



THE STRENGTH OF METAPHORS

THE EFFECTS OF METAPHOR AND TEXT ON CONSUMER
RESPONSES TO COFFEE PACKAGES

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Abstract

For many years brands make use of the power of metaphors. Think of a feather that expresses lightness, or placing items on top to give it more power. It is a strong and attractive technique to communicate a product attribute. At least, that is currently assumed, but the effects and influence are still quite uncertain because too little research has been conducted on this topic. Currently many brand use metaphors intuitively, but are not certain of its effects. This study tests what a metaphor of strength, namely placing an image of a lion on a coffee pack, can do for the tasting experience. The focus of this study lies on the effects of the use of a metaphor, its spatial positioning and a direct text claim on a coffee packaging and how it will influence the product experience and evaluation. This study uses a 2 (text claim vs. no text claim) x 3 (no metaphor vs. metaphor up located vs. metaphor down located) experimental design. This study shows that a visual metaphor can be an appealing and effective option to communicate a product attribute, but more interestingly that placing a metaphor on the bottom of the package can be seen as a metaphor for a stronger and more intense taste through the concept of heaviness. Furthermore, a simple text claim can contribute to the communicative qualities of a packaging and increase the final purchase intention. The results can contribute to future research and marketing communication strategy of brands.

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1 Introduction

The influence of packaging design remains a popular research topic in consumer behaviour. This is not surprising since many consumers often base their decisions on the aesthetic product design (Creusen & Schoormans, 2005). The consumer prefers the more attractive packaging or chooses the packaging that is most clear in communicating its benefits when the consumer is in a hurry. The design elements of a packaging can express the characteristics of a product, which can determine which product is the right one for the consumer. A packaging even has the power to create specific expectations and illusions that change the product experience and evaluation (Becker, Van Rompay, Schifferstein, & Galetzka, 2011; Lee, Frederick & Ariely, 2006).

Manipulated elements in packaging design often involve the material, colour or shape of a product. Another strategy in communicating a product attribute or quality can be to make use of metaphors. Research already shows the success of metaphors and how they have the power to create a specific product experience via visual metaphors (Forceville, 2002; Karnal, Machiels, Orth & Mai, 2016) or through the use of visual spatial positions (Sundar & Noseworthy, 2014; Van Rompay, de Vries, Bontekoe & Tanja-Dijkstra, 2012).

Many brands already make use of metaphors, but in fact little is known about the effects of metaphors. Expressing a product attribute through design is not always an easy job because it can be interpreted completely wrong. Especially for elements that are hard to define and open to interpretation it is of importance to know that the triggered associations are the right associations for that product. It is possible that the consumer understands the meaning of a packaging completely wrong when shopping in an overcrowded supermarket, where also many consumers decide under time pressure. Knowing which effects certain packaging elements have on the consumer can increase the product evaluation and purchase intention. Especially for visual metaphors the chance exists that the image does not portray the right meaning, is not represented clearly enough or is too difficult to be interpreted by the consumer (McQuarrie & Phillips, 2005).

While the number of research on the use of metaphors on product packaging is increasing, less or no research has been conducted on visual metaphors related to taste experience. This creates a research gap and therefore offers an opportunity for new research. This study tests a new combined research in which as well the visual metaphor as its visual spatial position are considered. This indirect way of communicating will be compared to a more direct way, where an indirect metaphor will be compared with a direct text claim to see which effects the different types of communications have on the consumer evaluation. The design will be applied to the product coffee, where a lion represents the metaphor strength at two different positions.

This study aims at providing more insights into the use of metaphors, its visual spatial position and text claims on coffee packages and how the customer evaluates them. Therefore this study focuses on giving an answer to the main research question:

‘To what extend does a metaphor compared to a text claim on a coffee packaging influence the product experience and evaluation?’

2 Theoretical framework

The theoretical framework provides insights in the relevant topics of the research design. The text gives an overview of the existing and relevant literature available on the topics. First the packaging design in general is reviewed, followed by a paragraph on taste expectations; the use of metaphors; the use of text cues; the mediators and finally the research design is presented.

2.1 Influence of packaging

Product packaging has a big influence on consumer behaviour. Especially in stores and supermarkets the packaging is one of the main factors which determines if a consumer buys a product or not (Creusen & Schoormans, 2005; Schifferstein, Fenko, Desmet, Labbe, & Martin, 2013). A consumer is influenced by many aspects of a packaging, such as the label (Fenko, Kersten & Bialkova, 2016), images and alignment (van Rompay, Fransen & Borgelink, 2014) and colour use (Kauppinen-Räsänen, 2014; Spence, 2016). A label for instance can increase the expected tastiness or healthiness of the product, depending on the type of label that is presented (Fenko et al, 2016).

According to Creusen and Schoormans (2005) the appearance of a product can have different purposes, for instance it can have an aesthetic and a symbolic meaning. It communicates the functional benefits of the product, the quality of the product and how the product can be used. Displaying the right values and characteristics of the product is important for drawing attention and customer satisfaction. The former is especially important in the overexposed supermarket where the consumer is overloaded with products. For a brand it is crucial to communicate clearly and attractively in order to stand out.

Schoormans and Robben (1997) also emphasize the importance of product categorization by different product characteristics, such as quality or a specific flavour. For the product coffee this can be for instance the intensity of the flavour (strong or weak).

2.2 Taste experience

When buying a product taste is one of the factors that are considered before purchasing the product, and this already occurs while the consumer even has no real experience with the taste of the product and can only guess the flavour by examining the packaging (Cardello, 1994;

Schifferstein et al., 2013). Consumers have certain expectations of the sensory attributes only by examining the text, colour and images on the packaging (Deliza, MacFie, and Hederley (2003).

Lee, Frederick and Ariely (2006) showed in their research that the packaging of a food product actually influences the experienced taste when it was showed before tasting a product but not when it was showed after tasting the product. This implies that simply the packaging alone influences how people experience the taste of a product and can confirm expectations by tasting it. This finding is also supported by the research from Mizutani et al. (2010), where they found that pleasant images on the packaging of orange juice led to an overall increased taste experience. Not just the design of the packaging influences the consumers' taste perception, but also the texture (Van Rompay, Finger, Saakes & Fenko, 2016), the shape and colour (Becker et al., 2011) can significantly influence how the consumer experiences a product. For example a study by Lith (2015) shows that a healthy looking material and colour enhances the expected healthiness of crackers. Measuring the actual taste experience is an important aspect of a product evaluation since the actual tasting experience verifies if the consumer likes it or that he or she will be disappointed and probably would not consider buying the product again.

Currently, most research about taste is focused on the relationship between haptic sensations of the packaging and the taste expectations and evaluations (Becker et al., 2011; Krishna & Morrin, 2008). The research by Becker et al. (2011) for example indicated that a more angular shape of a yogurt pack creates a more intense flavour sensation, or that the texture of a coffee cup can influence the perceived sweetness or bitterness of the coffee (Van Rompay et al., 2016). However, little is known about the impact of images and metaphors on taste experience.

Another technique to create a taste expectation and experience is by simply making a textual claim of the taste, which has already been proven in a study by Mizutani et al. (2010). For example 'strawberry', 'soft' or 'rich' give a very specific indication of which flavour the consumer can expect. Another option is to visualize the flavour by for instance placing a picture of a strawberry on a yoghurt pack. However, there are also taste expectations that are harder to visualize, for example a weak or strong taste or a round or smooth taste are quite difficult to be visualized. For these product expectations there are no literal translations in the form of an image, but it can be indirectly visualized by showing something that represents this characteristic by the use of a metaphor. In the next section this topic will be further discussed.

2.3 Metaphors

The use of a metaphor is a possibility to express a product feature. According to Lakoff and Johnson (1980, p. 195) a metaphor "involves conceptualizing one kind of object or experience

in terms of a different kind of object or experience”. Forceville (2008) stresses that there needs to be a clear resemblance between the target and the source. A metaphor cannot only be experienced in words, but a metaphor can influence consumer behaviour in many different ways (Krishna & Schwarz, 2014).

