able to significantly predict the preferred label in the case of fairtrade. This relation was positive, meaning that when participants were older, they preferred FTL more often. For BL, the predictor Age was significant, but the relation was negative, meaning that participants who were younger preferred BL more often. However, it should be noted that even although the analyses showed that Age is a significant predictor, Age only minimally explained the variances for the food labels.



Table 8. The intercept,  $R^2$ ,  $F$  value,  $\beta$  value, standard error and the Beta for the prediction of age on the number of chosen products per label

variable	$B$	$SE\ B$	$\beta$
<b>Fairtrade Labelling</b>			
Intercept	.05	.03	
$R^2$	.023		
$F$	39.38		
Age	.01	.01	.15*
<b>Country of Origin Labelling</b>			
Intercept	.03	.02	
$R^2$	.00		
$F$	1.02		
Age	.00	.00	.03
<b>Brand Labelling</b>			
Intercept	.35	.03	
$R^2$	.008		
$F$	13.68		
Age	-.01	.01	-.09*

\* $p < 0.05$

### 3.6 The Effect of Gender on the chosen label

A Chi-square test showed a significant relation between Gender and the label choice ( $\chi^2(4) = 24.193, p < .001$ ). Female participants chose FTL more often (26.4%) than male participants (17.5%). In addition, male participants chose BL more often (30.0%) than female participants (20.9%). However, gender did not contribute to a significant relation in the case of COOL, as shown in table 9.

To conclude this section, it can be stated that gender had a significant effect on the preferred label of participants. This was true for FTL and BL. Female participants chose more often FTL, whereas male participants chose BL more often.

Table 9. Observed count and column percentages (between brackets) between the two levels of gender for the three different labels.

Label	Female	Male
FTL	304 (26.4%)	88 (17.5%)
COOL	52 (4.5%)	23 (4.6%)
BL	241 (20.9%)	151 (30.0%)

### 3.7 The Effect of Education on the chosen label

For Education, Private Labelling (PL) and Non-labelled (NL) labeling were included in this report to fully illustrate the effect of the different educational levels, as omitting PL and NL from this report would not accurately display the differences between the educational levels.

A Chi-square test showed a significant relation between Education and the label choice ( $\chi^2(12) = 47.019, p < .001$ ). Participants with a HBO level chose FTL more often (29.2%) than participants with a WO (22.9%), MBO (17.2%), or High School (9.7%) level of education. In addition, participants with a WO level chose FTL more often than MBO and High School level of education. Moreover, participants with a High School level chose PL more often (16.7%) than participants with a WO (15.4%), MBO (14.4%), or HBO (8.3%) level of education. Furthermore, participants with a WO level chose PL more often than participants with a HBO or MBO level of education. Additionally, participants with a MBO level chose PL more often than participants with a HBO level of education.

However, Education did not contribute to a significant relation in the case of COOL, BL, and NL, as shown in table 10.

To conclude this last section, education is a significant factor when it comes to FTL and PL. Participants with a higher educational level such as HBO preferred FTL more often than a lower educational level, such as MBO. At the MBO level, however, PL was the preferred choice.

Table 10. Observed count and column percentages (between brackets) of the five levels of education for the five different labels

Label	High School	MBO	HBO	WO
FTL	7 (9.7%)	68 (17.2%)	210 (29.2%)	107 (22.9%)
COOL	5 (6.9%)	17 (4.3%)	34 (4.7%)	19 (4.1%)
BL	23 (31.9%)	105 (26.5%)	149 (20.7%)	115 (24.6%)
PL	12 (16.7%)	57 (14.4%)	60 (8.3%)	72 (15.4%)
NL	25 (34.7%)	149 (37.6%)	267 (37.1%)	155 (33.1%)

## **4. Conclusion**

The present study aimed to identify to which degree personality traits can predict the chosen food label of a customer. Food labels are seen as a quality cue in the eyes of customers, but subjectivity is at play, as every customer perceives quality differently. The concept of personality helps to differentiate between customers based on traits. It was hypothesized that personality traits can contribute to a better understanding of why customers choose a certain food label. This is relevant for marketers, as they want to target specific groups of customers. Participants were shown 12 images of supermarket shelves of a variety of products with 5 different labels: Fairtrade Labelling (FTL), Country of Origin Labelling (COOL), Brand Labelling (BL), Private Labelling (PL) and non-labeled labeling (NL) and were then asked to choose their preferred type of label. In addition, participants filled in 4 of the 5 Big Personality Traits. To better explain the variance of the results, the position of the product, the frequency of buying a product, age, and education were included as well. The research question of this study was:

*To what extent can personality traits predict the choice of food label (FTL, COOL, and BL) of customers?*

Grebitus and Dumortier (2015) showed that personality traits can accurately predict a preference for organic food products, thus based on this research, it was expected that personality traits can also predict the food label in the case of fairtrade, country of origin and brand. The main hypothesis was divided per label, so every label had a hypothesis associated with it.

### **4.1 Fairtrade Labelling**

For Fairtrade Labelling (FTL), it was hypothesized that a high degree of agreeableness and conscientiousness are able to predict the chosen food label. As these two traits are closely linked to social welfare and responsible behavior (Almlund et al., 2011; Gill & Hodgkinson, 2007), it was assumed that they can predict a food label that benefits social welfare: the fairtrade label. The analysis showed that personality traits are significant predictors, but that they can only minimally explain the variance: 4.5% of the variance was explained. Conscientiousness was not a good predictor, but agreeableness was. Participants who are more cooperative and care more about others are more likely to choose a fairtrade label. Therefore, it can be assumed that the credence attributes of a fairtrade label, such as

social welfare and environmental benefits that are associated with fairtrade, are important factors in the decision-making progress of a customer. This is in line with the research of Klintman (2006) and Kosmann and Gomez-Suarez (2019). Klintman suggested that the fairtrade label allows customers to express their identity by their FTL choice. Kosmann and Gomez-Suarez (2019) showed that morality was an important driver for customers to buy FTL products. The results of the present study contribute to these findings that openness can also be a significant predictor for a FTL choice. A high degree of openness is characterized by preferring novelty over convention. To explain why openness is a significant predictor, it could be theorized that choosing the fairtrade label is seen as an original choice. To my knowledge, no prior study has identified that the fairtrade label is also an original choice. Most studies, like the studies of Tang et al. (2016) or Darian et al. (2015), showed that the main significant drivers for FTL were benefits like social welfare and improved working conditions. It is noteworthy to mention that fairtrade consumption in the Netherlands is increasing steadily, but that fairtrade consumption still only makes up 1% of all food expenses on the Dutch market in 2018 (Logatcheva, 2019). In this regard, it is reasonable to believe that fairtrade is an original choice. However, this is only an assumption, future research should investigate if openness is also a significant predictor for FTL products in different markets. Another explanation for this result can be found in the design of the study. Even although fairtrade is a very relevant food label, not every product, such as candy, certain vegetables and fruits, and other products, do have a Fairtrade label. In this study, every product had a fairtrade label, so fairtrade may be overrepresented in this study, compared to the real-life situation. In addition, Darian et al. (2015) suggested that their experiment, in which they tested a preference for FTL, was influenced by the social desirability bias, meaning that participants chose FTL not because they would do this in real life, but because this was morally the best choice. The current study has not taken the social desirability bias into account, which could be a potential limitation of this study. The hypothesis if the personality traits could predict the number of chosen FTL products, was partially supported, only for agreeableness.

To better explain the variance of the number of chosen FTL products, the position of the product, the frequency of buying products, age, and education were also analyzed. The position of the product showed that the optimal position for FTL was on the middle shelf. This is not in line with Tonioni, Serra, and Di Stefano (2019), as they showed that the best

position for BL products is the middle shelf, whereas the upper shelf is better suited for less familiar labels. This is a surprising result, as considering that fairtrade only makes up 1% of the total food expenses of Dutch customers, FTL can be seen as a more unfamiliar label and thus it can be expected that the upper shelf would be the optimal location. A deeper analysis of how FTL compares to BL is given in section 4.4. In addition, Age was also a significant predictor for the number of chosen FTL products. Older participants more often chose FTL than younger participants. Studies have shown that in recent years, customers pay more attention to the environment and social welfare (e.g. Diehl, Terlutter & Mueller, 2016), however other studies have pointed out that younger customers are less influenced by this movement (Naderi & Van Steenburg, 2018). The current study contributes to these findings by suggesting that older participants are more likely to choose FTL than younger participants.

Furthermore, gender also contributed to the number of chosen FTL products. Female participants more often chose FTL products than male participants. This is in line with Beldad and Hegner (2018), who showed that the purchase intention of FTL products is moderated by gender. They found, similarly to the current study, that the purchase intention of Dutch women was higher than that of Dutch men. In addition, this also is in line with stereotypes about men and women (Ellemers, 2018). In this stereotype, women tend to be more caring, whereas men tend to avoid complexity (Ellemers, 2018).

Finally, the level of education was also a factor on the number of chosen FTL products. Participants with a higher level of education more often chose for FTL than participants with a lower level. This is in line with Darian et al. (2015), who studied the motivations of customers for buying fairtrade coffee. They suggest that this could be explained by the theory that people with a higher level of education are more open-minded and more conscious of the world around them (McMahon, 2009). However, the frequency of buying products was not shown to be a good predictor for the number of chosen FTL products. This means that it can be assumed that brand loyalty does not play a role for fairtrade in the decision-making process of customers.

All in all, for FTL, it can be stated that personality traits only minimally explain the variance of the number of chosen FTL products. Other factors, such as the position of the product, age, and education are also factors that marketers should keep into consideration by targeting groups of customers. The results of the current study are often in line with other

studies on FTL. The new element of this study is that the degree of openness can also predict the number of chosen FTL products.

#### **4.2 Country of Origin Labelling**

For Country of Origin Labelling (COOL), it was hypothesized that participants with a high degree of extraversion and openness tend to choose a COOL product. In previous studies (e.g. Aichner, 2014), COOL was found to be a marker for uniqueness. People with a high degree of extraversion like to stand out, they like to be unique (Gill & Hodgkinson, 2007). A high degree of openness is characterized by preferring novelty over convention. Both personality traits can be seen as a preference for specialty, which is similar to how COOL is a marker for uniqueness. For this reason, it was expected that a high score on openness and extraversion were able to predict the number of COOL products. The analysis showed that no personality trait was a significant predictor for the number of chosen COOL products. These findings were not in line with Mueller and Snolzoki (2010), as they did find significant differences. However, their study was focused on the effect of COO information, whereas the present study had a more broad focus. As a result, the number of chosen COOL products is low, as only 4.5% of the participants chose a COOL product. In fact, COOL was chosen less than non-labeled products. This begs the question if COOL is still considered a quality cue. Previous studies have shown that COOL can be a quality cue, but, as Hornikx et al. (2020) pointed out, the effect of COO information is most effective when a customer has a favorable image of the country with which the product is associated. In the pretest of the current study, participants were asked with which country they most associated the product. This question was used to determine which flag of a country would represent COOL for the products. However, *most associated with* is not exactly the same as *a favorable image of*: participants who thought rice was most associated with India, could have a neutral or even a negative image of Indian rice. If participants had a neutral or a negative image of the most associated country, then it can be expected that they do not see COOL as a cue for quality. Therefore, it can be suggested that the question in the pretest was not specific enough, as the element of *a favorable image of* was critically absent in the question. Thus, this limitation of the current study underlines the findings of Hornikx et al (2020), as it shows the importance of the favorable image of a country, with which the product is associated. Future research should incorporate this element and more systematically investigate if COOL is considered a

cue for quality on the Dutch market. The hypothesis if the personality traits could predict the number of chosen COOL products, was thus rejected.

To better explain the variance of the number of chosen COOL products, the position of the product, the frequency of buying products, age, and education were also analyzed. The analysis of the position of the product revealed that the optimal position for COOL was on the left side of the shelf. To my knowledge, no prior research has shown that the left side of a shelf is the optimal position for a COOL product. However, a real-life shelf does not have a left and a right side, but usually a great number of horizontal positions. The practical implication of these findings is thus limited. Future research should more systematically investigate the optimal position for COOL products and should elaborate on the practical implications of the effect of position on COOL products. Furthermore, the analysis on frequency of buying products, age, and education did not contribute to a significant relation. Possibly, the data sample was too small to accurately describe the relation of the aforementioned factors on the number of COOL products.

All in all, for COOL, it can be stated that personality traits were not able to predict the variance of the number of chosen COOL products. The position on the shelves of the product was the only finding that could explain some of the variance of the number of chosen COOL products. Other factors, such as age, frequency of buying products and education did not contribute to a significant result. Considering that the number of chosen COOL products is relatively low, it is difficult to draw many conclusions from the analyses, which consequently limits the relevancy of the practical implications. However, this study contributes to the theory of Hornikx et al (2020) in that a favorable image of a country with which the product is associated is vital to the marketing of COOL.

### **4.3 Brand Labelling**

For Brand Labelling (BL), it was hypothesized that participants with a low degree of openness tend to choose BL more often. Customers with a low level of openness are more prone to opt for the safe choice, which in terms of food labels would be BL. For this reason, it was hypothesized that a low level of openness was able to predict a preference for BL. The analyses showed that a low degree of openness was a good predictor for the number of chosen BL products. It was shown that customers who prefer the familiar to the unusual tend to choose a BL product. This means that the hypothesis was supported. Tonioni, Serra and Di

Stefano (2019) showed that brand image was an important driver for customers to choose a BL products. Brand image is the associations and beliefs that the customer has regarding the brand, which can be interpreted as a quality cue. It can be assumed that participants with a low degree of openness had favorable associations and beliefs towards the brands. In addition, the frequency analysis showed that participants who often bought tea more often chose BL tea. It could be hypothesized that this is brand loyalty, as participants preferred the BL label if they buy the product regularly. This could mean that the favorable associations and beliefs towards the brand have developed into brand loyalty. However, frequency was only a good predictor in the case of tea and not for the other products. The exception, in this case, is couscous, as if participants bought more couscous, the number of chosen BL couscous decreases. Based on these two findings, it is difficult to assume that frequency was a good predictor for BL products. In addition, openness as a predictor was only able to explain 1.1% of the variance of the number of chosen BL products. This means that the relevancy of personality traits as significant predictors of BL can be disputed. The analysis of the location of the product showed that the optimal position for BL products was on the middle shelf. This is thus in line with Anselmsson et al. (2014), as they suggested that a BL product placed on eye-sight, would outperform the other positions. However, it could be argued that every shelf was at eye-sight, as the experiment was conducted by the use of an electronic device. Furthermore, gender contributed to the number of chosen BL products. Male participants chose BL products more often than female participants. As BL is considered to be a safe choice, this is in line with stereotypes about men and women. In this stereotype, women tend to be more caring, whereas men tend to avoid complexity. The male preference for BL products fits well in this stereotype. Moreover, age was shown to be a good predictor, since younger participants chose BL products more often. This is in line with Naderi and Van Steenburg (2018), as they showed that younger customers are more self-centered. BL is seen as a quality cue that only benefits its consumer, as opposed to FTL, for instance. It can be assumed that younger people choose BL more often because they are more self-centered and only look for the benefits to the consumer of the product. Furthermore, education was not shown to contribute to the number of chosen BL products. This means that BL is valued equally by participants with a lower and a higher level of education.



