

SUITABLE MARKETING POSITIONING STRATEGIES FOR BRANDS OFFERING HYBRID MEAT – A CONSUMER INSIGHT

THE EFFECT OF PROMOTION AND AVAILABILITY ON EXPECTED QUALITY
PERCEPTION AND INTENTION TO BUY HYBRID MEAT

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Suitable marketing positioning strategies for brands offering hybrid meat – a consumer insight

Bachelor thesis Marketing and Consumer Behaviour group

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*July 2019
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Abstract

This research aims to investigate suitable marketing positioning strategies for brands offering hybrid meat. An online consumer survey was conducted to gain knowledge on consumer insights, additional to a literature study on different marketing positioning strategies. In this research, a 2x3 factorial design was used, resulting in six possible scenario groups. The stimuli *promotion* was divided into positive word of mouth and no word of mouth. The stimuli *availability* was divided into no availability, low variety and high variety. The effects of the two stimuli, *promotion* and *availability*, on *expected quality perception*, moderated by *food choice motivations*, were tested. On top of that the effect of *expected quality perception* on *intention to buy* hybrid meat was tested. Data was analysed using Univariate General Linear Model (ANOVA and factorial ANCOVA) and Linear Regression by using IBM SPSS Statistics 23. The number of participants (n=129) was equally distributed among the six scenario groups. No statistically significant effects were found between *promotion* and *availability* and *expected quality perception* of hybrid meat. A statistically significant effect between *expected quality perception* and *intention to buy* hybrid meat was found. To create a complete suitable marketing strategy for brands offering hybrid meat, it is suggested to use all four consumer sensitive indicators: *price*, *promotion*, *availability* and *packaging* in future research.

Table of contents

1.	INTRODUCTION	4
1.1.	<i>Situation</i>	4
1.2.	<i>Problem description</i>	5
2.	THEORETICAL FRAMEWORK	6
2.1.	<i>Positioning</i>	6
2.2.	<i>Marketing mix</i>	7
2.2.1.	Promotion	7
2.2.2.	Availability	8
2.3.	<i>Framework</i>	8
2.3.1.	Expected quality perception	8
2.3.2.	Promotion	8
2.3.3.	Availability	9
2.3.4.	Food choice motivations	9
2.3.5.	Conceptual model and hypotheses	10
3.	METHODOLOGY	11
3.1.	<i>Design and participants</i>	11
3.2.	<i>Stimuli</i>	11
3.3.	<i>Measures</i>	11
3.4.	<i>Procedure</i>	12
3.5.	<i>Data analysis</i>	12
4.	RESULTS	13
4.1.	<i>Descriptive and preparative</i>	13
4.2.	<i>Hypotheses</i>	14
4.2.1.	Relation promotion and availability – expected quality perception	14
4.2.2.	Relation expected quality perception – intention to buy	15
5.	CONCLUSION AND DISCUSSION	16
5.1.	<i>Conclusion</i>	16
5.2.	<i>Discussion</i>	16
5.2.1.	Theoretical relevance	16
5.2.2.	Practical relevance	17
5.2.3.	Limitations and implications for further research	18
6.	REFERENCE LIST	20
7.	APPENDIX	23
7.1.	<i>Survey</i>	23
7.2.	<i>Output IBM SPSS Statistics 23</i>	28
7.2.1.	Output IBM SPSS Statistics 23: Descriptive and preparative	28
7.2.2.	Output IBM SPSS Statistics 23: Hypotheses	30
7.2.2.1.	Relation promotion and availability – expected quality perception	32
7.2.2.2.	Relation expected quality perception – intention to buy	33

1. Introduction

1.1. Situation

The world is facing a major challenge of feeding nine billion people by the middle of this century in an environmentally sustainable way (Godfray et al., 2010). On top of this rising population, increased wealth and thereby higher purchasing powers resulted in higher consumption and increasing demand for meat, dairy and fish. This is of great concern, since producing meat and other animal proteins requires a huge amount of plant material and consequently huge amounts of arable land, water and raw materials (de Bakker & Dagevos, 2012). The production of meat has to double to feed nine billion people by the middle of this century, which is alarming considering that we need to halve the environmental impact to not exceed the status quo in overall impact (Steinfeld et al., 2006). Rising meat consumption is not only harmful from an environmentally sustainable perspective, but also from a public health perspective (Stehfest et al., 2009). Saturated fats in animal products increase the risk of cardiovascular disease, diabetes and some types of cancer (Walker, Rhubart-Berg, McKenzie, Kelling, & Lawrence, 2005).