Visual metaphors

Forceville (1994) mentions visual metaphors, which are metaphors that are visually expressed by presenting two different images in a non-literal but in a ‘is’ or ‘is like’ way; replacing an expected image by an unexpected one. Forceville (2002) argues that metaphors are not only related to words but also to a wide range of thoughts, therefore images can represent these thoughts. For example, the concept of strength can be conceptualized by a representation of a ‘strong’ image, like a lion (‘as strong as a lion’). A condition for a metaphor according to Forceville (2002) is that a visual metaphor is typically irreversible; the metaphor representing the source cannot be reversed. The lion can represent strong coffee, but strong coffee cannot represent a lion. The visual metaphor owns his success due to the implicit way of communicating and by the attractive use of images (Jeong, 2008).

Embodied cognition

The mechanism of a metaphor can be explained by embodied cognition. Embodied cognition is generally referred to as the abstract meaning of a product feature that is related to our bodily movements and experiences (Van Rompay et al., 2012). Our bodily experiences and our sensory interactions are required to understand the human cognition (Krishna & Schwarz, 2014; Wilson, 2002).

Van Rompay et al. (2012) show in their research how package design and advertisements can create a bodily experience that influences the mind. The study presents how the use of vertical elements in an advertisement can enhance the feeling of luxury where the vertical elements are a metaphor for power since moving upwards can be associated with physical strength. This is a good example of how embodied cognition works through spatial positions. Placing elements verticality or horizontality can impact how consumers evaluate an element, where a higher position can be related the concept that powerful people are above others or are have a ‘higher’ status (Schubert, 2005). The study by Sundar and Noseworthy (2014) has found the same results but then for the use of brand logos on a high placed position. But a high position on a pack can also be seen as a ‘light’ location since light objects can be associated with flying up high rather than falling down, indicating a literal lighter product (Kahn & Deng, 2010). Additional studies show findings where a lower position on the packaging was

associated with a literal heavier package, intense smell and less activity (Van Rompay et al., 2014). Here, a lower position was associated with heaviness and more intensity. Since there is still a lot to be discovered about this topic and the results are not very straightforward, it is important to conduct more research to know more about the effects of different spatial positions. Interesting can be to investigate how placing images high or low, or left or right possibly have other effects on the consumer's perception of the product. Perhaps placing a text or image up high can be seen as more powerful or that a higher position can be associated with more strength and effort to get to that high position and therefore the product can be evaluated as strong or heavy. This concept of strength is considered in this research.

Metaphors in research

Earlier studies have shown the effect of metaphors, where Meier, Robinson and Clore (2004) for example have presented the effect of the metaphor 'dark is bad' by showing that bright coloured objects evokes more positive feelings. However, McQuarrie and Phillips (2005) consider a few important features of visual metaphors; they claim that metaphors are not always effective when the metaphor is irrelevant to the product category and a visual metaphor is more open to different interpretations compared to a direct cue like a word. This empathizes the importance of research on this topic.

The metaphor strength for food products, for example coffee, can give an impression of a strong taste and therefore influence the evaluation of the packaging, the perceived taste, the effectiveness of the product and influence the final purchase intention. This research tests if a metaphor related to strength on the packaging of coffee has a significant influence on the taste experience and product evaluation.

The following hypotheses are formulated to guide the research:

- **H1a/b/c/d/e:** Coffee packages with a lion as a metaphor for strength positively influences the a) packaging evaluation b) strength experience c) taste experience d) physical effects e) purchase intention of the coffee.
- **H2a/b/c/d/e:** Placing the metaphor on the top compared to on the bottom of a packaging positively influences the a) packaging evaluation b) strength experience c) taste experience d) physical effects e) purchase intention of the coffee.

2.4 Verbal cues

While visual elements of the packaging obtain much attention in research on packaging design, verbal cues should not be ignored. A text, compared to a visual element, can evoke different meanings of the product (Mueller & Lockshin, 2008), and so can have a unique contribution when it comes to packaging design. However the same study also stated that generally consumers find visual representations easier to process and understand, compared to a textual one.

Mueller and Lockshin (2008, p. 3) refer to the saying “a picture is worth a thousand words”, but a text on a package can contribute to a higher perceived attractiveness, quality and purchase intention (Machiels & Karnal, 2016).

Furthermore, a text cue can be used to support an indirect visual metaphor in order to give the right meaning to the image, since a metaphor can be open to interpretation (McQuarrie & Phillips, 2005; van Rompay & Velkamp, 2014), nonetheless the study by Machiels and Karnal (2016) tested this phenomenon and found different results. Their research indicated that further research on this topic is needed. Moreover, the Dual Coding Theory by Paivio (1990) suggests that combining a visual with a verbal cue should enhance the recognition and retention of the given information. Since a metaphor is an indirect indicator of a product quality, a metaphor will be compared to a direct message, namely a text claim: ‘Extra strong’. For the use of a text claim the following hypotheses are formulated, including an expected interaction effect.

- **H3a/b/c/d/e:** Packages with a text claim indicating a strong coffee positively influences the a) packaging evaluation b) strength experience c) taste experience d) physical effects e) purchase intention of the coffee.
- **H4:** A combination of a metaphor related to strength and a text claim related to strength will have a stronger influence on the evaluation of the coffee, compared to when the two elements are presented separately.

2.5 Mediators

This study tests different mediators to see how the two factors metaphor and text claim will have an influence. The mediators that are used in this research are Packaging Evaluation, Strength Experience, Taste Experience and Physical Effects. The first variable, Packaging Evaluation, evaluates the first impression of the packaging and its aesthetic qualities. The packaging and its evaluation are expected to influence the other mediators regarding the strength, taste and physical effects of the coffee that is tasted. All mediators are expected to

influence the final variable Purchase Intention. Therefore the following and final hypothesis is formulated:

- **H5a/b/c/d:** The a) packaging evaluation b) strength experience c) taste experience d) physical effects will mediate the effects of the metaphor and text claim and positively influence the final purchase intention.

2.6 Research design

The following model in Figure 1 gives an overview of the research. A 3 (no metaphor vs. up located metaphor vs. down located metaphor) x 2 (text claim vs. no text claim) experimental research design will be conducted. With this design the main research question will be addressed: *‘To what extend does a metaphor compared to a text claim on a coffee packaging influence the product experience and evaluation?’*

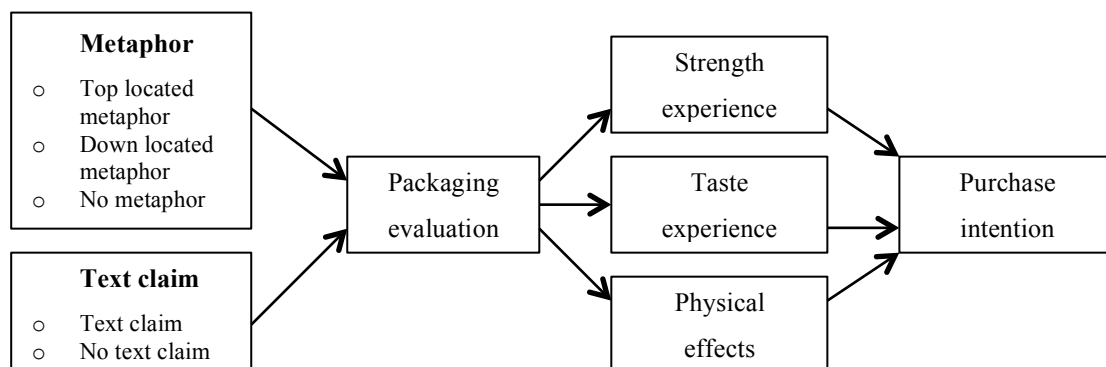


Figure 1 - The model of the 2 x 3 experimental design

3 Pre study

In order to create reliable measurement scales and stimuli for the main study, a pre study was conducted. The main study tests the evaluation of different coffee packages. Measurement scales to evaluate coffee are not present in existing research, therefore more insights in the evaluation of coffee was needed. Moreover, a correct metaphor and text claim were chosen for the stimuli in the main research that communicate the right metaphor and the right message. Both the measurement scales of the evaluation of a coffee pack (Strength Experience, Taste Experience and Physical Effects), the image of the metaphor and text claim were determined with the pre study.