All in all, for BL, it can be stated that personality traits only minimally explained the variance of the number of chosen BL products. The relevancy of brand loyalty can be disputed in this study. Other factors, such as the position of the product, gender, and age are also factors that marketers should keep into consideration by targeting groups of customers. The results of the current study are in line with prior research. For future research, the prize of a product should be incorporated, as prior research has shown that the prize is a significant predictor (Greibitus & Dumortier, 2014). This variable was not included in the present study but the price could be an interesting addition for future studies.

#### **4.4 Practical / societal relevance**

To conclude, personality traits were able to predict the number of chosen products for a food label, but the explained variance is very small, which greatly limits the conclusion that can be drawn from the results. The relevance of this study can be denoted by its two practical goals.

The first goal was to gain a better understanding of to what extent personality traits can predict the number of chosen products for a variety of food labels. This was still unknown in the scientific community (Thøgersen et al., 2017). This study shows that personality traits cannot be valued equally regardless of the food label. In other words, the effectiveness of the prediction is dependent on the food label. Greibitus and Dumortier (2014) showed that personality traits can be good predictors for organic products. The present study, in contrast, showed that personality traits can only minimally explain the variance. This difference could be explained by stating that Greibitus and Dumortier only (2014) focused on one specific label with one specific product. The current study featured multiple labels for a variety of products: the methods were not similar. In addition, the organic label may differ from the food labels used in this study, because a driver for organic products is benefits related to health to the individual, as no pesticides are used on the products, for instance (Greibitus & Dumortier, 2014). This driver is not as relevant for FTL, COOL, and BL. The current study leads to a better understanding of the relation between personality traits and food labels and contributes to this discussion by suggesting that personality traits can only minimally predict the chosen number of product per label. Future research should incorporate multiple labels with a sustainable focus, such as a lower carbon footprint label, a recycled label, or an animal welfare-related label, and examine to what extent personality traits can predict the choice of

label. This comparison could be interesting, as it is likely that these labels can be predicted by the same personality trait.

The second goal of this study was to identify the practical implications of personality traits for food labels. This study showed that for marketing purposes, personality traits are not to be ignored, but they do have to be taken lightly. In essence, this study shows that other factors such as product position, gender, age, and education should be carefully taken into consideration by designing a marketing plan to target groups of customers.

Perhaps the most interesting aspect that this study has produced is the comparison between FTL and BL. The results showed similarities between these two types of label but also distinct differences. As for the similarities, both labels were chosen an equal number of times and the optimal position for both was the middle shelf. However, a high degree of openness was a good predictor for FTL, whereas a low degree of openness was a good predictor for BL. In addition, younger participants chose BL more often, whereas older participants chose FTL more often. Furthermore, gender showed a difference between the two labels, as men chose BL more often, whilst women preferred FTL. Finally, in regard with education, this research showed that participants with a higher level of education were more prone to chose FTL, whereas participants with a lower level preferred BL more often. To my knowledge, no prior research has shown that FTL and BL are direct opposites on multiple fronts. One possible reason for the similarities could be that FTL is seen as a brand. In the Netherlands, *Fairtrade Original* is a brand that solely focuses on fairtrade products. However, this is just one brand in a market where many brands use the fairtrade logo. Future research should more systematically explore if a branded fairtrade label acts more as a fairtrade label or as a brand label.

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## Appendix A: Pretest

Je bent uitgenodigd om mee te doen aan een pre-test naar voedsel etiketten. Dit onderzoek wordt uitgevoerd door Sven de Ruiter, student Master International Business Communication aan de Radboud Universiteit.

Wat wordt er van je verwacht?

Meedoen aan het onderzoek houdt in dat je een online vragenlijst gaat invullen. De vragen hebben betrekking op hoe je voedsel etiketten ziet. Het invullen van de vragenlijst kost ongeveer 5 minuten.

### Vrijwilligheid

Je doet vrijwillig mee aan dit onderzoek. Daarom kan je op elk moment tijdens het onderzoek je deelname stopzetten en je toestemming intrekken. Je hoeft niet aan te geven waarom je stopt. Je kunt tot twee weken na deelname ook uw onderzoeksgegevens laten verwijderen. Dit kan je doen door een mail te sturen naar [s.deruiter@student.ru.nl](mailto:s.deruiter@student.ru.nl)

### Wat gebeurt er met mijn gegevens?

De onderzoeksgegevens die we in dit onderzoek verzamelen, zullen door wetenschappers gebruikt worden voor datasets, artikelen en presentaties. De anoniem gemaakte onderzoeksgegevens zijn tenminste 10 jaar beschikbaar voor andere wetenschappers. Als we gegevens met andere onderzoekers delen, kunnen deze dus niet tot u herleid worden. We bewaren alle onderzoeksgegevens op beveiligde wijze volgens de richtlijnen van de Radboud Universiteit.

### Heeft u vragen over het onderzoek?

Als je meer informatie over het onderzoek wilt hebben, kan je contact opnemen met Sven de Ruiter, (e-mail: [sderuiter@student.ru.nl](mailto:sderuiter@student.ru.nl))

### Ethische toetsing en klachten

Heb je klachten over het onderzoek, dan kan je contact opnemen met de verantwoordelijke onderzoeker.

Ook kunt u een klacht indienen bij de secretaris van de Ethische Toetsingscommissie Geesteswetenschappen Radboud Universiteit ([etc-gw@ru.nl](mailto:etc-gw@ru.nl)).

Voor vragen over de verwerking van gegevens in dit onderzoek kan je contact opnemen met:  
dataofficer@let.ru.nl

**TOESTEMMING: Geef hieronder uw keuze aan.**

Door te klikken op de knop 'Ik ga akkoord' geef je aan dat je:

- bovenstaande informatie heeft gelezen
- vrijwillig meedoet aan het onderzoek
- 16 jaar of ouder bent

Als je niet mee wilt doen aan het onderzoek, kan je op de knop 'Ik wil niet meedoen' klikken.

Ik ga akkoord

Ik wil niet meedoen

**First part introduction**

Deze pre-test bestaat uit 3 onderdelen.

In het eerste onderdeel krijg je zo direct 3 keer een supermarktschap te zien waarin producten zijn afgebeeld.

Beeld je in dat je voor dit schap staat. Welk product zou je dan kopen?

Alle producten hebben een nummer, dus onthoud goed welk nummer jouw favoriete product heeft.

Je krijgt maar een aantal seconden om het schap in je op te nemen, dus kijk goed!

Door op het pijltje te drukken, ga je naar de schappen.

**Supermarket Shelves 20 seconds Image**

**These page timer metrics will not be displayed to the recipient.**

First Click: *0 seconds*

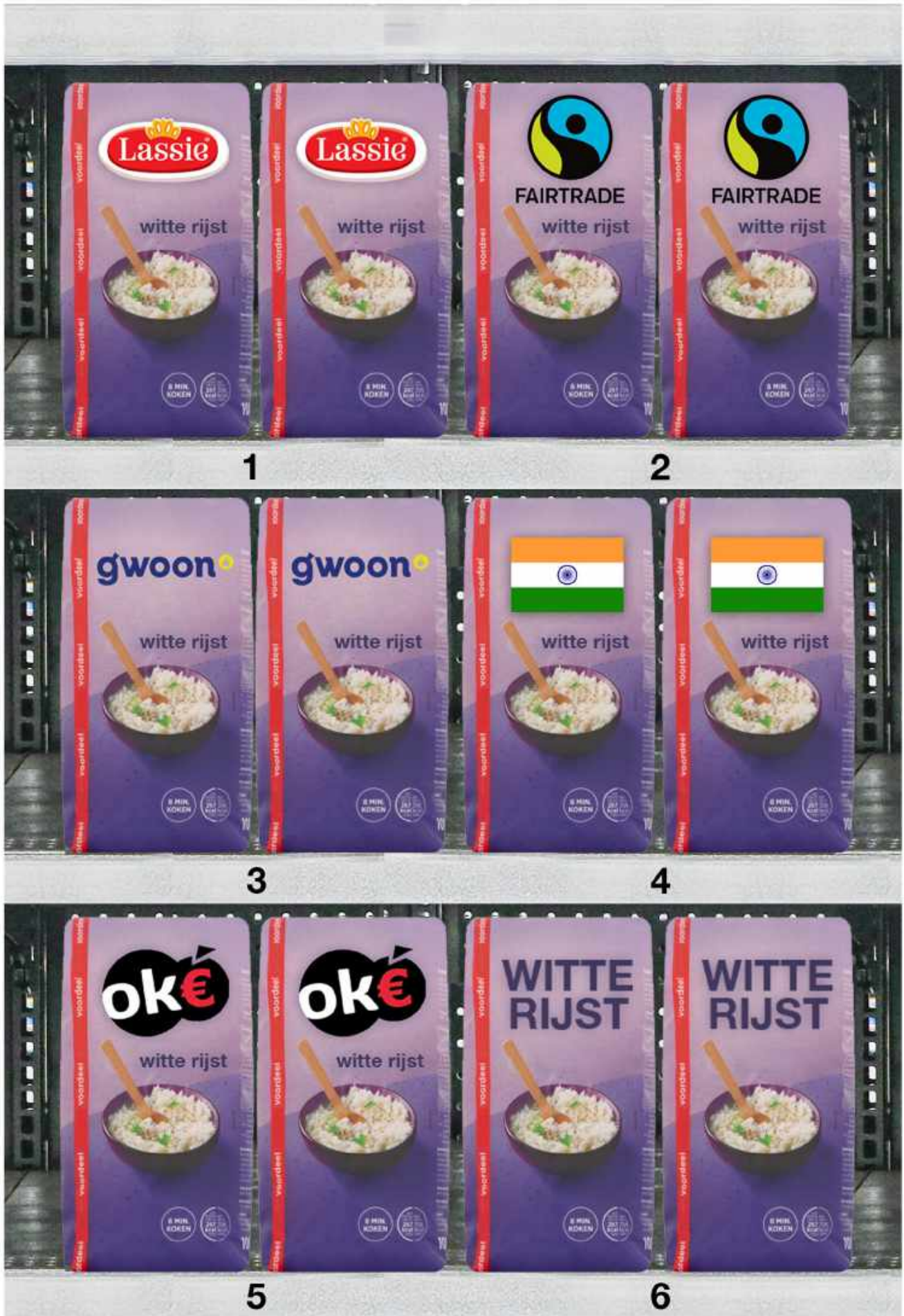
Last Click: *0 seconds*

Page Submit: *0 seconds*

Click Count: *0 clicks*



Beeld je in dat je voor dit schap staat. Welk product zou jij willen kopen? Onthoud het juiste nummer!



### Supermarket Shelves Block 20 seconds Answers

Beantwoord nu de vragen hieronder.

Had je genoeg tijd om het schap in je op te nemen?

Had je genoeg tijd om je favoriete product te kiezen?

Geef hieronder aan in hoeverre je het eens bent met de stelling

Ik vind het schap er realistisch en echt uitzien.

Ik vind de producten er realistisch en echt uitzien.

Ik vind de labels er realistisch en echt uitzien.

## Supermarket Shelves 30 seconds

**These page timer metrics will not be displayed to the recipient.**

First Click: *0 seconds*

Last Click: *0 seconds*

Page Submit: *0 seconds*

Click Count: *0 clicks*

Beeld je in dat je voor dit schap staat. Welk product zou jij willen kopen? Onthoud het juiste nummer!





Supermarket Shelves 30 Seconds Answers

Geef hieronder aan of je genoeg tijd had om de het schap goed in je op te nemen en of je genoeg tijd had om je favoriete product te kiezen

Had je genoeg tijd om het schap in je op te nemen?

Had je genoeg tijd om je favoriete product te kiezen?

Geef hieronder aan in hoeverre je het eens bent met de stelling

Ik vind het schap er realistisch en echt uitzien.

Ik vind de producten er realistisch en echt uitzien.

Ik vind de labels er realistisch en echt uitzien.

## Supermarket Shelves 40 seconds

**These page timer metrics will not be displayed to the recipient.**

First Click: *0 seconds*

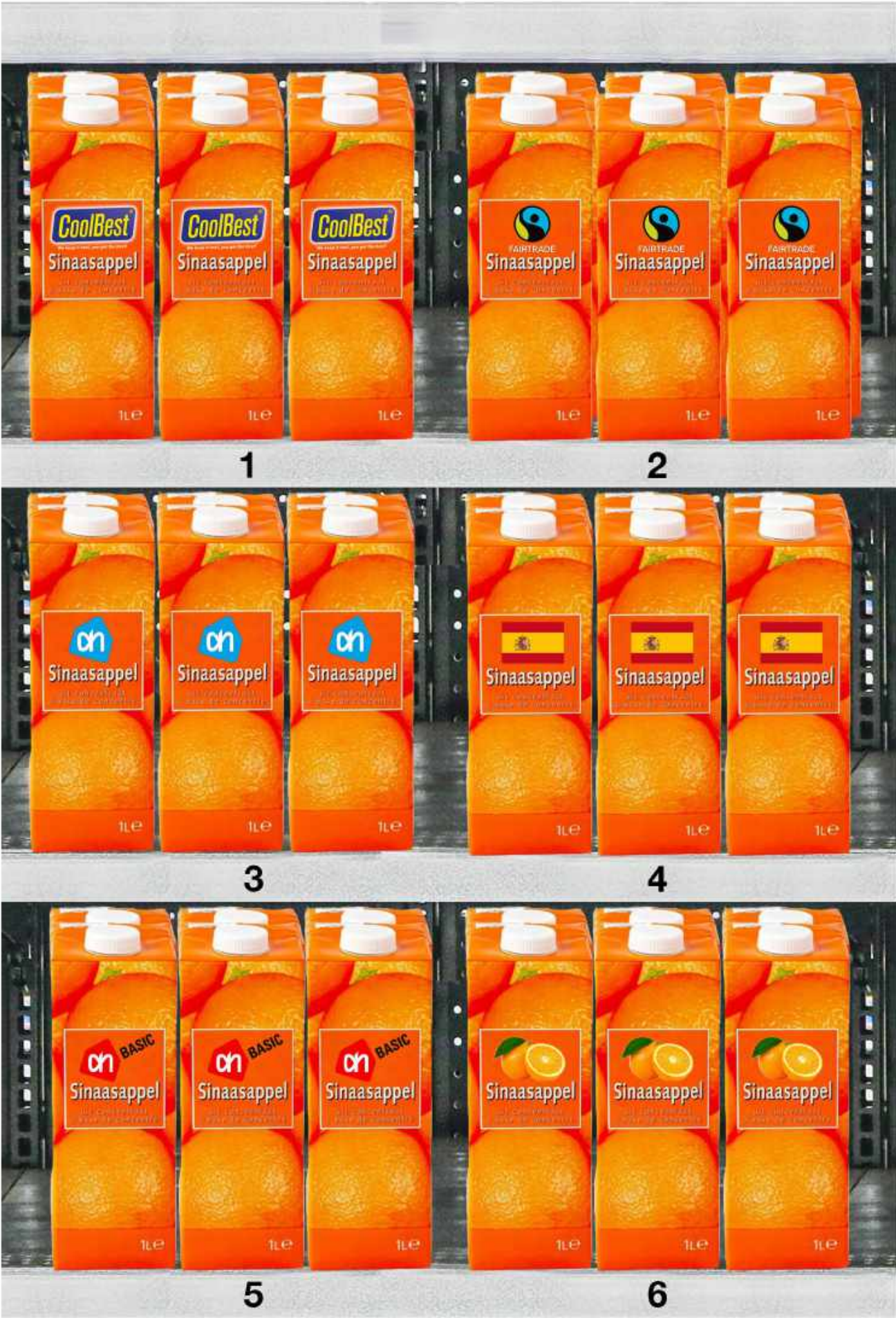
Last Click: *0 seconds*

Page Submit: *0 seconds*

Click Count: *0 clicks*

Beeld je in dat je voor dit schap staat. Welk product zou jij willen kopen? Onthoud het juiste nummer!





Supermarket Shelves 40 Seconds Answers

Beantwoord nu de vragen hieronder.

Had je genoeg tijd om het schap in je op te nemen?

Had je genoeg tijd om je favoriete product te kiezen?

Geef hieronder aan in hoeverre je het eens bent met de stelling

Ik vind het schap er realistisch en echt uitzien.

Ik vind de producten er realistisch en echt uitzien.

Ik vind de labels er realistisch en echt uitzien.

## Second part introduction

Je hebt zojuist het eerste onderdeel afgerond. Voor het tweede onderdeel wordt je een aantal vragen gesteld. Geef aan wat het eerste in je opkomt.

### Country of origin

Aan welk land denk je als eerst als je denkt aan de productie van kidneybonen?

Aan welk land denk je als eerst als je denkt aan de productie van hagelsag?

Aan welk land denk je als eerst als je denkt aan de productie van rijst?

Aan welk land denk je als eerst als je denkt aan de productie van suiker?

Aan welk land denk je als eerst als je denkt aan de productie van couscous?

Aan welk land denk je als eerst als je denkt aan de productie van sinaasappelsap?

Aan welk land denk je als eerst als je denkt aan de productie van koffiebonen?

Aan welk land denk je als eerst als je denkt aan de productie van thee?

Aan welk land denk je als eerst als je denkt aan de productie van chocolade?

Aan welk land denk je als eerst als je denkt aan de productie van zout?

Aan welk land denk je als eerst als je denkt aan de productie van ingeblikte tomaten?

Aan welk land denk je als eerst als je denkt aan de productie van taco schelpen?

### Question regarding knowledge of flags

Bij welk land hoort de onderstaande vlag?

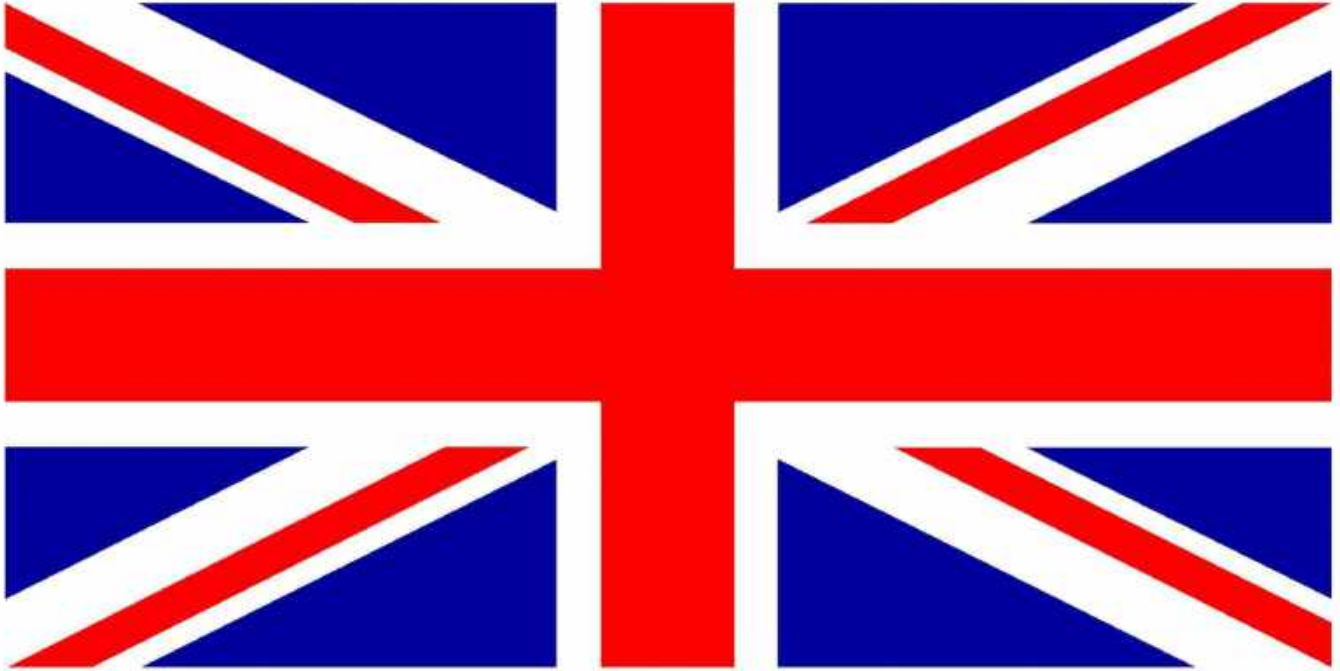




Bij welk land hoort de onderstaande vlag?



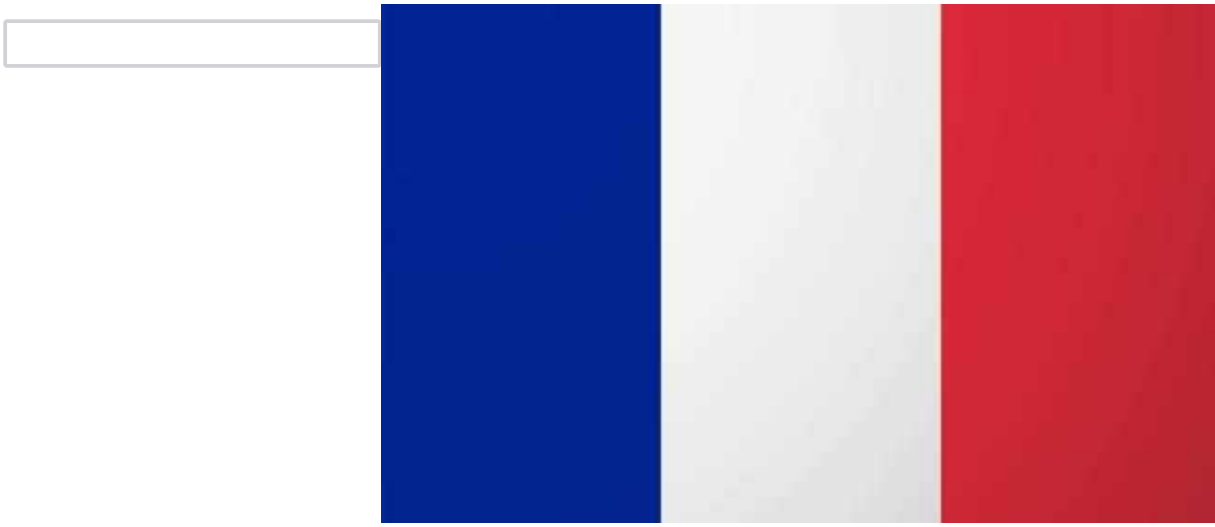
Bij welk land hoort de onderstaande vlag?



Bij welk land hoort de onderstaande vlag?



Bij welk land hoort de onderstaande vlag?



Bij welk land hoort de onderstaande vlag?



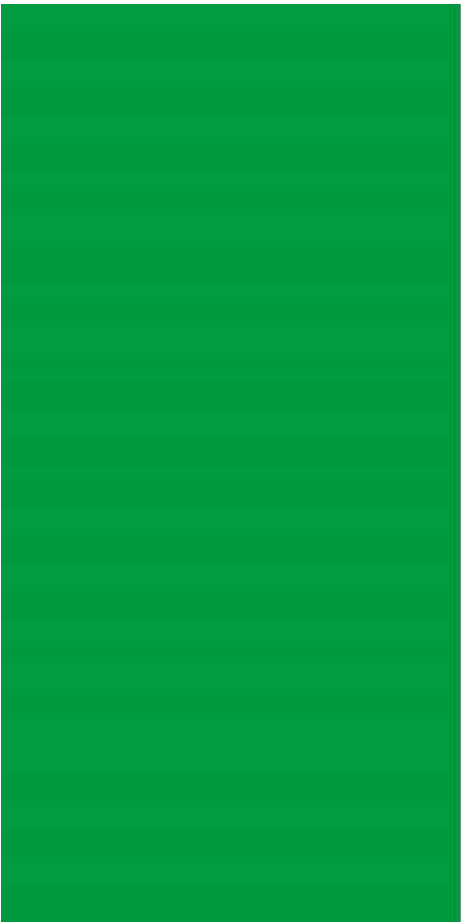
Bij welk land hoort de onderstaande vlag?



Bij welk land hoort de onderstaande vlag?



Bij welk land hoort de onderstaande vlag?



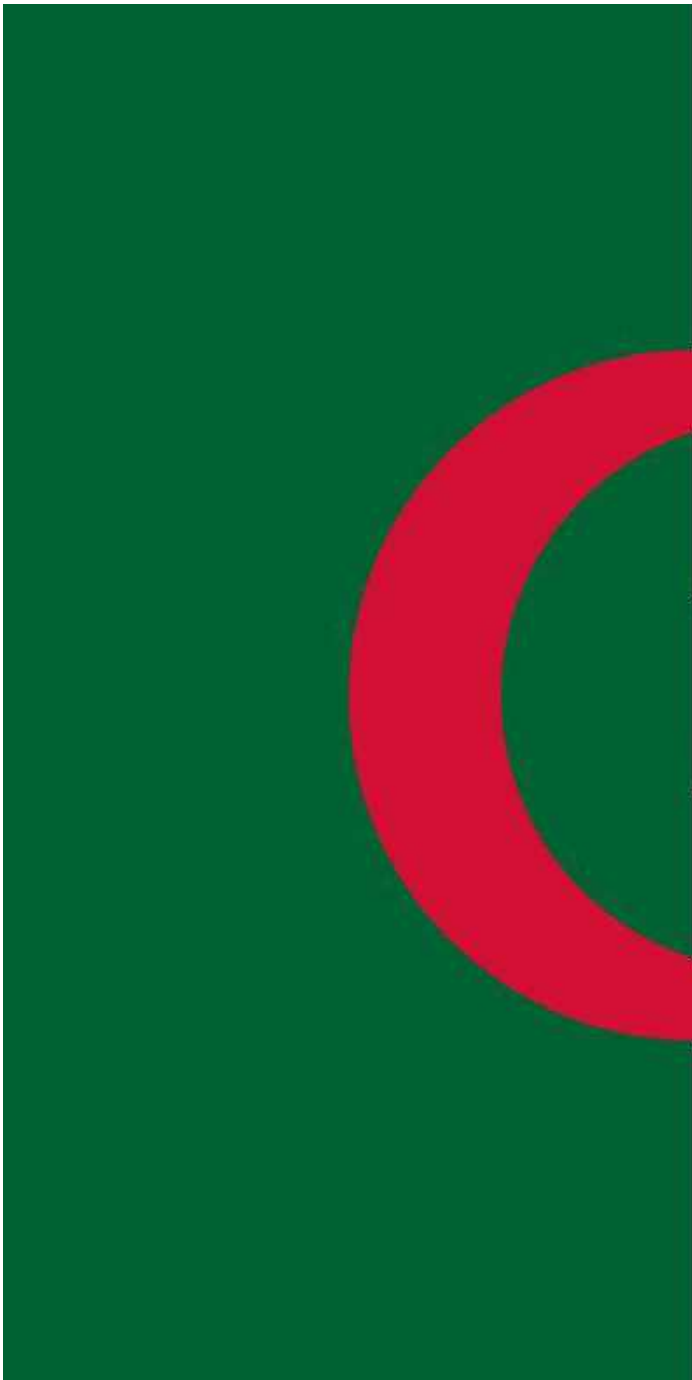
Bij welk land hoort de onderstaande vlag?



Bij welk land hoort de onderstaande vlag?



Bij welk land hoort de onderstaande vlag?



Bij welk land hoort de onderstaande vlag?



Bij welk land hoort de onderstaande vlag?

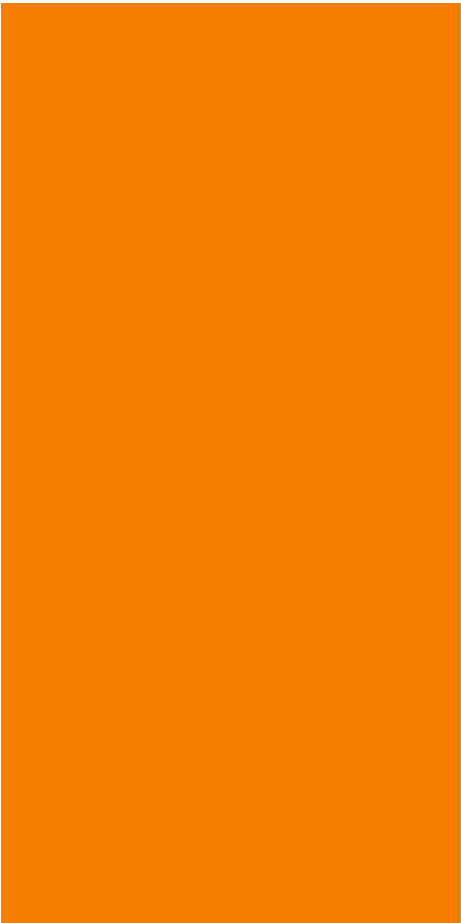




Bij welk land hoort de onderstaande vlag?



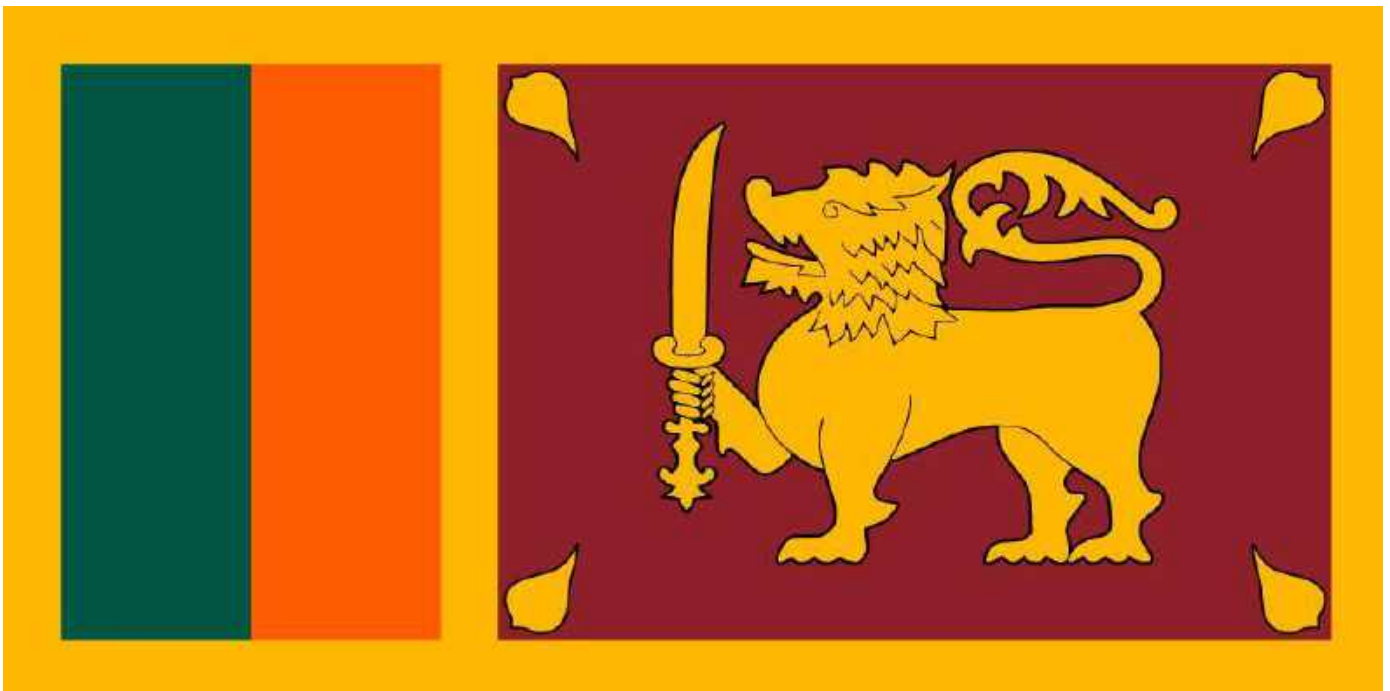
Bij welk land hoort de onderstaande vlag?