3.1 Focus group

Chosen was to conduct a pre study in the form of a focus group. The focus group consisted of coffee experts who have a more professional view on the evaluation of coffee; in this case baristas from Starbucks were used for the study. The same focus group determined the final image and text claim for the stimuli material for the main study. The focus group presented the needed insights needed for the main study, of which the most important insights are presented in Paragraph 3.3. The focus group consisted of six participants, both male and females. The participants all work or used to work at Starbucks, which make them a coffee expert. All participants are between the ages of 21 until 29 years old.

3.2 Design of the focus group

The discussion was divided in four parts: tastes of coffee, effects of coffee, evaluation of text claims and evaluation of images (metaphors). First, open questions were asked in order to gain new insights and next more closed ended questions were asked. All questions that were created for the focus group can be found in Appendix A. Occasionally additional questions were asked to clarify an answer. The entire conversation was recorded for the final processing; the participants were informed about this on beforehand. In order to help choosing the correct metaphor, cards of different images were used. The participants were asked to choose the right images for a certain word, for example ‘strength’. The discussion lasted 45 minutes and took place on the 26th of February 2017.

3.3 Important findings

The discussion went well and led to a range of expected tastes in a coffee. For example sweet, bitter, sour, nutty, smoky and spicy are flavours that were called several times during the conversation. It was surprising to hear that the continents of a good or bad cup of coffee are very different per person. Not everyone likes a nutty flavour and prefers a bitterer cup of coffee. Therefore it can be concluded that the evaluation of a coffee taste can best be judged by simply asking if the participant thinks the coffee tastes good or bad, or maybe the coffee is expensive or cheap. Most participants did agree on the effects of coffee, they expect that coffee makes them more awake, energetic, focussed, alert and gives them a boost but also a relaxed feeling. When the participants were asked to come up with a text claim that indicated a strong coffee the words ‘dark’, ‘dark roast’, ‘extra strong’ and ‘intense’ were called. They all agreed that the text claim ‘Extra dark’ or ‘Extra strong’ were clear in communicating a strong type of coffee. For the determination of the image for the metaphor the participants made a top 3 of the most beautiful cards, the cards for best suiting the word ‘strong’ and also for ‘coffee’. The cards contained different images of for example animals and a bodybuilder. All images can be found in Appendix B. For all three exercises the image of the lion was the overall winner, the horse and elephant came subsequently second and third. Because of the winning picture of the lion, the text claim ‘Extra strong’ (in Dutch ‘extra sterk’) will be used for the main study since this claim best matches the image. The results of this pre study are used for the scales of the questionnaire for the main study, which is discussed in the next chapter of this paper.

4 Main study

The main study of this research tests how the use of a visual metaphor and text claim are evaluated. Also the location of the metaphor is considered. A questionnaire is used to measure the constructs that represent the evaluation of the respondents. By using a questionnaire it is possible to test all conditions in a fast and efficient way. The respondent got a quick impression of the different packages; next the participant got to taste the coffee and was asked to evaluate it with the use of a questionnaire. This chapter reflects the design, participants, procedure and the measurement instruments and reliability for all constructs.

4.1 Stimuli and design

This study uses the product coffee beans. For this product the (indirect) metaphor on different two locations (top and bottom) and the (direct) text claim are compared. The metaphor of strength is visualized with an image of a strong animal, as a result of the focus group a lion was chosen as a correct metaphor. Also the text claim is based on the focus group, the direct text claim indicates the strength with the text *‘Extra sterk’* (translated: *‘Extra strong’*). The typeface, the packaging shape and the packaging colour are kept as neutral as possible. The packaging contains as less a possible distracting features but still a few are used in order to make the packaging as real as possible. The stimuli are created with the use of Adobe Photoshop and can be found on the next page in Figure 2. A bigger version of the images can also be found in Appendix C. There are six different conditions in total. The conditions are presented below in Table 1:

Table 1 – Overview of the six conditions

Condition	Metaphor	Text claim
1 (control)	No	No
2	Up	No
3	Down	No
4	No	Yes
5	Up	Yes
6	Down	Yes



Figure 2 - Overview of the six stimuli

4.2 Participants

For the main study 131 participants participated in the study, distributed over the six different conditions. The participants are active consumers who could buy a coffee product; therefore the participants are included in the research when they drink at least one cup of coffee a year. All participants are both male and female consumers and at least 18 years old, living in the Netherlands.

A few participants were deleted from further evaluation since they did not meet the requirements. Seven participants selected that they did not drink coffee at all and one participant filled out the questionnaire dishonest, selecting all answers on the right disregarding of the asked question. The deletion of participants led to a final number of 123 participants. A Chi-

Square tests shows that there were no significant differences, $X^2(5) = 5.29, p = .38$, between gender and the conditions. A one-way ANOVA also confirmed that there were no significant differences between the conditions and ages, $F(5, 117) = 1.11, p = .36$. These results confirm that the sample was random. An overview of the final participants can be found in Table 2.

Table 2 - Demographic information of the participants

Condition	N	Age		Gender	
		M	SD	Male	Female
1	20	35.90	16.22	40%	60%
2	20	30.85	15.29	15%	85%
3	20	31.30	14.67	45%	55%
4	20	28.30	13.48	25%	75%
5	22	27.68	11.38	31.8%	68.2%
6	21	27.10	13.27	33.3%	66.7%
Total	123	30.12	14.12	31.7%	68.3%

4.3 Coffee consumption

The participants were asked about their coffee preferences. Their preferred type of coffee, strength of coffee and frequency of consumed coffee was asked. With these questions the different types of consumers were controlled in this study. Figure 2 gives an overview of the coffee usage among the participants.

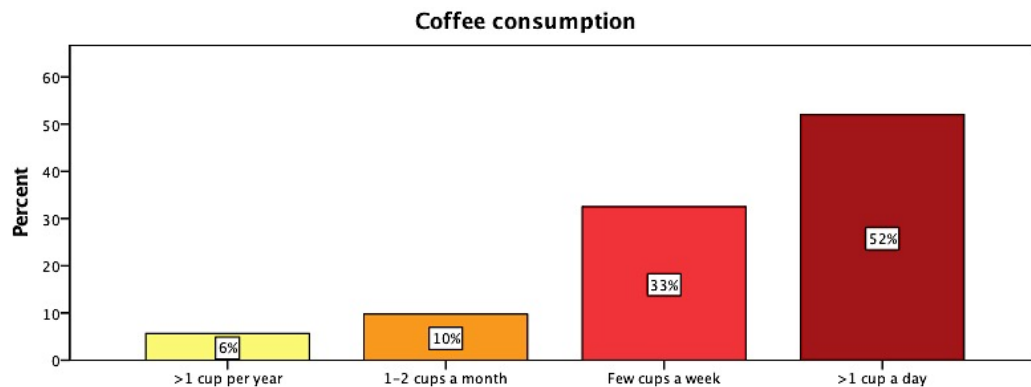


Figure 3 - Overview of the coffee consumption

Based on Figure 3 it can be concluded that most participants are frequent coffee drinkers. More than half of the participants (52%) drink at least one cup of coffee per day. Participants who never drink coffee were excluded from the research. The results show no significant effects for the different types of coffee drinkers.

Table 3 – Preference for type of coffee

Type of coffee	N	%	% of cases
Espresso	13	8.4	10.6
Regular coffee	40	26.0	32.5
Cappuccino / latte	80	51.9	65.0
Sweetened coffee	20	13.0	16.3
Other	1	0.6	0.8
Total	154	100.0	125.2

Table 3 shows the preference of the type of coffee. The most popular types of coffee are cappuccino (65%) and regular coffee (32.5%). Participants were able to select more than one type of coffee; this makes the total number of cases 154 instead of 123.

Table 4 – Preferred strength of coffee

	N	Min	Q1	M	Q3	Max	Mean
Preferred strength	123	1	5	6	7	10	5.93

Table 4 shows a simple overview of the preferred strength of the coffee of the participants. Most participants prefer a bit strong coffee, with a mean strength of 5.93 on a scale from 1 to 10. Based on the five number summary it can be concluded that 50% of the participants prefer a level of strength between 5 and 7 on a scale from 1 to 10.