Bij welk land hoort de onderstaande vlag?



Bij welk land hoort de onderstaande vlag?



Bij welk land hoort de onderstaande vlag?



### Third part introduction

Je hebt het tweede onderdeel ook afgerond. Het laatste onderdeel gaat over welke merken het eerst in je opkomen bij een bepaald product.

### Brand preference

Aan welk merk moet je het meeste denken als het gaat om koffie?



**LAVAZZA**  
TORINO, ITALIA, 1895

Aan welk merk moet je het meeste denken als het gaat om sinaasappelsap?



Aan welk merk moet je het meeste denken als het gaat om kidneybonen?



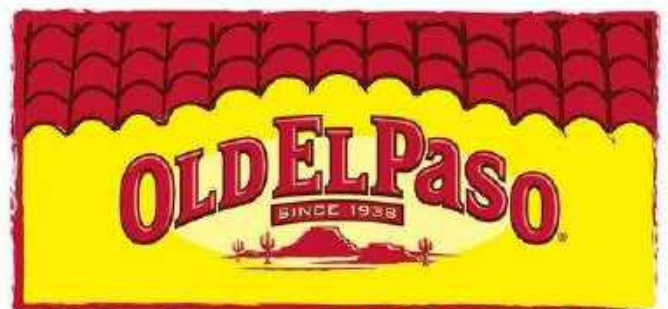
Aan welk merk moet je het meeste denken als het gaat om thee?



Aan welk merk moet je het meeste denken als het gaat om couscous?



Aan welk merk moet je het meeste denken als het gaat om taco's?



Aan welk merk moet je het meeste denken als het gaat om zout?





Aan welk merk moet je het meeste denken als het gaat om hagelslag?



Aan welk merk moet je het meeste denken als het gaat om chocolade?





Aan welk merk moet je het meeste denken als het gaat om rijst?



Aan welk merk moet je het meeste denken als het gaat om suiker?



Aan welk merk moet je het meeste denken als het gaat om ingeblikte tomaten?





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## Appendix B

In this Appendix, the results of the pretest were reported. Firstly, the number of seconds that participants needed to choose the label was analyzed. Secondly, for Country of Origin Labelling, the most associated country to a product was analyzed. In addition, participants were also asked if they knew the flag of a country. By combining these two elements, it could be established which flag of a country was going to be used in the experiment. Finally, the most associated brand was analyzed.

### B1. Number of seconds per product

In the pretest participants were asked if they had enough time to make a choice. Answers were filled in on 5 point Likert scale, ranging from 1) far too little time, to 5) far too much time. Table 1 shows that the majority of participants (71.4%) thought that 20 seconds was the optimal time. Therefore, each image was shown 20 seconds in the experiment.

Table 1. An overview of how participants responded to the question: *did you have enough time to make a choice?* Count and their percentages (between brackets) are displayed (N=21).

	20 seconds	30 seconds	40 seconds
Far too little time	1 (4.8%)	0 (0%)	0 (0%)
Too little time	1 (4.8%)	1 (4.8%)	0 (0%)
Exactly enough time	15 (71.4%)	10 (47.6%)	9 (42.9%)
Too much time	4 (19.0%)	8 (38.1%)	5 (23.8%)
Far too much time	0 (0%)	2 (9.5%)	7 (33.3%)

### B2. Flags used in experiment for Country of Origin Labelling

The goal of this part of the pretest was to establish which country could best be displayed as part of the Country of Origin Labelling (COOL). First, the most associated country was reported (see table 2) and subsequently it was identified if participants would recognize the flag of the country (see table 3). The results were reported per product.

For black beans, Mexico was the most associated country (42.9%) and the flag of Mexico was sufficiently recognized correctly (71.4%), so the flag of Mexico would be displayed on COOL black beans.

For orange juice, Spain was the most associated country (85.7%) and the flag of Spain was sufficiently recognized correctly (90.5%), so the flag of Spain would be displayed on COOL orange juice.

For rice, Indonesia was the most associated country (42.9%), but the flag of Indonesia was not sufficiently recognized correctly (19.0%), so the second most associated country for rice was taken, which was India (38.1%). The flag of India was sufficiently recognized correctly (71.4%), so the flag of India would be displayed on COOL rice.

For sugar, the Netherlands were the most associated country (38.1%) and the flag of the Netherlands was sufficiently recognized correctly (100%), so the flag of the Netherlands would be displayed on COOL sugar.

For salt, the Netherlands were the most associated country (38.1%) and the flag of the Netherlands was sufficiently recognized correctly, so the flag of the Netherlands would be displayed on COOL salt.

For chocolate sprinkles, the Netherlands were the only associated country (100%) and the flag of the Netherlands was sufficiently recognized correctly, so the flag of the Netherlands would be displayed on COOL chocolate sprinkles.

For coffee, Brazil was the most associated country (71.4%) and the flag of Mexico was sufficiently recognized correctly, so the flag of Brazil would be displayed on COOL coffee.

For chocolate, Brazil was the most associated country (38.1%) and the flag of Brazil was sufficiently recognized correctly (100%), so the flag of Brazil would be displayed on COOL chocolate.

For canned tomatoes, Italy was the most associated country (42.9%) and the flag of Mexico was sufficiently recognized correctly (100%), so the flag of Italy would be displayed on COOL canned tomatoes.

For tacos, Mexico was the most associated country (90.5%) and the flag of Mexico was sufficiently recognized correctly, so the flag of Mexico would be displayed on COOL tacos.

For tea, India was the most associated country (42.9%) and the flag of India was sufficiently recognized correctly, so the flag of India would be displayed on COOL tea.

For couscous, Morocco was the most associated country (71.4%) and the flag of Morocco was sufficiently recognized correctly (61.9%), so the flag of Morocco would be displayed on COOL couscous.

Table 2. An overview of the Most Associated Countries (MAC) and their percentages (between brackets) of the 12 types of products (N=21)

Type of product	First MAC	Second MAC	Third MAC
Black beans	Mexico (42.9%)	Netherlands (19%)	Chili (14.3%)
Orange Juice	Spain (85.7%)	Netherlands (4.8%)	Brasil (4.8%)
Rice	Indonesia (42.9%)	India (38.1%)	China (14.3%)
Sugar	Netherlands (38.1%)	Brasil (19%)	Indonesia (13.3%)
Salt	Netherlands (38.1%)	China (23.8%)	France (14.3%)
Chocolate Sprinkles	Netherlands* (100%)	-	-
Coffee	Brasil (71.4%)	Ethiopia (19.0%)	Other (4.8%)
Chocolate	Brasil (38.1%)	Belgium (23.8%)	Switzerland (9.5%)
Canned Tomatoes (14.3%)	Italy (42.9%)	Netherlands (19.0%)	Spain
Tacos	Mexico (90.5%)	Spain (4.8%)	Italy (4.8%)
Tea	India (42.9%)	China (23.8%)	Indonesia (14.3%)
Couscous	Morocco (71.4%)	Turkey (19.0%)	Others (9.5%)

\*only the Netherlands were associated to chocolate sprinkles

Table 3. An overview of the count and the percentages (between brackets) of which country flags were correctly and incorrectly recognised.

Flag	Flag correctly recognised	Flag incorrectly recognised
Brazil	21 (100%)	0 (0%)
Belgium	19 (90.5%)	2 (9.5%)
United Kingdom	21 (100%)	0 (0%)
Mexico	15 (71.4%)	6 (28.6%)
France	21 (100%)	0 (0%)
Ghana	4 (19.0%)	17 (81.0%)
India	15 (71.4%)	6 (28.6%)
Spain	19 (90.5%)	2 (9.5%)
Italy	21 (100%)	0 (0%)
USA	21 (100%)	0 (0%)
Vietnam	6 (28.6%)	15 (71.4%)
Tunisia	0 (0%)	21 (100%)
China	16 (76.2%)	5 (23.8%)
Germany	21 (100%)	0 (0%)
Indonesia	4 (19.0%)	17 (81.0%)
Ivory Coast	0 (0%)	100 (0%)
Morocco	13 (61.9%)	8 (38.1%)
Sri Lanka	4 (19.0%)	17 (81.0%)
Turkey	17 (81.0%)	4 (19.0%)
The Netherlands	21 (100%)	0 (0%)

### B3. Brands used in experiment for Brand labeling

The goal of this part of the pretest was to establish which brand logos would be used for the experiment. The most associated brand logo was consistently chosen as the brand logo that would represent the brand label for a product. Table 4 shows an overview of which brand logos were most associated with a product.

Table 4. An overview of the Most Associated Brands (MAB) and their percentages (between brackets) of the 12 types of products (N=21)

Type of product	First MAB	Second MAB	Third MAB
Black beans	Bonduelle (61.9%)	Hak (28.6%)	Other (9.5%)
Orange Juice	Appelsientje (61.9%)	Coolbest (23.8%)	Innocent (14.3%)
Rice	Lassie (100%)	-	-
Sugar	Van Gilse (90.5%)	Werster (9.5%)	-
Salt	Jozo (81.0%)	La Baleine (19.0%)	-
Chocolate Sprinkles	De Ruijter (71.4%)	Venz (28.6%)	-
Coffee	Douwe Egberts (90.5%)	Kanis & Gunnink (9.5%)	-
Chocolate	Milka (47.6%)	Côte d'Or (28.6%)	Tony (23.8%)
Canned Tomatoes	Heinz (71.4%)	Mutti (19.0)	Cirio (9.5%)
Tacos	Santa Maria (52.4%)	El Paso (33.3%)	Knorr (14.3%)
Tea	Pickwick (90.5%)	Lipton (9.5%)	-
Couscous	Lassie (100%)		

## Appendix C: Experiment - Version 1

Je bent uitgenodigd om mee te doen aan een onderzoek naar voedsletiketten. Dit onderzoek wordt uitgevoerd door Sven de Ruiter, student Master International Business Communication aan de Radboud Universiteit.

### Wat wordt er van je verwacht?

Meedoen aan het onderzoek houdt in dat je een online vragenlijst gaat invullen. De vragen hebben betrekking op koopgedrag. Het invullen van de vragenlijst kost ongeveer 10 minuten.

### Vrijwilligheid

Je doet vrijwillig mee aan dit onderzoek. Daarom kan je op elk moment tijdens het onderzoek je deelname stopzetten en je toestemming intrekken. Je hoeft niet aan te geven waarom je stopt. Je kunt tot twee weken na deelname ook uw onderzoeksgegevens laten verwijderen. Dit kan je doen door een mail te sturen naar [s.deruiter@student.ru.nl](mailto:s.deruiter@student.ru.nl)

### Wat gebeurt er met mijn gegevens?

De onderzoeksgegevens die we in dit onderzoek verzamelen, zullen door wetenschappers gebruikt worden voor datasets, artikelen en presentaties. De anoniem gemaakte onderzoeksgegevens zijn tenminste 10 jaar beschikbaar voor andere wetenschappers. Als we gegevens met andere onderzoekers delen, kunnen deze dus niet tot je herleid worden. We bewaren alle onderzoeksgegevens op beveiligde wijze volgens de richtlijnen van de Radboud Universiteit.

### Ethische toetsing en klachten

Dit onderzoek is opgesteld volgens de richtlijnen van de Ethische Toelatingscommissie Geesteswetenschappen van de Radboud Universiteit. Heb je vragen of klachten over het onderzoek, dan kan je contact opnemen met de verantwoordelijke onderzoeker.

### Heeft u vragen over het onderzoek?

Als je meer informatie over het betreffende onderzoek wilt ontvangen, dan kan je contact opnemen met Sven de Ruiter, (e-mail: [sderuiter@student.ru.nl](mailto:sderuiter@student.ru.nl))

### TOESTEMMING: Geef hieronder uw keuze aan.

Door te klikken op de knop 'Ik ga akkoord' geef je aan dat je:

- bovenstaande informatie heeft gelezen



- vrijwillig meedoet aan het onderzoek
- 16 jaar of ouder bent

Als je niet mee wilt doen aan het onderzoek, kan je op de knop 'Ik wil niet meedoen' klikken.

Ik ga akkoord

Ik wil niet meedoen

## Info

Deze enquête bestaat uit 3 onderdelen en duurt in totaal ongeveer 10 minuten.  
Het eerste onderdeel gaat over koopgedrag van consumenten in een supermarkt.  
Het tweede onderdeel gaat over jouw persoonlijke eigenschappen als consument.  
In het laatste onderdeel wordt een aantal gegevens gevraagd.

## Supermarket shelves

Zo direct krijg je een aantal schappen uit de supermarkt te zien.

Stel je voor dat je voor dit schap staat en je hebt dit product nodig, welk product zou je dan kiezen?

Je kan op het product klikken. Heb je een verkeerd product aangeklikt, dan kan je door nog een keer te klikken je keuze ongedaan maken.

Voor elk schap krijg je maximaal 20 seconden om een keuze te maken. De pagina gaat na 20 seconden automatisch door. De timer geeft aan hoeveel seconden je nog hebt.

Mocht je al eerder je favoriete product weten, dan kan je op het pijltje klikken.

Door op het pijltje te klikken ga je naar het eerste schap.

Er zijn geen foute antwoorden.

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18

Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.



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18

Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.





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18

Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.





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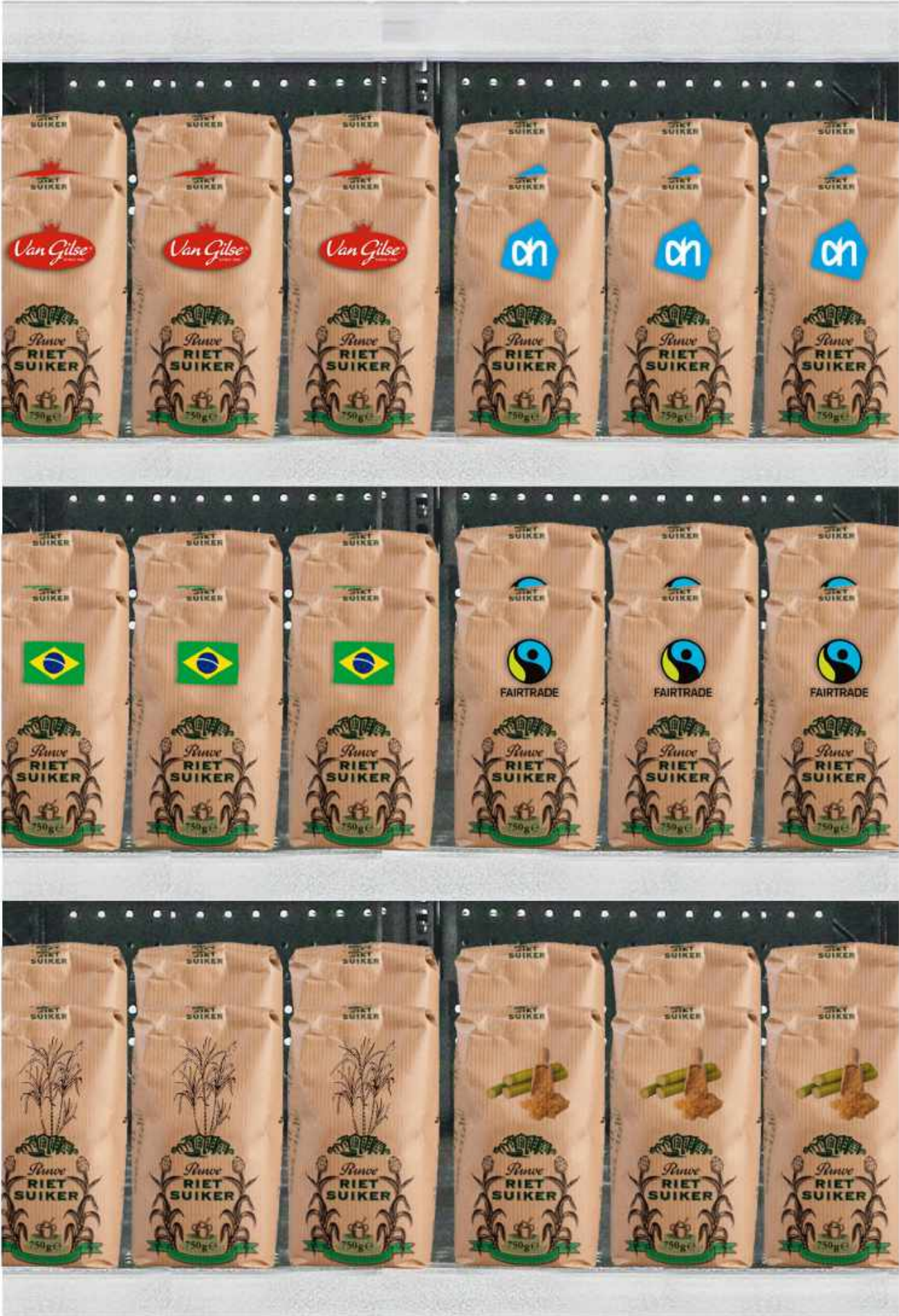
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18

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18

Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.



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18

Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.





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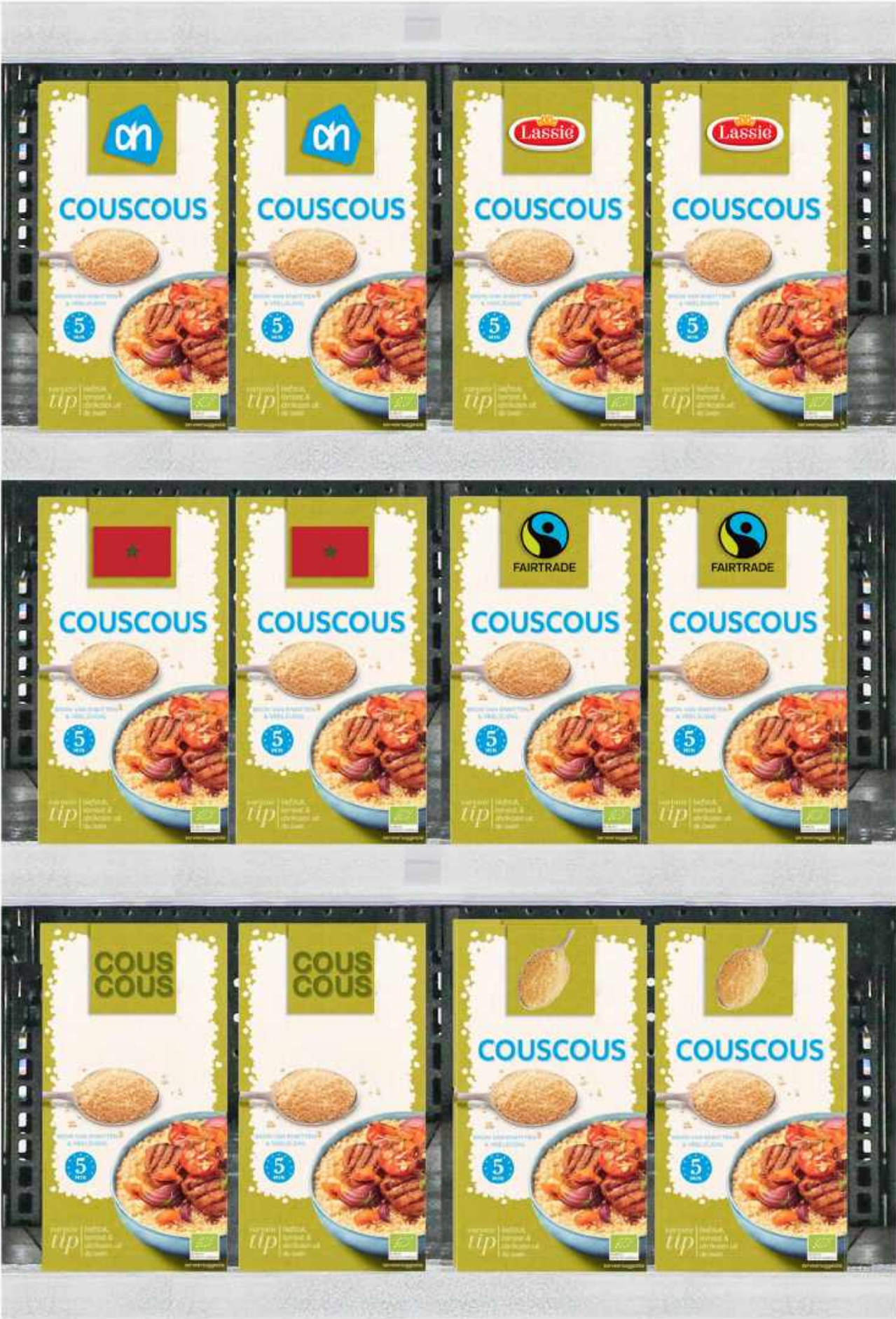
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19

Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.





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19

Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.





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19

Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.



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19

Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.





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Click Count: *0 clicks*

19

Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.





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Click Count: *0 clicks*

20

Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.





*Hoeveel van de onderstaande producten koop je per maand?*





## Personality traits

In dit tweede onderdeel krijg je een aantal statements te zien.

Geef aan in hoeverre het statement bij jou past.

Er zijn wederom geen foute antwoorden.

Ik ben iemand die ...

	Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Een beetje mee eens	Mee eens	Helemaal mee eens
de toon zet, als een leider handelt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
doorgaans stil is	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
behulpzaam en onzelfzuchtig ten opzichte van anderen is	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
soms verlegen, introvert is	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
respectvol is, anderen met respect behandelt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
spraakzaam is	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Een beetje mee eens	Mee eens	Helemaal mee eens
veel enthousiasme en uitbundigheid uitstraalt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
van het beste in mensen uitgaat					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Een beetje mee eens	Mee eens	Helemaal mee eens
niet zo snel uitgaat van de goede bedoelingen van anderen					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
communicatief, een gezelschapsmens is					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
koud en ongevoelig kan zijn					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
betrokken, meevoelend is					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ik ben iemand die ...

Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Een beetje mee eens	Mee eens	Helemaal mee eens
zich zelden angstig of bang voelt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
zich vaak verdrietig voelt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
zich regelmatig somber voelt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ontspannen is, goed met stress kan omgaan					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Een beetje mee eens	Mee eens	Helemaal mee eens
zich veel zorgen maakt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Niet snel overstuur raakt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
benieuwd is naar veel verschillende dingen					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
gefascineerd is door kunst, muziek of literatuur					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Een beetje mee eens	Mee eens	Helemaal mee eens
waarde hecht aan kunst en schoonheid					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
genuanceerd en diep over dingen nadenkt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
vindingrijk is, creatieve manieren verzint om dingen te doen					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Een beetje mee eens	Mee eens	Helemaal mee eens
veel verbeeldingskracht heeft					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Demographics

In dit laatste onderdeel wordt je een aantal korte vragen gesteld.

Wat is je leeftijd?

Wat is je geslacht?

Man

Vrouw

Zeg ik liever niet

Wat is je nationaliteit?

Nederlands

Anders, namelijk

Wat is je hoogst genoten onderwijsniveau?

Basisonderwijs

Middelbaar onderwijs

MBO

HBO

WO

Powered by Qualtrics

## Appendix C: Experiment - Version 2

Je bent uitgenodigd om mee te doen aan een onderzoek naar voedsletiketten. Dit onderzoek wordt uitgevoerd door Sven de Ruiter, student Master International Business Communication aan de Radboud Universiteit.

### Wat wordt er van je verwacht?

Meedoen aan het onderzoek houdt in dat je een online vragenlijst gaat invullen. De vragen hebben betrekking op koopgedrag. Het invullen van de vragenlijst kost ongeveer 10 minuten.

### Vrijwilligheid

Je doet vrijwillig mee aan dit onderzoek. Daarom kan je op elk moment tijdens het onderzoek je deelname stopzetten en je toestemming intrekken. Je hoeft niet aan te geven waarom je stopt. Je kunt tot twee weken na deelname ook uw onderzoeksgegevens laten verwijderen. Dit kan je doen door een mail te sturen naar [s.deruiter@student.ru.nl](mailto:s.deruiter@student.ru.nl)

### Wat gebeurt er met mijn gegevens?

De onderzoeksgegevens die we in dit onderzoek verzamelen, zullen door wetenschappers gebruikt worden voor datasets, artikelen en presentaties. De anoniem gemaakte onderzoeksgegevens zijn tenminste 10 jaar beschikbaar voor andere wetenschappers. Als we gegevens met andere onderzoekers delen, kunnen deze dus niet tot u herleid worden. We bewaren alle onderzoeksgegevens op beveiligde wijze volgens de richtlijnen van de Radboud Universiteit.

### Ethische toetsing en klachten

Dit onderzoek is opgesteld volgens de richtlijnen van de Ethische Toelatingscommissie Geesteswetenschappen van de Radboud Universiteit. Heb je vragen of klachten over het onderzoek, dan kan je contact opnemen met de verantwoordelijke onderzoeker.

### Heeft u vragen over het onderzoek?

Als je meer informatie over het betreffende onderzoek wilt ontvangen, dan kan je contact opnemen met Sven de Ruiter, (e-mail: [sderuiter@student.ru.nl](mailto:sderuiter@student.ru.nl))

### TOESTEMMING: Geef hieronder uw keuze aan.

Door te klikken op de knop 'Ik ga akkoord' geef je aan dat je:

- bovenstaande informatie heeft gelezen

- vrijwillig meedoet aan het onderzoek
- 16 jaar of ouder bent

Als je niet mee wilt doen aan het onderzoek, kan je op de knop 'Ik wil niet meedoen' klikken.

Ik ga akkoord

Ik wil niet meedoen

## Info

Deze enquête bestaat uit 3 onderdelen en duurt in totaal ongeveer 10 minuten.  
Het eerste onderdeel gaat over koopgedrag van consumenten in een supermarkt.  
Het tweede onderdeel gaat over jouw persoonlijke eigenschappen als consument.  
In het laatste onderdeel wordt een aantal gegevens gevraagd.

## Supermarket shelves

Zo direct krijg je een aantal schappen uit de supermarkt te zien.

Stel je voor dat je voor dit schap staat en je hebt dit product nodig, welk product zou je dan kiezen?

Je kan op het product klikken. Heb je een verkeerd product aangeklikt, dan kan je door nog een keer te klikken je keuze ongedaan maken.

Voor elk schap krijg je maximaal 20 seconden om een keuze te maken. De pagina gaat na 20 seconden automatisch door. De timer geeft aan hoeveel seconden je nog hebt.

Mocht je al eerder je favoriete product weten, dan kan je op het pijltje klikken.

Door op het pijltje te klikken ga je naar het eerste schap.

Er zijn geen foute antwoorden.

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Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.





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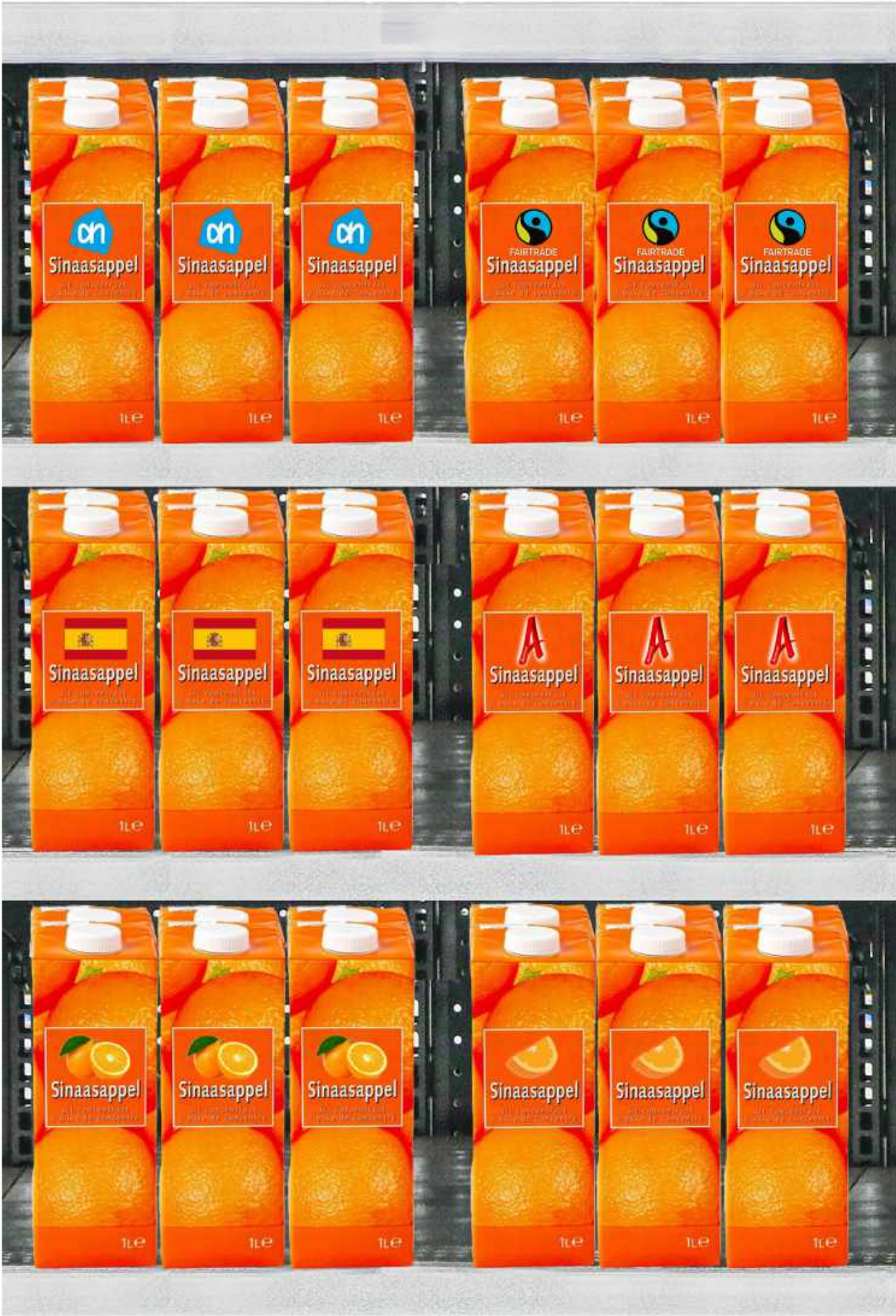
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Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.