4.4 Procedure

Participants were approached in the Starbucks store in Zwolle. The data was collected on 5, 7, 8 and 10 April 2017 in the afternoon between 11 and 5 o'clock. He or she was asked to participate in a quick research for a master thesis. The participant filled out the questionnaire him- or herself on a laptop or tablet. The participant was shown one of the six packages and asked how he or she evaluated it. Asking the participant to evaluate the packaging prior to tasting the coffee ensured that the participant paid attention to the packaging. Subsequent the participant was asked to drink an unknown coffee, claimed to come from the shown packaging and was asked to evaluate the coffee with the use of a questionnaire. The coffee they tasted was a regular coffee from the brand Douwe Egberts and prepared with a French press, served in a simple plastic cup that resulted in a plain and simple coffee. The questionnaire was created in Qualtrics. Qualtrics randomly showed one of the six conditions, making sure each condition has an equally divided group of at least 20 participants.

4.5 Measurement instruments

The questionnaire measures all variables (Packaging Evaluation, Strength Experience, Taste Experience, Physical Effects and Purchase Intention). If available, existing scales for the constructs were used. All items are measured on a 7-point Likert scale, including reversed items in order to avoid bias. The questionnaire starts with the selection criteria where the participant was asked how much coffee he or she drinks, people who drink less than one cup of coffee a year were excluded from the research. The questionnaire ends with demographical questions regarding their age and gender. The questionnaire can be found in Appendix D.

Packaging Evaluation

This construct measures the first impressions the respondent has of the packaging and is expected to mediate the effects of the independent factors (metaphor and text) and the dependent variables (Strength Experience, Taste Experience and Physical Effects). The questions test the basic evaluation of the packaging on a 7-point Likert scale. Questions like '*I like this packaging*' and '*I think this coffee is of good quality*' are asked. This question ensures that the participant really takes the time to evaluate the packaging before tasting the coffee.

Strength Experience

The measurement of the construct Strength Experience is based on the insights of the focus group from the pre study. Asked was how the participants evaluated a strong coffee and what they associated with this. Strength Experience was measured using a 7-point Likert scale where the participant was asked to indicate their level of agreement with how well words like 'dark', 'heavy' and 'powerful' fitted the coffee they tasted. The participant could choose between 'totally disagree' and 'totally agree'.

Taste Experience

The construct Taste Experience measures how well the participants evaluate the coffee taste. Since a good or bad coffee tastes for everyone different, the tastes were measured on a more basic level. The participant could indicate their level of agreement on a 7-point scale between 'totally agree' and 'totally disagree' on statements like '*I think this coffee tastes... good... expensive...etc.*'.

Physical Effects

The construct Physical Effects is measured using a 7-point Likert scale, measuring the level of agreement on the physical effects the participant expects to have from the coffee. The

question ‘*I expect that this coffee makes me*’ was asked. The participant would rate statements like ‘*more awake*’, ‘*more concentrated*’ and ‘*more focussed*’. The rated items are based on the findings from the pre study.

Purchase Intention

For Purchase Intention the scale of Dodds, Monroe and Grewal (1991) is used. The scale was also measured with a 7-point Likert scale where the participant could chose between ‘totally disagree’ and ‘totally agree’. The existing scale was edited to fit the supermarket product coffee and resulted into three items that were used in the questionnaire.

4.6 Reliability

The reliability of the scales is calculated according to the values of Cronbach’s Alpha. The values need to be at least .70 in order to be called reliable (Spector, 1991). Table 5 presents the final scales and their reliability. All items have an alpha of at least .73 and can be called reliable.

Table 5 – The items per scale and the reliability of the constructs

Scale	Items	N	α
Packaging Evaluation	‘I like this packaging’	4	.73
	‘I think this coffee is of good quality’		
	‘This packaging does not appeal to me’ (<i>reversed</i>)		
	‘I think this is a strong coffee’		
Taste Experience	‘This coffee tastes... good’	4	.82
	‘This coffee tastes... rich’		
	‘This coffee tastes... exclusive’		
	‘This coffee tastes... cheap’ (<i>reversed</i>)		
Strength Experience	‘This coffee tastes... dark’	5	.90
	‘This coffee tastes... heavy’		
	‘This coffee tastes... weak’ (<i>reversed</i>)		
	‘This coffee tastes... powerful’		
	‘This coffee tastes... strong’		
Physical Effects	‘I expect this coffee to make me... awake’	7	.81
	‘I expect this coffee to make me... concentrated’		
	‘I expect this coffee to make me... focussed’		
	‘I expect this coffee to make me... lazy’ (<i>reversed</i>)		
	‘I expect this coffee to make me... aroused’		
	‘I expect this coffee to make me... relaxed’		
	‘I expect this coffee to make me... powerful’		
Purchase Intention	‘I would consider buying this coffee at the supermarket’	3	.95

‘I would buy this coffee at the supermarket’

‘There is a strong likelihood that I will buy this coffee at the
supermarket’

5 Results

This research tests two factors: the use of metaphors on two different positions and the use of text claims. This resulted in six different conditions that measured the five dependent variables: Packaging Evaluation, Taste Experience, Strength Experience, Expected Effectiveness and Purchase Intention. A one-way MANOVA was conducted to see which influence the metaphor and text claim have on the variables. An alpha with the value of .05 is used. All noticeable results are discussed in the results section, which leads to a confirmation or disconfirmation of the proposed hypotheses. An overview of the descriptive statistics of the variables and the results of the one-way MANOVA test can be found in Appendix E.

5.1 Metaphor effects

The study tests the effects of metaphors on packages. Four out of the total six conditions contained the metaphor of a lion that resembled the strength of the coffee, placed on the top or at the bottom of the packaging. Below the effects of the metaphor are tested.

Packaging Evaluation

A metaphor appears to have a significant main effect on the Packaging Evaluation, $F(2, 117) = 9.36, p < .001$. These results show that packages with a metaphor are more positively evaluated compared to a packaging without a metaphor. Figure 4 shows a graph that demonstrates that the presence of a metaphor, whether up or down, has a positive influence on the Packaging Evaluation of the coffee. The packaging is more appreciated with a lion or maybe the appearance of an image on the design. The metaphor in the top position is somewhat more appreciated compared to the bottom position, but this effect between the top and bottom location is not significant. The findings are in favour of the hypothesis regarding the presence of the lion (H1a), but demonstrate no significant results regarding the hypothesis about the top and bottom location (H2a).

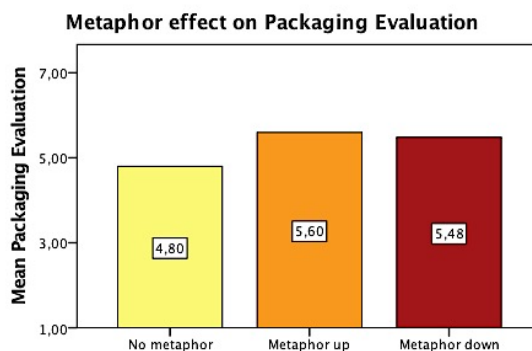


Figure 4 - The mean packaging evaluation

Strength Experience

The metaphor effect is marginally significant for Strength Experience, $F(2, 117) = 2.42, p = .09$. The graph in Figure 5 shows how the evaluation is distributed among the positions of the metaphor. Strength Experience has the highest evaluation on packages containing a metaphor, but show no difference between the different positions of the lion. Just as for the Packaging Evaluation, the presence of a lion shows a positive effect on the Strength Experience, but the position does not show any effect. This is in line with the predictions about the main effect of the metaphor (H1b), but contradicts the hypothesis about the position of the metaphor (H2b).

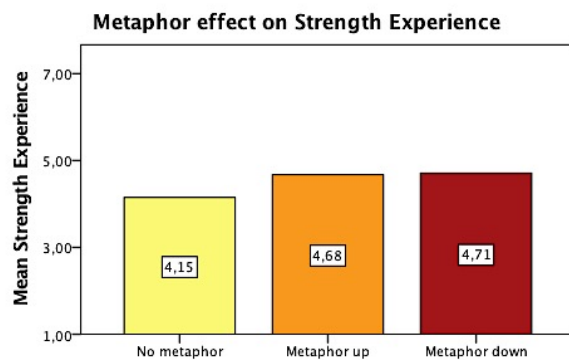


Figure 5 - The mean strength evaluation

Purchase Intention

The metaphor effect is also marginally significant for Purchase Intention, $F(2, 117) = 2.47, p = .09$. The graph in Figure 6 shows how the effects are distributed among the positions. This graph shows a different pattern than the graphs in Figure 4 and 5 since the metaphor does not seem to have the main influence, but the position of the lion does.

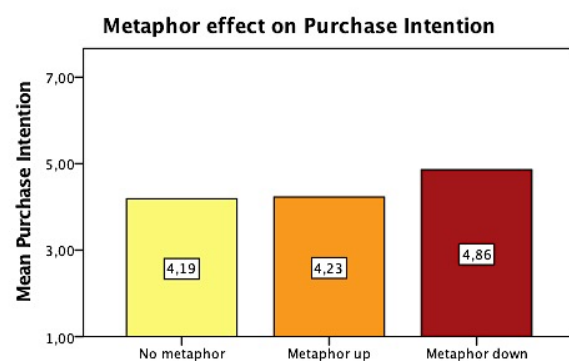


Figure 6 - The mean purchase intention

Surprisingly, the metaphor placed on the bottom has the highest evaluation on Purchase Intention, and therefore contradicts the hypothesis about the effects of the position on Purchase Intention (H2e). Also the metaphor on the top position is equally evaluated as the packages without a metaphor. The top position therefore does not seem to add any value when it comes to Purchase Intention. The metaphor alone does have an influence, supporting H1e, but only when the metaphor is in the down-placed position, rejecting H2e.

The effect of the metaphor was not found significant for the other variables as can be seen in Table 9, Appendix E. This leads to a rejection of the remaining hypotheses H1c/d and H2c/d. An overview of the supported and not supported hypothesis can be found in paragraph 6.5.

5.2 Text claim effects

A text claim was tested on the different coffee packages. Three out of the six conditions contained a text claim ‘Extra strong’ on a fixed location. The effects of the text claim are discussed below.

Strength Experience

The use of a text claim has a significant main effect on the Strength Experience, $F(1, 117) = 4.42$, $p = .04$. As can be seen in the graph in Figure 7, the presence of a text claim has a positive influence on the level of strength of the coffee. This is in line with the expectations claiming that a text claim has a positive influence on the Strength Evaluation of a coffee packaging (H3b).

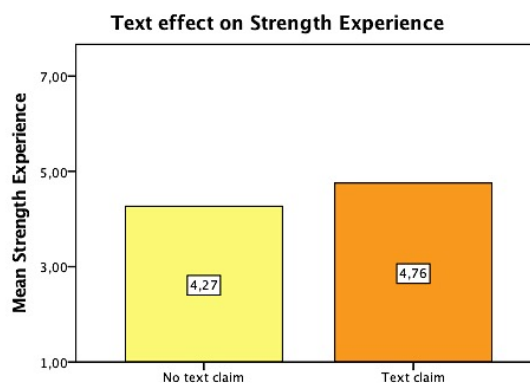


Figure 7 - Mean strength experience

Purchase Intention

The text claim effect is marginally significant on Purchase Intention, $F(1, 117) = 2.29$, $p = .07$, which means that the current data almost confirms the main effect of text claim for this construct. In Figure 8 it can be seen that the text claim also has a positive influence on the Purchase Intention of the coffee. So a text claim shows for both the Strength Experience and the Purchase Intention a positive influence. This positive influence of the presence of a text claim on the Purchase Intention is in line with the predictions (H3e).

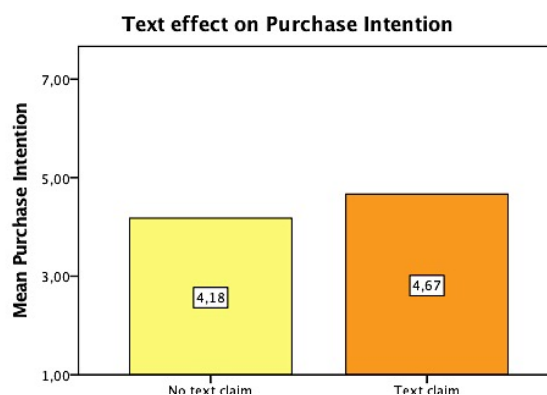


Figure 8 - Mean purchase intention

The effect of the metaphor was not found significant for the other variables as can be seen in Table 9, Appendix E. This leads to a rejection of the remaining hypotheses H3a/c/d. An overview of the supported and not supported hypothesis can be found in paragraph 6.5.

5.3 Interaction effects

No interaction effects were found between the metaphor and text claim. This means that the metaphor or text claim do not interact with each other; they do not strengthen or reduce each

other. This results in a rejection of H4, which indicated that a text claim and a metaphor together have a more positive effect compared to when the elements are presented separately.

5.4 Regression analysis

To see if Packaging Evaluation, Strength Experience, Taste Experience and Physical Effects had a direct effect on Purchase Intention a stepwise multiple regression was conducted. Although the constructs Taste Experience and Physical Effects did not appear to be influenced by the use of a metaphor or text claim according to the one-way MANOVA, the variables do seem to have a predictive power for the construct Purchase Intention. All other variables did not have a significant effect on Purchase Intention and were deleted from the regression analysis. Table 6 shows the results of the regression analysis.

Table 6 – Regression analysis of Physical Effects and Taste Experience
Dependent variable: Purchase Intention

Models		β	t	p	F	Adj. R ² (ΔR^2)
Model 1					84.69	.41 (.00)
	Physical Effects	.64	9.20	.00		
Model 2					59.42	.49 (.08)
	Physical Effects	.45	5.75	.00		
	Taste Experience	.35	4.53	.00		

The only remaining variables in the regression analysis are Physical Effects and Taste Evaluation and support H5c and H5d. Remarkable is that both variables are more focussed on the quality of the coffee. Merely the variable Physical Effects already predicts Purchase Intention for 42% and has a significant influence on Purchase Intention, $\beta = .64$, $t = 9.20$, $p < .001$. However, including Taste Experience, $\beta = .35$, $t = 4.53$, $p < .001$, to the model with the Physical Effects, $\beta = .45$, $t = 5.75$, $p < .001$, increases its predictive power with 8%, which leads to a final adjusted R² of .49. Physical Effects and Taste Experience together then predict almost 50% of the Purchase Intention of the coffee. The model in Figure 9 below shows the regression analysis of the total model, including the non-significant variables.

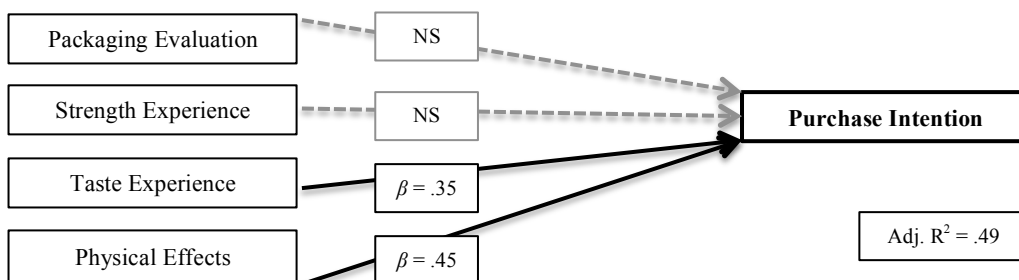


Figure 9 - Results of the regression analysis

5.5 Overview of hypotheses

Considering the previous results, the proposed hypotheses can be supported or rejected. Below in Table 7 an overview is given of the hypotheses.

Table 7 – Overview of the supported and rejected hypotheses

	Hypotheses	Supported
H1a	Coffee packages with a lion as a metaphor for strength positively influence the <i>packaging evaluation</i> of the coffee.	Yes
H1b	Coffee packages with a lion as a metaphor for strength positively influence the <i>strength experience</i> of the coffee.	Yes*
H1c	Coffee packages with a lion as a metaphor for strength positively influence the <i>taste experience</i> of the coffee.	No
H1d	Coffee packages with a lion as a metaphor for strength positively influence the <i>physical effects</i> of the coffee.	No
H1e	Coffee packages with a lion as a metaphor for strength positively influence the <i>purchase intention</i> of the coffee.	Yes*
H2a	Placing the metaphor on the top compared to on the bottom of a packaging has a more positive influence on the <i>packaging evaluation</i> of the coffee.	No
H2b	Placing the metaphor on the top compared to on the bottom of a packaging has a more positive influence on the <i>strength evaluation</i> of the coffee.	No
H2c	Placing the metaphor on the top compared to on the bottom of a packaging has a more positive influence on the <i>taste experience</i> of the coffee.	No
H2d	Placing the metaphor on the top compared to on the bottom of a packaging has a more positive influence on the <i>physical effects</i> of the coffee.	No
H2e	Placing the metaphor on the top compared to on the bottom of a packaging has a more positive influence on the <i>purchase intention</i> of the coffee.	No
H3a	Packages with a text claim indicating a strong coffee positively influences the <i>packaging evaluation</i> of the coffee.	No
H3b	Packages with a text claim indicating a strong coffee positively influences the <i>strength experience</i> of the coffee.	Yes
H3c	Packages with a text claim indicating a strong coffee positively influences the <i>taste experience</i> of the coffee.	No
H3d	Packages with a text claim indicating a strong coffee positively influences the <i>physical effects</i> of the coffee.	No
H3e	Packages with a text claim indicating a strong coffee positively influences the <i>purchase intention</i>	Yes*

of the coffee.