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Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.



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19

Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.



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Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.





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Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.





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Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.



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Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.





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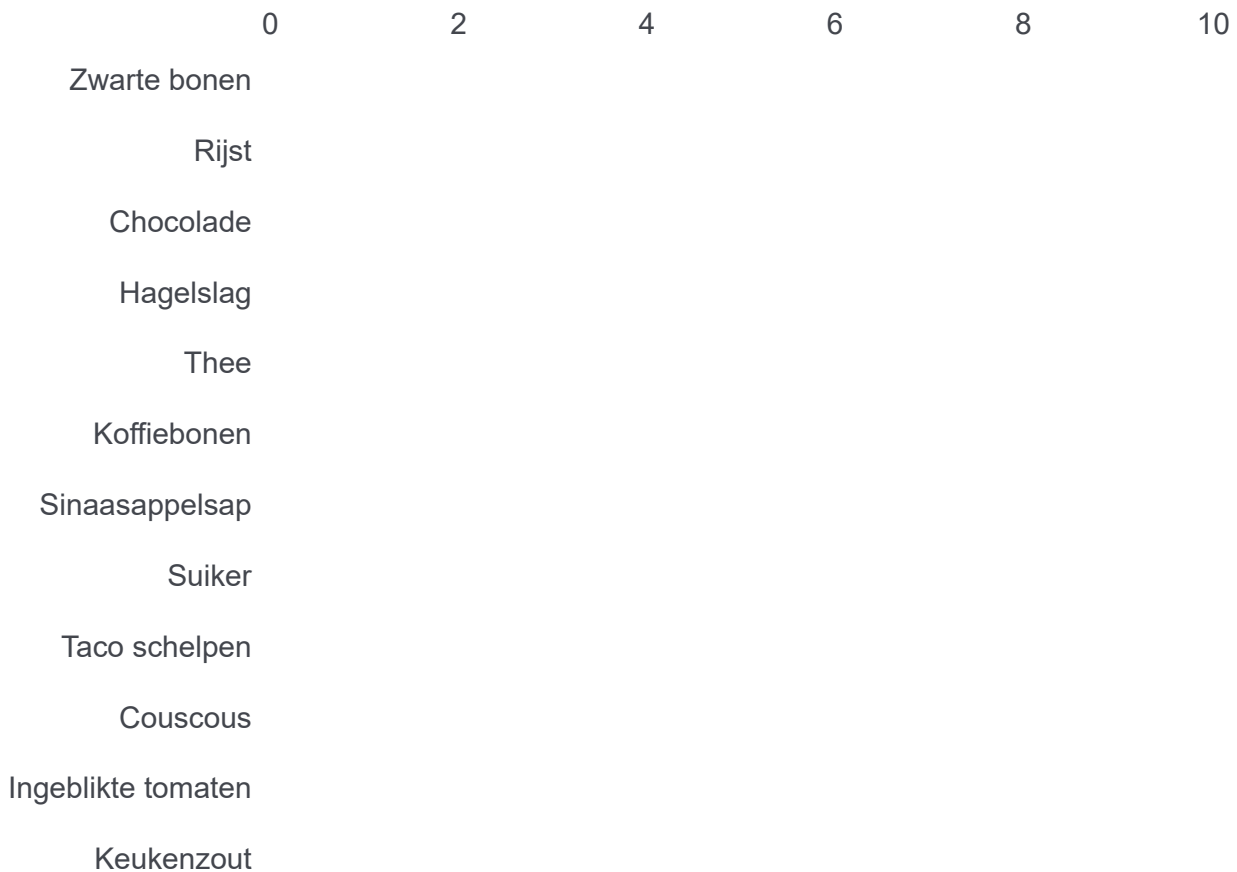
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Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.



Hoeveel van de onderstaande producten koop je per maand?



## Goede personality traits

In dit tweede onderdeel krijg je een aantal statements te zien.

Geef aan in hoeverre het statement bij jou past.

Er zijn wederom geen foute antwoorden.

Ik ben iemand die ...

	Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Een beetje mee eens	Mee eens	Helemaal mee eens
van het beste in mensen uitgaat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
niet zo snel uitgaat van de goede bedoelingen van anderen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
communicatief, een gezelschapsmens is	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
doorgaans stil is	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
koud en ongevoelig kan zijn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
soms verlegen, introvert is	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Een beetje mee eens	Mee eens	Helemaal mee eens
behulpzaam en onzelfzuchtig ten opzichte van anderen is					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
spraakzaam is					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Een beetje mee eens	Mee eens	Helemaal mee eens
respectvol is, anderen met respect behandelt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
betrokken, meevoelend is					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
de toon zet, als een leider handelt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
veel enthousiasme en uitbundigheid uitstraalt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ik ben iemand die ...

Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Een beetje mee eens	Mee eens	Helemaal mee eens
zich zelden angstig of bang voelt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
zich vaak verdrietig voelt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
zich regelmatig somber voelt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ontspannen is, goed met stress kan omgaan					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Een beetje mee eens	Mee eens	Helemaal mee eens
zich veel zorgen maakt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Niet snel overstuur raakt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
benieuwd is naar veel verschillende dingen					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
gefascineerd is door kunst, muziek of literatuur					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Een beetje mee eens	Mee eens	Helemaal mee eens
waarde hecht aan kunst en schoonheid					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
genuanceerd en diep over dingen nadenkt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
vindingrijk is, creatieve manieren verzint om dingen te doen					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Een beetje mee eens	Mee eens	Helemaal mee eens
veel verbeeldingskracht heeft	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Demographics

In dit laatste onderdeel wordt je een aantal korte vragen gesteld.

Wat is je leeftijd?

Wat is je geslacht?

Man

Vrouw

Zeg ik liever niet

Wat is je nationaliteit?

Nederlands

Anders, namelijk

Wat is je hoogst genoten onderwijsniveau?

Basisonderwijs

Middelbaar onderwijs

MBO

HBO

WO

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## Appendix C: Experiment - Version 3

Je bent uitgenodigd om mee te doen aan een onderzoek naar voedsletiketten. Dit onderzoek wordt uitgevoerd door Sven de Ruiter, student Master International Business Communication aan de Radboud Universiteit.

### Wat wordt er van je verwacht?

Meedoen aan het onderzoek houdt in dat je een online vragenlijst gaat invullen. De vragen hebben betrekking op hoe je voedsletiketten ziet. Het invullen van de vragenlijst kost ongeveer 10 minuten.

### Vrijwilligheid

Je doet vrijwillig mee aan dit onderzoek. Daarom kan je op elk moment tijdens het onderzoek je deelname stopzetten en je toestemming intrekken. Je hoeft niet aan te geven waarom je stopt. Je kunt tot twee weken na deelname ook uw onderzoeksgegevens laten verwijderen. Dit kan je doen door een mail te sturen naar [s.deruiter@student.ru.nl](mailto:s.deruiter@student.ru.nl)

### Wat gebeurt er met mijn gegevens?

De onderzoeksgegevens die we in dit onderzoek verzamelen, zullen door wetenschappers gebruikt worden voor datasets, artikelen en presentaties. De anoniem gemaakte onderzoeksgegevens zijn tenminste 10 jaar beschikbaar voor andere wetenschappers. Als we gegevens met andere onderzoekers delen, kunnen deze dus niet tot u herleid worden. We bewaren alle onderzoeksgegevens op beveiligde wijze volgens de richtlijnen van de Radboud Universiteit.

### Heeft u vragen over het onderzoek?

Als je meer informatie over het onderzoek wilt hebben, kan je contact opnemen met Sven de Ruiter, (e-mail: [sderuiter@student.ru.nl](mailto:sderuiter@student.ru.nl))

### Ethische toetsing en klachten

Heb je klachten over het onderzoek, dan kan je contact opnemen met de verantwoordelijke onderzoeker.

Ook kunt u een klacht indienen bij de secretaris van de Ethische Toetsingscommissie Geesteswetenschappen Radboud Universiteit ([etc-gw@ru.nl](mailto:etc-gw@ru.nl)).



Voor vragen over de verwerking van gegevens in dit onderzoek kan je contact opnemen met:  
dataofficer@let.ru.nl

**TOESTEMMING: Geef hieronder uw keuze aan.**

Door te klikken op de knop 'Ik ga akkoord' geef je aan dat je:

- bovenstaande informatie heeft gelezen
- vrijwillig meedoet aan het onderzoek
- 16 jaar of ouder bent

Als je niet mee wilt doen aan het onderzoek, kan je op de knop 'Ik wil niet meedoen' klikken.

Ik ga akkoord

Ik wil niet meedoen

**Info**

Deze enquête bestaat uit 3 onderdelen en duurt in totaal ongeveer 10 minuten.

Het eerste onderdeel gaat over koopgedrag van consumenten in een supermarkt.

Het tweede onderdeel gaat over jouw persoonlijke eigenschappen als consument.

In het laatste onderdeel wordt een aantal gegevens gevraagd.

**Supermarket shelves**

Zo direct krijg je een aantal schappen uit de supermarkt te zien.

Stel je voor dat je voor dit schap staat en je hebt dit product nodig, welk product zou je dan kiezen?

Je kan op het product klikken. Heb je een verkeerd product aangeklikt, dan kan je door nog een keer te klikken je keuze ongedaan maken.

Voor elk schap krijg je maximaal 20 seconden om een keuze te maken. De pagina gaat na 20 seconden automatisch door. De timer geeft aan hoeveel seconden je nog hebt.

Mocht je al eerder je favoriete product weten, dan kan je op het pijltje klikken.

Door op het pijltje te klikken ga je naar het eerste schap.

Er zijn geen foute antwoorden.

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First Click: 0 seconds

Last Click: 0 seconds

Page Submit: *0 seconds*

Click Count: *0 clicks*

18

Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.



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18

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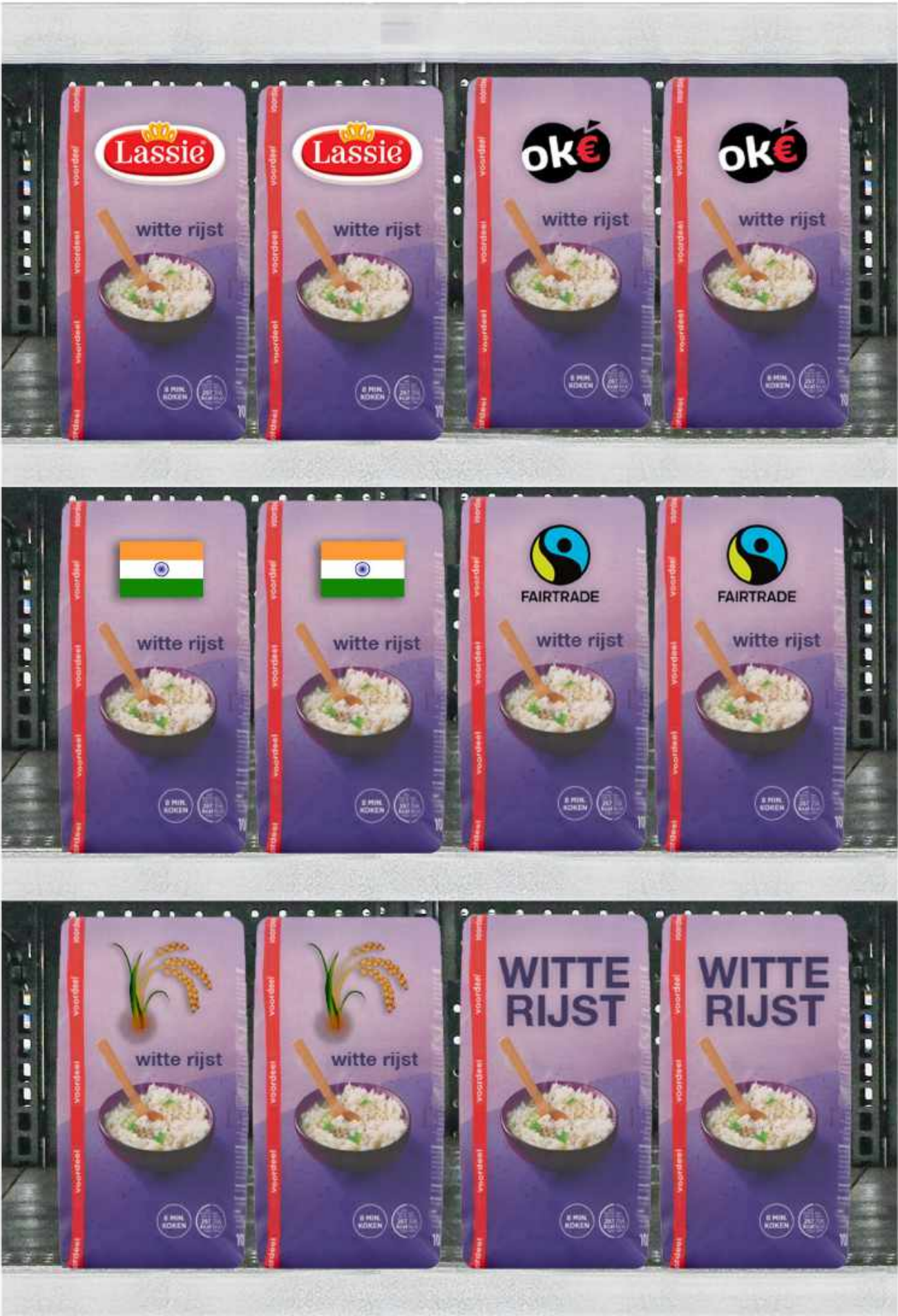
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18

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Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.





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Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.





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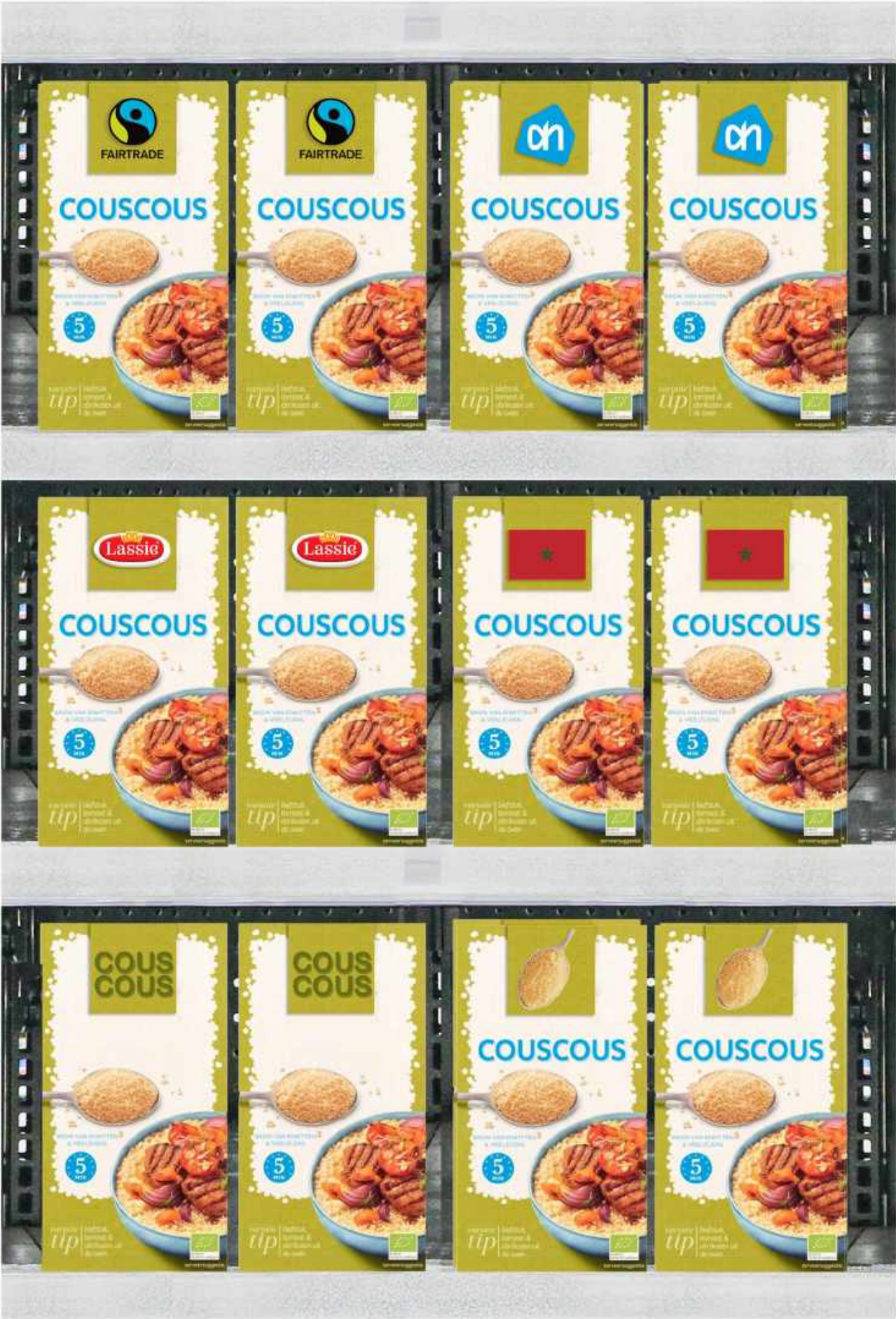
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18

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18

Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.



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Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.



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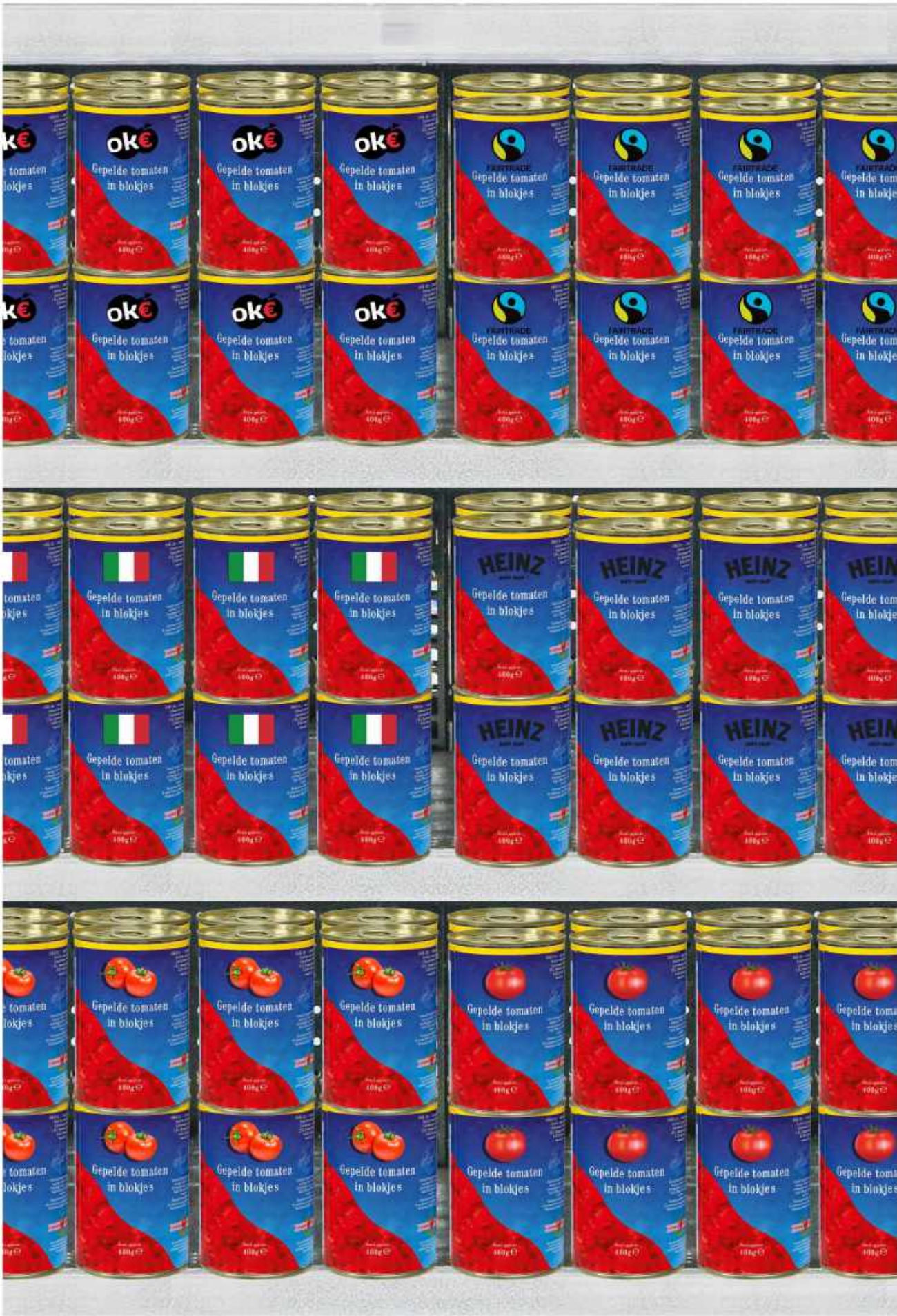
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18



Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.



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Click Count: *0 clicks*

19

Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.





These page timer metrics will not be displayed to the recipient.

First Click: 0 seconds

Last Click: *0 seconds*

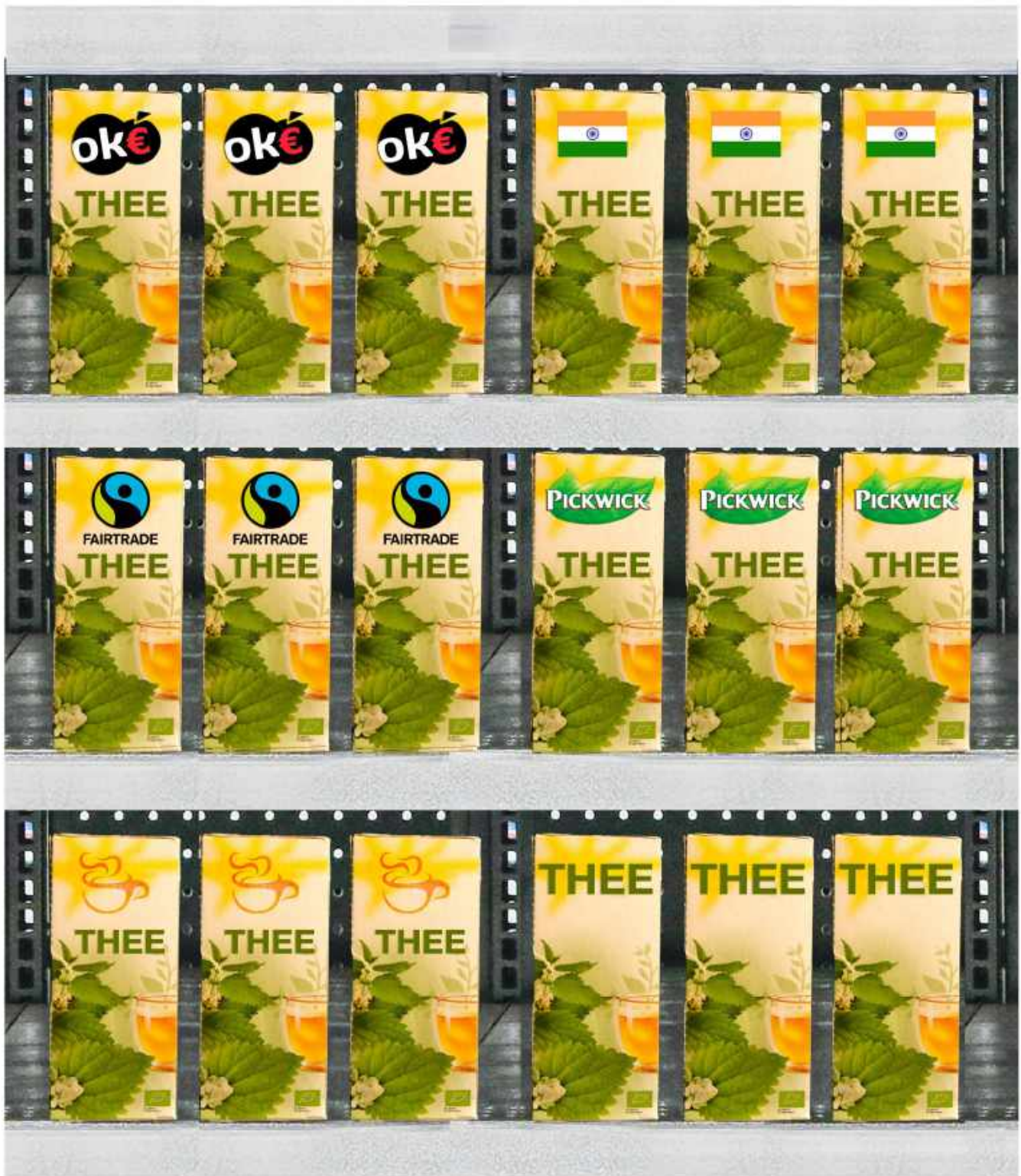
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Click Count: *0 clicks*

19

Stel je voor dat je voor dit supermarktschap staat. Klik op het product dat jij zou kopen.





Hoeveel van de onderstaande producten koop je per maand?



## Goede personality traits

In dit tweede onderdeel krijg je een aantal statements te zien.

Geef aan in hoeverre het statement bij jou past.

Er zijn wederom geen foute antwoorden.

Ik ben iemand die ...

	Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Een beetje mee eens	Mee eens	Helemaal mee eens
de toon zet, als een leider handelt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
behulpzaam en onzelfzuchtig ten opzichte van anderen is	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
spraakzaam is	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
veel enthousiasme en uitbundigheid uitstraalt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
betrokken, meevoelend is	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
communicatief, een gezelschapsmens is	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Een beetje mee eens	Mee eens	Helemaal mee eens
niet zo snel uitgaat van de goede bedoelingen van anderen					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
respectvol is, anderen met respect behandelt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Een beetje mee eens	Mee eens	Helemaal mee eens
doorgaans stil is					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
soms verlegen, introvert is					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
koud en ongevoelig kan zijn					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
van het beste in mensen uitgaat					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ik ben iemand die ...

Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Een beetje mee eens	Mee eens	Helemaal mee eens
zich zelden angstig of bang voelt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
zich vaak verdrietig voelt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
zich regelmatig somber voelt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ontspannen is, goed met stress kan omgaan					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Een beetje mee eens	Mee eens	Helemaal mee eens
zich veel zorgen maakt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Niet snel overstuur raakt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
benieuwd is naar veel verschillende dingen					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
gefascineerd is door kunst, muziek of literatuur					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Een beetje mee eens	Mee eens	Helemaal mee eens
waarde hecht aan kunst en schoonheid					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
genuanceerd en diep over dingen nadenkt					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
vindingrijk is, creatieve manieren verzint om dingen te doen					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Een beetje mee eens	Mee eens	Helemaal mee eens
veel verbeeldingskracht heeft					
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Demographics

In dit laatste onderdeel wordt je een aantal korte vragen gesteld.

Wat is je leeftijd?

Wat is je geslacht?

Man

Vrouw

Zeg ik liever niet

Wat is je nationaliteit?

Nederlands

Anders, namelijk

Wat is je hoogst genoten onderwijsniveau?

Basisonderwijs

Middelbaar onderwijs

MBO

HBO

WO

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## **Appendix D**

In this Appendix, the results of the experiment were reported. Firstly, the effect of the personality traits on a choice for Private Labeling (PL) and Non-labelled labeling (NL) was analyzed. Secondly, the effect of frequency on the choice for Private Labeling (PL) and Non-labelled labeling (NL) was analyzed. Thirdly, the effect of age on the choice of Private Labeling (PL) and Non-labelled labeling (NL) was analyzed. Finally, the effect of gender on the choice for Private Labeling (PL) and Non-labelled labeling (NL) was analyzed.

### **D1. Personality traits**

#### **D1.1 Private label Labelling (PL)**

The multiple regression analysis showed that the four variables entered, extraversion, agreeableness, conscientiousness and openness, explained 1.0% of the variance of the amount of chosen PL products ( $F(4,1651) = 5.114, p < .001$ ). Openness was shown to be a significant predictor of the amount of chosen PL products ( $\beta = -.09, p < .001$ ). The amount of chosen PL products decreases with .09 *SD* for each increase of 1 *SD* of Openness, given that all other variables are kept constant. Moreover, Conscientiousness was shown to be a significant predictor ( $\beta = .07, p = .001$ ) of the amount of chosen PL products. The amount of chosen NL products increases with .07 *SD* for each increase of 1 *SD* of Conscientiousness, given that all other variables are kept constant.

However, Extraversion was not a significant predictor of the amount of chosen PL products ( $\beta = -.25, p = .369$ ). In addition, Agreeableness was not a significant predictor of the amount of chosen PL products ( $\beta = .03, p = .240$ ). Considering that the effect of personality traits on the amount of chosen FTL products is relatively small, the analysis on a type of product level can be found in Appendix D.

#### **D1.2 Non-labelled labelling (NL)**

A multiple regression analysis showed that the four variables entered, extraversion, agreeableness, conscientiousness and openness, explained 1.0% of the variance of the amount of chosen NL products ( $F(4,1651) = 5.114, p < .001$ ). Agreeableness was shown to be a significant predictor of the amount of chosen NL products ( $\beta = -.10, p < .001$ ). The amount of chosen NL products decreases with .10 *SD* for each increase of 1 *SD* of Agreeableness, given that all other variables are kept constant.

However, Extraversion was not a significant predictor of the amount of chosen NL products ( $\beta = .03$ ,  $p = .302$ ). In addition, Conscientiousness was not a significant predictor ( $\beta = -.02$ ,  $p = .417$ ) of the amount of chosen NL products. Furthermore, Openness was not a significant predictor ( $\beta = -.01$ ,  $p = .912$ ) of the amount of chosen NL products. Considering that the effect of personality traits on the amount of chosen NL products is relatively small, the analysis on a type of product level can be found in Appendix D.