H4	A combination of a metaphor related to strength and a text claim related to strength will have a stronger influence on the evaluation of the coffee, compared to when the two elements are presented separately.	No
H5a	The <i>packaging evaluation</i> will mediate the effects of the metaphor and text claim and positively influence the final purchase intention.	No
H5b	The <i>strength experience</i> will mediate the effects of the metaphor and text claim and positively influence the final purchase intention.	No
H5c	The <i>taste experience</i> will mediate the effects of the metaphor and text claim and positively influence the final purchase intention.	Yes
H5d	The <i>physical effects</i> will mediate the effects of the metaphor and text claim and positively influence the final purchase intention.	Yes

* These results were significant for an alpha level of .10.

6 Discussion

This study aimed to get more insights in the effects of metaphors and text claims on product packages. To test these effects six conditions were examined and used to evaluate the dependent variables Packaging Evaluation, Strength Experience, Taste Experience, Physical Effects and Purchase Intention. In this discussion all results are evaluated per factor and the final conclusions are described. Furthermore, the implications and limitations of the research are discussed and a general conclusion is given.

6.1 Discussion of results

Metaphor

This study is interested in how a metaphor on a product packaging can contribute to the product expectations and evaluation. The last couple of years there is an increasing amount of research focussed on this topic and has shown the importance of testing how a metaphor impacts the consumer's evaluation of a product (Sundar & Noseworthy, 2014; Van Rompay & Veltkamp, 2014). This study confirms these findings and demonstrates that the presence of a metaphor, in this case the image of a lion to communicate the strength of the coffee, positively influences the general packaging evaluation.

The lion on the coffee packaging was successful in communicating the strength of the coffee. Packages with a lion were perceived to taste stronger compared to packages without a lion, even though the coffee the participants tasted was not a specifically strong coffee and for all participants in the different conditions the same coffee was used. This means that a visual metaphor is an effective tool in communicating a product attribute or can give the illusion that a product contains a specific product attribute. Therefore, this result confirms the previous findings by Forceville (2002).

A significant effect for the presence of a metaphor was found on the packaging evaluation. Placing a lion on a packaging has a positive influence on the packaging evaluation, meaning that the participants evaluated the packages to be more beautiful, appealing, higher of quality and were more convinced that the product contained a stronger coffee. Jeong (2008) states that the attractiveness of images contributes to the evaluation of a product; this claim can be confirmed with this study.

The intention to buy the coffee product with the presence of a lion was slightly higher than for the packages that did not contain a lion. Thus, a metaphor contributes to the purchase

intention of a product. Surprisingly, this result is not mediated by the previously mentioned variables Packaging Evaluation or Strength Experience since these variables were non-significant in the regression analysis. A metaphor can therefore have a direct effect on Purchase Intention or be mediated by an external variable like for example price, brand or trust.

Also the results were not significant for the Taste Experience and Physical Effects, perhaps the representation of a lion is not associated with a better taste or human physical effects and therefore the right connection is not made. Or the lack of a physical product like of a coffee cup or bean makes the packaging less connected to the original product coffee and therefore the taste experience can be harder to imagine.

Position

One of the most unexpected results is how the position of the metaphor influenced the evaluation of the participants. There was a top-located position of the metaphor and a bottom-located position. The top-located lion was evaluated to have a more appealing packaging. However overall, the bottom-located lion was better evaluated. Unfortunately, many of these effects were not found significant. To be more specific: the mean evaluation of Strength Evaluation, Taste Experience and Physical Effects was a bit higher for the lower placed lion, but these results were too little to be called significant. Thus, it can be concluded that the location has no influence on the general evaluation, but expected is that more data can confirm the trend that has been acknowledged and that a bottom-located lion will have a positive influence on the more intrinsic product evaluation but not for the extrinsic attributes.

The one significant result was found for Purchase Intention; participants implied to buy the product sooner when they were shown a packaging with a lion on the bottom of the package. This result is in line with the other non-significant results, which show that a lion on the bottom has a more positive influence on their evaluation of the product. This result can be supported by the research of Van Rompay et al. (2014) where it was concluded that a lower position and movement referred to the idea of heaviness. The concept of heaviness can, according to the results of the focus group, be related to the idea of strength, a strong taste can be perceived as heavy (on the tongue). Heaviness was also one of the items of the scale for Strength Experience. Hereby, this research enhances the idea that a lower spatial position on a packaging can give the impression of heaviness, not just literally but also metaphorically heavy of taste.

Text claim

To compare the effects of the indirect message by using a metaphor, a text claim was used to test how a direct message is of influence on the evaluation of the product. The text claim

‘Extra sterk’ (‘Extra strong’ in English) was placed on the coffee packages for half of the conditions. As in line with the expectations, a text claim did contribute to communicating its product attribute of a strong coffee.

The text claim is found significant on the Strength Experience and also on the Purchase Intention, for both variables the packages containing a text claim had a positive influence on their evaluations. The text claim is very straightforward and it would have been surprising if the message was not well understood, this also did not seem to be a problem in the study.

The text claim was not of benefit for the taste or effectiveness of the coffee. Contrary to the metaphor, the packaging was also not found more appealing with the text claim presented. From this it can be concluded that a text claim works best for communicating a specific product attribute, but not really for much more. This strategy possibly makes the consumer more convinced about the benefits a product has; he or she perhaps has more trust in the product or prefers a simple and clear message, which can lead to a higher purchase intention. A negative effect for the text claim has not been found in this study, from which it can be concluded that a text claim works for the aim it is supposed to work and does not negatively influence other elements. A text claim presents itself as a simple and effective communication tool for product packages.

Interaction effects

In this study there were no interactions found between the factors, but the text claim and metaphor were found effective on its own. This result is surprising since the Dual Coding Theory by Paivio (1990) proposes that both visual and verbal information are processed and recognized better together than presented separately. The results do not show any effects between the visual metaphor and the verbal text claim, which raises questions about the working of the two elements together. Though, these results are in line with the study by Machiels and Karnaal (2016) where they found that a text and image, both regarding the level of processing of an orange juice, did not show any interaction effects. This shows that there is more to be discovered about how visual and verbal elements work together and how the consumer processes them.

Mediating effects

The constructs Taste Experience and Physical Effects are not influenced by the use of a metaphor or text claim, nonetheless the two variables together do have a predictive power of 49% on the variable Purchase Intention. These variables are more focussed on the intrinsic attributes of the coffee and that can be the reason why the packaging and its elements are of less

importance than the actual coffee itself. Besides, this study did not particularly manipulate the taste expectations or effects directly, but is more focussed on the strength of the coffee. It seems that the participants were not influenced by the metaphor or text claim when it comes to the actual taste and effects or maybe even the quality of the coffee itself. However, the two variables Taste Experience and Physical Effects are important predictors for the decision to buy a coffee or not. A coffee should have a pleasant and good taste and it should have the desired physical effects in order to make a chance to be purchased by the consumer. However, still 51% of the purchase intention is determined by other factors that are not tested in this research, but these variables remain unknown in this study.

When the consumer buys a product in a supermarket he or she most of the time does not know how a coffee actually tastes or which effect the coffee has. In this study the participants did taste the coffee product and the factors Taste Experience and Physical Effects became predictive for Purchase Intention. Possibly these two variables have a different impact when the consumer buys the product in the supermarket and has no opportunity to taste the product. This remains a question that cannot be answered with this study, but it can be concluded that the quality, meaning the taste and the physical effectiveness, of the coffee does say a lot about the chances if a consumer is likely to buy the product or not.

6.2 Implications

Practical implications

Current research already shows the influence that packages have on the decision making process of consumers in supermarkets (Creusen & Schoormans, 2005; Schifferstein, Fenko, Desmet, Labbe, & Martin, 2013). Thus, a good design based on the knowledge of which effects different factors can have on consumer behaviour can be crucial. A brand does not only want to stand out, but also wants to communicate the right message in order to be successful.

This study demonstrates that the use of a metaphor, its location and a text claim all have influence on the evaluation and the product evaluation. Placing a metaphor on a packaging does not only communicate successfully its message in a metaphorically and indirect way, but it also enhances the aesthetic quality of the packaging and can contribute to the final purchase intention. A metaphor on the bottom can create an illusion of intensiveness, heaviness or the strength of the product, perhaps depending on the type of product. So placing an image or maybe text on the bottom can contribute to the experienced intensiveness of the taste of the product. These are insights that are quite new and not applied by many brands yet. Additionally,

a text claim is effective in communicating one simple message or product attribute. If the text claim is not drawing too much attention it probably will not negatively influence any other factors, but it would also not contribute to anything else. Though, a text claim on its own is powerful enough to influence the purchase intention of the consumer.

Theoretical implications

This research supports existing studies about the influence of product packages, making the findings and theories more valid and valuable. More information has come to knowledge that creates opportunities for new research. This research in particular is a good example where several studies are combined and tested in one study; a metaphor, its position and text claim are factors that are not new within the field of consumer research, but are topics that need more research to gain more insights on how to successfully make use of them. The used factors in this study, to my knowledge, have also never been researched in this combination before. The results can be applied and tested for other products or categories in future studies. It can be interesting to see if the results are the same for other beverages like energy drink, soda or tea. But the design might also be suitable for completely different products like cleaning products, where for instance a lower placed lemon can increase the expected cleaning effects or scent experience.

6.3 Limitations and suggestions for future research

This study presents some interesting results that are useful for future research. However, the study knows a few limitations and should be taken into account. First, it is important to mention that it is a small study and conducted with a limited amount of participants, which gives little data and makes not all results significant. Therefore, the conclusions are sometimes based on marginally significant outcomes. More data is needed to create a more valid study. When the research procedure is considered it is important to understand that the used packages were not shown in real life, but on a computer screen. This can make the packaging less real and harder to image what the product really would look like. The study used a questionnaire where the participants were approached randomly face-to-face. The downside of a questionnaire is that it is a self-report of the participant. It is difficult to know what the participant actually thinks or why, also the unconscious processes of the participant are not well measured. The location where the study was conducted can be a bias for the study since the surrounding could be noisy or crowded; this could lead to less concentrated or distracted participants. The final results are not based on the type of coffee drinkers (occasionally vs. frequent coffee drinkers) since the

study did not show significant effects for the different type of consumers, which can possibly affect the preference for a strong coffee when people might not like strong coffee in general. Since the experiment was conducted in a Starbucks the participants possibly might not represent the general coffee buyers in the supermarkets but might appear to be more coffee lovers than the general supermarket consumer.

Elaborating on the limitations, advice and guidelines for future research can be formulated. First of all it can be interesting too test how this design works for other products and product categories, tested on more participants. From this it can be concluded if the results can be generalized for all packages or perhaps only drinks or food products. To get more insights in the final results it is important to know which other mediating or moderating variables can be influenced by a metaphor, its position and text claim and how these variables can influence the eventual purchase intention. Possible mediators can be brand preference or awareness, price and trust. A moderator can be the amount of consumption or the level of involvement. High involved consumers are likely to take more time to evaluate a packaging and can be less sensitive for peripheral cues, for these consumers a text claim providing useful information will probably have the biggest influence on the purchase intention. Where the lower involved consumer prefers a more simple and attractive packaging and will be influenced by the images and its location on a packaging. This study shows that taste and effectiveness are very important predictors for the purchase intention, but they were not influenced by the independent factors. Interesting can be to investigate how a package can influence the variables of taste and physical effectiveness in order to increase the purchase intention. A possible method for this can be a focus group or interviews to find the underlying reason why they like a packaging or not and to understand how important certain packaging elements are for them.

6.4 Conclusion

The aim of this study was to see which influence a metaphor and text claim have on the evaluation of a product. A 2 x 3 experimental design was conducted to test the following research question: *'To what extend does a metaphor compared to a text claim on a coffee packaging influence the product experience and evaluation?'* This study succeeded in answering the question by means of a focus group and questionnaire, testing six different conditions. A metaphor has been found to be a successful strategy in communicating a product attribute like the strength of a coffee, and enhances the aesthetic value of the packaging and increases the purchase intention. This study shows very interesting results when it comes to the down-positioned lion on the coffee packaging. Contrary to the top-located lion, the bottom

position seems to slightly impact the taste and strength experience and the physical effects of the coffee by giving the illusion of metaphorically heaviness or strength. It also significantly influences the purchase intention of the product. The literally low and heavy location seems to be related to the actual taste experience and the evaluation of the strength and effectiveness, creating a more intense and effective coffee. Though not all effects were found significant, the results and the detectable trend yield more interest in the effects of the positioning on product packages. Finally, a text claim can also be effective in communicating a product attribute and purchase intention, but only in a less attractive manner. The results can be valuable for future research and feasible for marketing strategies.

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Appendices

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Appendix A – Questions pre study

Note: All questions were asked in Dutch.

-- INTRODUCTION --

Here I want to ask the participants to not just think of the 'Starbucks rules' about coffees and tasting coffees. But I would like their own and general opinions. I also will mention that they are free to say anything that is on their mind. The interview will be used for research purposes only and the participants will remain anonymous.

PART 1. TASTE EXPECTATIONS

Q1. You are all coffee experts. Can you tell me which words you might use when you describe how a coffee tastes, despite the quality of the coffee? Can everyone name 2 words?

Q2. Which flavours would you like to taste in a good cup of coffee?

Q3. Which flavours would you expect to taste in a strong cup of coffee?

Q4. Which flavours would you expect to taste in a weak cup of coffee?

PART 2. EXPECTED EFFECTIVENESS

Q5. Which effect do you expect after drinking coffee? How do you expect to feel afterwards?

Q6. Would you say that coffee makes you...:

... more focussed? (NL: gefocussed)

... more active? (NL: actief)

... more awake? (NL: wakker)

... more concentrated? (NL: geconcentreerd)

... more aroused? (NL: geprikkeld)

... more alert? (NL: alert)

Something else?

PART 3. TEXT

Q7. Image you buy a pack of coffee, what kind of coffee would you expect to see on the packaging that indicates it is a strong coffee? What would you choose to place on such a coffee packaging?

Q8. Which of the following text claims do you think is most clear in communicating a strong type of coffee?

- ‘Extra sterk’ (EN: extra strong)
- ‘Extra sterke koffie’ (EN: extra strong coffee)
- ‘Sterke smaak’ (EN: strong taste)
- ‘Extra dark’
- ‘Extra krachtig’ (EN: extra powerful)
- ‘Extra caffeine’
- ‘Very strong’

PART 4. STRENGTH

Q9. What does a strong coffee mean to you? (*Only strong of taste, or more caffeine etc.*)

Q10. Before you I placed a couple of images. My question to you is to make a top 3 together of the cards that you think are most appealing/beautiful.

Q11. Can you now do the same, but then a top 3 of the cards that you think best match the word ‘coffee’.

Q12. Can you now do the same, but then for the word ‘strength’?