Table 1: The intercept,  $R^2$ ,  $F$  value,  $\beta$  value, standard error and the Beta for the prediction of the two personality traits on the number of chosen products per label

variable	$B$	$SE\ B$	$\beta$
<b>Private label Labelling</b>			
Intercept	.18	.08	
$R^2$	.01		
$F$	5.11		
Agreeableness	.02	.02	.03
Conscientiousness	.02	.01	.07
Extraversion	-.01	.01	-.02
Openness	-.04	.01	-.09
<b>Non-labelled Labelling</b>			
Intercept	.70	.12	
$R^2$	.01		
$F$	3.64		
Agreeableness	-.08	.02	-.10*
Conscientiousness	-.01	.01	-.02
Extraversion	-.01	.01	-.02
Openness	-.01	.02	-.01

\* $p < 0.05$

## D2. Frequency

For Private Labelling, a simple regression analysis showed that the one variable entered, Frequency of buying rice, explained 1.7% of the variance of the amount of chosen BL rice ( $F(1,136) = 3.351$ ,  $p = .049$ ). The Frequency of buying rice was shown to be a significant predictor of the amount of chosen PL rice ( $\beta = -.16$ ,  $p = .049$ ). The amount of chosen PL rice decreases with .16  $SD$  for each increase of 1  $SD$  of the Frequency of buying rice, given that all other variables are kept constant. However, Frequency was not a good predictor for the other products.

For the non-labelled products, a simple regression analysis also showed that the one variable entered, Frequency of buying couscous, explained 2.3% of the variance of the

amount of chosen NL couscous ( $F(1,136) = 4.274, p = .041$ ). The Frequency of buying couscous was shown to be a significant predictor of the amount of chosen NL couscous ( $\beta = .18, p = .041$ ). The amount of chosen NL couscous increases with .18 *SD* for each increase of 1 *SD* of the Frequency of buying couscous, given that all other variables are kept constant.

Table 2. The intercept,  $R^2$ ,  $F$  value,  $\beta$  value, standard error and the Beta for the prediction of frequency of buying a product on the number of chosen BL and PL products

variable	Intercept $B$	Intercept $SE B$	$F$	$R^2$	$B$	$SE B$	$\beta$
<b>Private label Labelling</b>							
Rice	.15	.04	3.35	.017	-.02	.01	-.16
<b>Non-labelled Labelling</b>							
Couscous	.28	.05	4.27	.02	.05	.02	.18

### D3. Age

A simple regression analysis showed that the one variables entered, Age, explained 0.7% of the variance of the chosen amount of PL products ( $F(1,1654) = 11.6876, p = .001$ ). Age was shown to be a significant predictor of the amount of chosen PL products ( $\beta = -.08, p < .001$ ). The amount of chosen PL products decreases with .08 *SD* for each 1 *SD* of Age, given that all other variables are kept constant.

However, Age was not a significant predictor in the case of NL ( $\beta = .05, p = .492$ ), as shown in table 3.

Table 3. The intercept,  $R^2$ ,  $F$  value,  $\beta$  value, standard error and the Beta for the prediction of age on the number of chosen products per label

variable	$B$	$SE B$	$\beta$
<b>Private label Labelling</b>			
Intercept	.20	.03	
$R^2$	.007		
$F$	11.876		
Age	-.01	.01	-.08*
<b>Non-labelled Labelling</b>			
Intercept	.37	.04	
$R^2$	.00		
$F$	.11		
Age	.00	.00	-.01

\* $p < 0.05$

#### **D4. Gender**

A Chi-square test showed a non-significant relation between Gender and the label choice ( $\chi^2(1) = .277, p = .598$ ). Consequently, gender did not contribute to a significant relation in the case of PL. Furthermore, Gender did not contribute to a significant relation in the case of NL.

Table 9.  
the two Observed count and column percentages (between brackets) between levels of gender for the three different labels.

Label	Female	Male
PL	137 (24.7%)	64 (26.4%)
NL	418 (75.3%)	178 (73.6%)



## Appendix E

In this Appendix, the results of the on product type level analyses were reported. Firstly, the product choice variable on a product type level was analyzed. Secondly, the effect of personality traits on a product type level was analyzed. Thirdly, the effect of gender was analyzed on a product type level. Fourthly, the effect of age was analyzed on a product type level. Finally, the effect of education on a product type level was analyzed.

### E1. Product choice

On a product level, a Chi-square test showed a significant relation between the preferred product, which had the six types of labels as its levels, and the type of product, which had the twelve types of products as its levels ( $\chi^2(44) = 233.985, p < .001$ ). On a product level, the analysis showed that for salt NL(13.3%) was chosen significantly more than FTL (5.6%), COO (9.3%), BL (4.1%) and than PL (7.0%). In addition, FTL was chosen significantly more than COO and PL.

For chocolate, the analysis showed that FTL (12.5%) was chosen significantly more than COO (8.0%), than BL (6.9%), than PL (9.5%) and than NL(8.3%). In addition, NL was chosen significantly more than BL and COO.

For canned tomatoes, the analysis showed that COOL (18.7%) was chosen significantly more than FTL (5.6%), than BL (5.4%), PL (8.5%) and than NL (10.7%). In addition, NL was chosen significantly more than FTL, BL, PL. Moreover, PL was chosen significantly more times than FTL and BL.

For tacos, the analysis showed that NL (11.4%) was chosen significantly more times than FTL (4.8%), COO (6.7%), BL (7.9%) and PL (7.5). In addition, BL was chosen more often than FTL, COOL and PL.

For tea, the analysis showed that BL (16.6%) was chosen significantly more times for FTL (9.7%), COOL (0.0%), PL (2.5%) and NL (5.0%). In addition, FTL was chosen significantly more times than COOL, PL and NL. All results can be found in table 3.

To conclude this first section, it can be stated that FTL and BL were preferred equally, that COOL was only preferred minimally and that the fillers, both PL and NL, were preferred almost half of the time, with a combined 36%. The significance of the relation is usually product dependent.

Table 3: descriptive results of the preferred label on specific products (N=138 per product type)

	FTL	COOL	BL	PL	NL
<b>Salt</b>					
Count	22	7	16	14	79
%	5.6%	9.3%	4.1%	7.0%	13.3%
<b>Chocolate</b>					
Count	49	6	27	19	37
%	12.5%	8.0%	6.9%	9.5%	8.3%
<b>Tomatoes</b>					
Count	22	14	21	17	64
%	5.6%	18.7%	5.4%	8.5%	10.7%
<b>Tacos</b>					
Count	19	5	31	15	68
%	4.8%	6.7%	7.9%	7.5%	11.4%
<b>Tea</b>					
Count	38	0	65	5	30
%	9.7%	0%	16.6%	2.5%	5.0%

## E2. Personality traits

### E2.1 Fairtrade

On a product type level, agreeableness was a significant predictor for black beans ( $\beta = .25$ ,  $p = .008$ ) and chocolate ( $\beta = .23$ ,  $p = .016$ ). The likelihood that a consumer prefers FTL chocolate and black beans therefore increases with the associated  $\beta$  SD for each increase of 1 SD of agreeableness, given that all other variables are kept constant.

Openness was a significant predictor for orange juice ( $\beta = .20, p = .033$ ), rice ( $\beta = .22, p = .017$ ), sugar ( $\beta = .22, p = .020$ ), salt ( $\beta = .27, p = .003$ ), chocolate sprinkles ( $\beta = .19, p = .039$ ), and tea ( $\beta = .24, p = .010$ ).

For the aforementioned products, the likelihood that a consumer will prefer FTL products increases with the associated  $\beta$  SD, for each increase of 1SD of openness, assuming that the other variables are kept constant.

### **E2.2 Country of Origin**

The multiple regression analysis showed that the four variables entered, extraversion, agreeableness, conscientiousness, and openness, did not explain any of the variance, 0.0%, of the number of chosen COOL products ( $F(4,1651) = 1.08, p = .365$ , adjusted  $R^2 = .00$ ).

Extraversion was not shown to be a significant predictor of the number of chosen COOL products ( $\beta = -.03, p = .254$ ). In addition, Agreeableness was not shown to be a significant predictor of the number of chosen COOL products ( $\beta = .02, p = .542$ ). Moreover, Conscientiousness was not a significant predictor of the number of chosen COOL products ( $\beta = -.03, p = .234$ ). Furthermore, Openness was not a significant predictor of the number of chosen COOL products ( $\beta = -.03, p = .205$ ).

### **E2.3 Brand labelling**

On a type of product level, the main effect of openness was prevalent for couscous ( $\beta = -.26, p = .005$ ), for tea ( $\beta = -.23, p = .013$ ), and rice ( $\beta = -.18, p = .048$ ). For couscous, tea and rice, the likelihood that a participant preferred BL decreases with the associated  $\beta$  SD, for each increase of 1SD of openness, assuming that the other variables are kept constant.

### **E2.4 Private labelling**

On a type of product level, the main effect of openness was prevalent for sugar ( $\beta = -.26, p = .006$ ), and nearing significance for black beans ( $\beta = -.18, p = .052$ ). The main effect of conscientiousness was prevalent for salt ( $\beta = .25, p = .005$ ).

For the aforementioned products, the likelihood that a consumer will prefer BL increases with the associated  $\beta$  SD, for each increase of 1SD of openness, assuming that the other variables are kept constant.

### **E2.5 Non-labelled**

On a type of product level, the main effect of agreeableness was prevalent for black beans ( $\beta = -.22$ ,  $p = .023$ ), and in the case of chocolate sprinkles beans ( $\beta = -.24$ ,  $p = .012$ ).

This means that for black beans the preference for NL decreases with .22 SD for each 1 SD of agreeableness. For chocolate sprinkles, this means that the preference for NL decreases with .24 for each 1 SD of agreeableness.

### **E3. Gender**

On a product level, in the case of FTL, the ANOVA showed that gender had a significant effect on FTL black beans ( $F(1, 136) = 10.416$ ,  $p = .002$ ) and FTL chocolate ( $F(1, 136) = 7.424$ ,  $p = .007$ ). This means that for FTL black beans, male participants ( $M=.10$ ,  $SD=.30$ ) preferred FTL less often than female participants ( $M=.35$ ,  $SD=.48$ ). For FTL chocolate, this means that female participants ( $M=.43$ ,  $SD=.50$ ) preferred FTL more often than male participants ( $M=.19$ ,  $SD=.40$ ).

In addition, in the case of BL, the ANOVA also showed that gender had a significant effect on BL rice ( $F(1, 136) = 6.912$ ,  $p = .010$ , Bonferroni correction) and BL chocolate ( $F(1, 136) = 7.566$ ,  $p = .007$ , Bonferroni correction). This means that for BL rice, male participants ( $M=.38$ ,  $SD=.49$ ) preferred BL rice more often than female participants ( $M=.18$ ,  $SD=.38$ ). For chocolate, this means that male participants ( $M=.44$ ,  $SD=.42$ ) preferred BL chocolate more often than female participants ( $M=.28$ ,  $SD=.45$ ).

However, the ANOVA also showed that gender had no significant effect on COOL ( $F(1, 1654) F<1$ ), PL ( $F(1, 1654) F<1$ ) and NL ( $F(1, 1654) F<1$ ).

### **E4. Age**

#### **E4.1 Fairtrade**

On a product level, age was a significant predictor of a preference for FTL in the case of orange juice ( $\beta = .26$ ,  $p = .002$ ), sugar ( $\beta = .30$ ,  $p < .001$ ), salt ( $\beta = .19$ ,  $p = .030$ ), canned tomatoes ( $\beta = .22$ ,  $p = .011$ ), tacos ( $\beta = .25$ ,  $p = .003$ ) and tea ( $\beta = .20$ ,  $p = .018$ ).

For Country of Origin Labelling, a simple regression analysis showed that the variable Age was not a significant predictor of a preference for COOL products ( $F(1,1654) = 1.019, p = .313$ ).

#### **E4.2 Country of Origin**

For Country of Origin Labelling, a simple regression analysis showed that the variable Age was not a significant predictor of a preference for COOL products ( $F(1,1654) = 1.019, p = .313$ ).



### **E4.3 Brand Labelling**

On a product level, age was a significant predictor for chocolate ( $\beta = -.19$ ,  $p = .025$ ). Therefore, the preference for BL chocolate decreases with 0.19 SD for each 1 SD of Age, assuming that all other variables are kept constant.

### **E4.4 Private Labelling**

On a product level, age was a significant predictor for sugar ( $\beta = -.27$ ,  $p = .001$ ), salt ( $\beta = -.18$ ,  $p = .031$ ), chocolate sprinkles ( $\beta = .18$ ,  $p = .031$ ) and canned tomatoes ( $\beta = -.28$ ,  $p = .001$ ). Therefore, the preference for PL sugar and canned tomatoes decreases with .27 and .28 respectively SD for each 1 SD of Age, whereas the preference for PL chocolate sprinkles increases with .18 SD for each 1 SD of Age, assuming that all other variables are kept constant.

### **E4.5 Non-labelled**

For Non-Labelling, a simple regression analysis showed that the variable Age was not a significant predictor of a preference for NL products ( $F(1,1654) = F < 1$ ).

## **E5. Education**

The last variable that may have played a role in determining a participants preference for a certain label, is education. Education was represented by 4 levels: 1) Secondary Education ; 2) MBO; 3) HBO and 4) WO. A One-way Analysis of Variance (ANOVA) was used to examine the question of whether the level of education has a significant main effect on the 5 types of labels. The independent variable represented the 5 different levels of education. Levene's F test revealed that the homogeneity of variance assumption was not met ( $p < .001$ ). As such, the Welch's F test was used. The dependent variable was the preferred product which could be any of the five labels: 1) FTL; 2) COOL; 3) BL; 4) PL and 5) NL. For the case of FTL, a one- way analysis of variance showed a significant effect of education on the preference for FTL ( $F(3, 1652) = 9.890$ ,  $p < .001$ ). Participants whose highest form of education was secondary education ( $M=.10$ ,  $SD=.30$ ) preferred FTL less often than HBO ( $p=0.001$ , Bonferroni-correction  $M=.29$ ,  $SD=.46$ ). Participants whose highest form of education was MBO ( $M=.17$ ,  $SD=.38$ ) scored significantly lower than HBO ( $p < 0.001$ ,

Bonferroni- correction,  $M=.29$ ,  $SD=.46$ ). This effect was not significant on a product level, as no singular type of product was shown to have a significant relation to education.

For the case of COOL, a one- way analysis of variance did not show a significant effect of education on the preference for COOL ( $F(3, 1652) < 1$ ). This means that the different types of education were not a factor in preferring a COOL product.

For the case of BL, a one- way analysis of variance showed a significant effect of education on the preference for BL ( $F(3, 1652) = 2.754$ ,  $p = .041$ ). However, the post hoc test with a Bonferroni correction revealed that no singular type of education was significantly different from another type. On a product level, the ANOVA showed that education did not significantly affect the BL products, only nearing significance for BL sugar ( $F(3, 134) = 2.253$ ,  $p = .085$ ).

For the case of PL, a one-way analysis of variance showed a significant effect of education on the preference for PL ( $F(3, 1652) = 5.940$ ,  $p < .001$ ). Participants with a MBO level of education ( $M=.14$ ,  $SD=.35$ ) scored significantly higher than participants with a HBO level of education ( $M=.08$ ,  $SD=.28$ ,  $p=.007$ , Bonferroni correction). Participants with a HBO level of education scored significantly lower than participants with a WO level of education ( $M=.15$ ,  $SD=.36$ ,  $p=.026$ , Bonferroni Correction).

On a product type level, the ANOVA with independent variable Education and dependent variable PL, showed that education only played a significant role in the case of PL rice ( $F(3, 134) = 2.921$ ,  $p = .036$ ). However, the post hoc test with a Bonferroni correction revealed that no singular level of education was significantly different from another level for PL rice.

For the case of NL, a one- way analysis of variance did not show a significant effect of education on the preference for NL ( $F(3, 1652) < 1$ ). This means that the different types of education were not a factor in preferring a NL product.