--- End of focus group ---

Appendix B – Images pre study

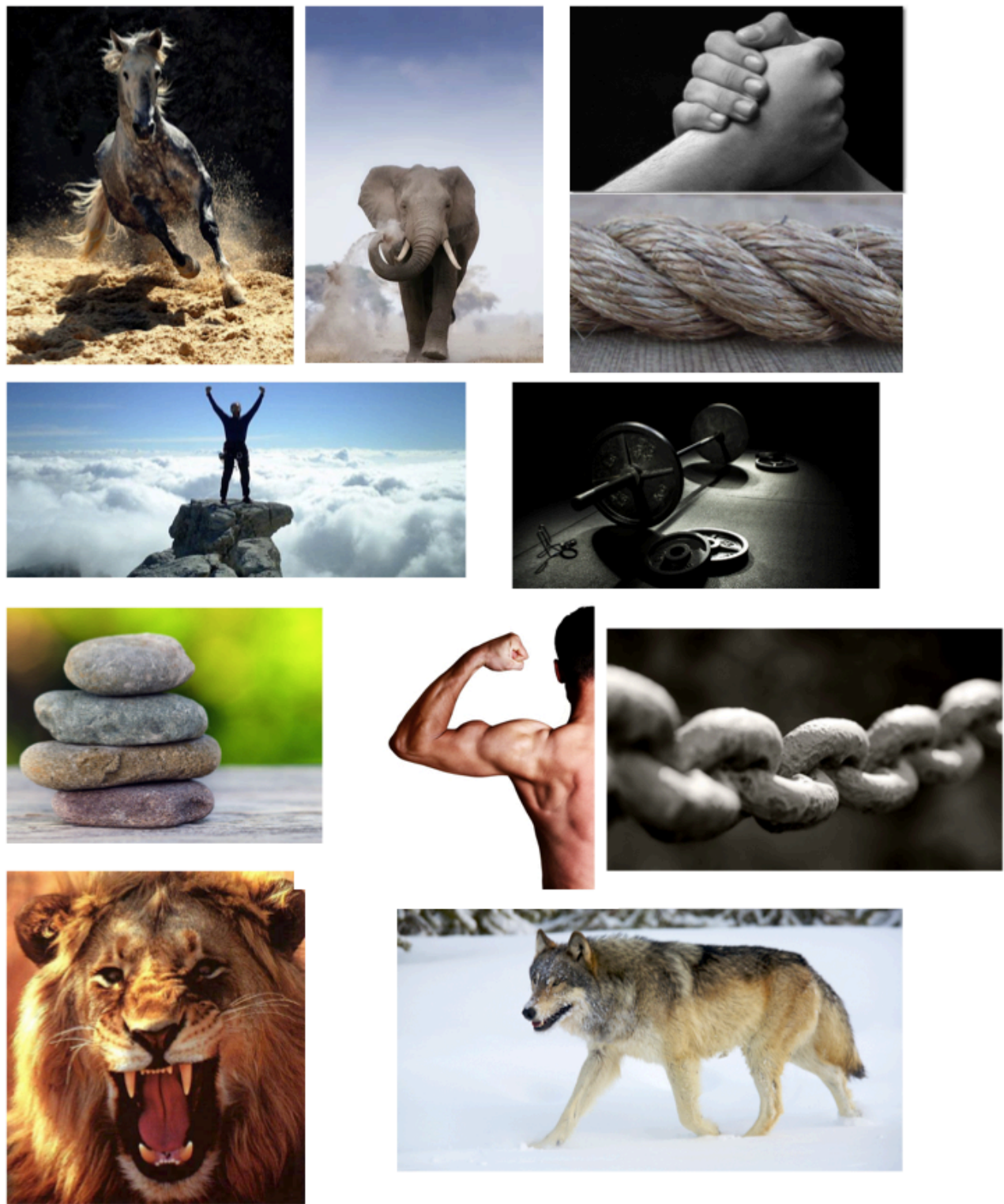


Figure 4 - Images used for the focus group

Appendix C – Stimuli main study

Condition 1: Control condition
(no metaphor, no text claim)



Condition 2: Metaphor up + no text



Condition 3: Metaphor down + no text



Condition 4: Text claim only



Condition 5: Metaphor up + text claim



Condition 6: Metaphor down + text claim



Appendix D – Questions main study

Note: All questions are translated to Dutch in the final questionnaire.

This questionnaire is part of my Master Thesis for the study Communication Studied, which I attend at the University of Twente. By filling out this questionnaire you are helping me graduate, thank you for that! Filling out the questions will take about 4 minutes. The results are used for research purposes only and will be treated anonymously. Know that there is no right or wrong answer. Thank you again for taking the time to fill out this questionnaire.

Important: The products that are used in this study have by no means a relation with Starbucks products. The brand Starbucks has no relation with this study.

Kind regards,
Roxan de Vries

- ☐ I hereby agree to participate in this study and declare that I am at least 18 years old.
-

Q1. How often do you drink coffee?

- ☐ Never (*→ excluded from the research*)
- ☐ At least 1 cup of coffee a year
- ☐ One or two cups a month
- ☐ A few cups of coffee a week
- ☐ At least one cup of coffee every day

Q2. What kind of coffee do you prefer?

- ☐ Espresso
- ☐ Regular coffee (filter, lungo, Senseo etc)
- ☐ Cappuccino or latte
- ☐ Sweetened coffee with syrup
- ☐ None of the above

Q3. On a scale from 1 to 10, how strong do you prefer your coffee?

1 - - - - - 10

The following questions are about the packaging you see below. Take a minute to look at the image. Important: you cannot go back to this image later on.

> SHOW PACKAGING A / B / C / D / E / F <

Q4. Please indicate your level of agreement on the following statements:

Totally disagree - - - - - Totally agree

- Q4.1 I like this coffee package
- Q4.2 I think this coffee is of good quality
- Q4.3 This packaging does not appeal to me
- Q4.4 I think this is a strong coffee

*You may now taste the coffee. The coffee belongs to the coffee packaging you just saw.
(A sip is enough, it is about the impression you have of the coffee).*

The next questions are about the coffee you just tasted from the shown packaging.

Q5. Please indicate your level of agreement on the following statements:

This coffee tastes:

Totally disagree - - - - - Totally agree

TASTE

- Q5.1 Good
- Q5.2 Rich
- Q5.3 Exclusive
- Q5.4 Cheap

STRENGTH

- Q5.5 Dark
- Q5.6 Heavy
- Q5.7 Weak
- Q5.8 Powerful
- Q5.9 Strong

Q6. Please indicate your level of agreement on the following statements:

I expect this coffee to make me:

Totally disagree - - - - - Totally agree

- Q6.1 Awake
- Q6.2 Concentrated

Q6.3 Focussed

Q6.4 Lazy

Q6.5 Aroused

Q6.6 Relaxed

Q6.7 Powerful

Image you are in the supermarket looking for coffee and you see this coffee packaging. The product fits within your budget.

Q7. Please indicate your level of agreement on the following statements

Totally disagree - - - - - Totally agree

Q7.1 I would consider buying this coffee at the supermarket

Q7.2 I will purchase this coffee at the supermarket

Q7.3 There is a strong likelihood that I will buy this coffee at the supermarket

Finally, I would like to know some general information about you.

Q8. What is your age?

—

Q9. What is your gender?

- ☐ Male
- ☐ Female

This is the end of the questionnaire. Thank you for your time!

Appendix E – Additional tables

Table 8 – Descriptive statistics of scales

Text claim	Metaphor	Packaging Evaluation		Strength Experience		Taste Experience		Physical Effects		Purchase Intention	
		M	SD	M	SD	M	SD	M	SD	M	SD
No Text claim	No metaphor	4.84	1.21	3.72	1.32	4.14	1.51	4.07	1.20	3.78	1.85
	Metaphor up	5.63	.64	4.31	1.43	4.43	1.34	4.27	1.18	4.25	1.76
	Metaphor down	5.40	.81	4.77	1.32	4.59	1.12	4.51	1.02	4.50	1.25
Text claim	No metaphor	4.76	1.21	4.58	1.16	4.36	1.25	4.39	1.06	4.60	1.67
	Metaphor up	5.57	.74	5.01	1.24	4.68	1.14	4.61	.71	4.21	1.46
	Metaphor down	5.56	.56	4.66	1.14	4.86	.88	4.61	.79	5.21	.92

Table 9 – Results of the one-way MANOVA for all variables

Factor	Packaging Evaluation		Strength Experience		Taste Experience		Physical Effects		Purchase Intention	
	F	p	F	p	F	p	F	p	F	p
Metaphor	9.35	.00	1.55	.22	2.42	.09	1.15	.32	2.47	.09
Text claim	.00	.96	1.29	.26	4.42	.04	1.91	.17	3.29	.07
Metaphor * Text claim	.22	.81	.00	1.00	1.72	.18	.18	.84	.98	.38