It is clear that there is a need for meat reduction and substitution to more sustainable ways of protein intake (de Bakker & Dagevos, 2012). The study of de Bakker and Dagevos (2012) showed that 26.5% of the Dutch consumer population eat meat on a daily basis and consider it as an essential component of their meals. This group of consumers is called “meat lovers”. The opposite of “meat lovers” are “meat avoiders”, which is only a small group (4%) of vegetarians eating no meat at all. There is a large group of consumers (approximately 70%) in between these more extreme groups, who are called “meat reducers”. This group reduces their meat consumption by having at least one meatless day a week. It is found that especially this large group of meat reducers, or also called flexitarians, offer promising opportunities to transform meat consumption to more sustainable ways of protein intake.

De Boer, Schösler and Aiking (2014) compared meatless meals and smaller portions of meat to examine strategies to adapt Western meat consumption to health and sustainability challenges. Quantitatively, a meatless day (0 g meat instead of 150 g) and three days with reduced portions of meat (three times 100 g instead of 150 g) are equivalent. However, from consumer perspective, these are different types of choices. A meatless day involves a qualitative decision, and a reduced portion of meat involves a quantitative decision. The results of the study of de Boer et al. (2014) showed a correlation between a meatless meal and the purchase of a meat substitute and a correlation between reduced portions of meat and the purchase of organic or free range meat.

Another solution to bridge the gap between “meat lovers” and “meat avoiders” could be found in hybrid meat. This is proposed in the study of Neville, Tarrega, Hewson and Foster (2017) to achieve substitution and reduction of meat consumption. Hybrid meat partially replaces animal proteins with more sustainable plant-based high protein sources, which allows consumers to continue using meat, a product they conventionally used. The results of their study showed that hybrid meat products contain similar sensory attributes as full meat products, since they were grouped together on a correspondence analysis. On top of that, it is found that hybrid meat products are generally well liked among consumers. This indicates

that it is important to replicate a meaty flavour and meaty colour in hybrid meat products to increase acceptability among “meat lovers”.

1.2. Problem description

It is clear that increasing production and consumption of meat is harmful for both the environment and public health. There is room for improvement, considering the fact there is a large group of consumers in between “meat lovers” and “meat avoiders”, who are already reducing their meat consumption to a certain extent (de Bakker & Dagevos, 2012). According to the Vegetarian Butcher, the Dutch market for meat substitutes has increased from 13% in 2016 to 15% in 2017 (Ingenbleek & Zhao, 2019). Although this increase does not seem to be substantial, the total turnover of this market has increased from 27 million euros at the beginning of this century to 62 million euros in 2009 (de Bakker & Dagevos, 2010). Compared to the enormous market for meat, the market for meat substitutes is relatively small, but it is rising.

The market for hybrid meat products is relatively new. Only some hybrid meat products have entered the Dutch food market in the past years (de Bakker & Dagevos, 2012). A recent example is that of hybrid minced schnitzels and meat bars from meat company Encko, containing 70% meat and 30% mushrooms, which are entering the Dutch food market in supermarkets like Coop and Poiesz (Hallema, 2019). A more sustainable way of protein intake is made accessible by incorporating plant-based protein sources in for example hamburgers, sausages and mince products (de Bakker & Dagevos, 2012). However, de Bakker and Dagevos (2012) mention, it is not the sustainability aspect of hybrid meat that is emphasized, but the value of health by advertising hybrid meat as lean products containing less fat. In addition to this, an imitation strategy is used, by modifying hybrid meat products until they look and taste the same as full meat products. This may be favourable for consumer acceptability, but on the other hand could lead to criticism that consumers are being misled or that food enterprises are messing unnaturally with original products.

A sufficient amount of knowledge on different types of motivations and options to reduce and substitute meat consumption is available in literature. However, to our best knowledge, limited knowledge is available on consumer insights of hybrid meat and the best way to position this product in the market. Therefore, the aim of this research is to investigate suitable marketing positioning strategies for brands offering hybrid meat, by studying consumer insights. A main research question is used to guide this research. The main question used in this research is:

“Which marketing positioning strategies are most suitable for brands offering hybrid meat, reaching most effective consumer insights?”

At first, a literature study will be conducted to explore different marketing positioning strategies of brands offering hybrid meat. Thereafter, consumer insights on these different positioning strategies will be measured by conducting an online consumer survey.

2. Theoretical framework

2.1. Positioning

It is impossible to serve all buyers in a market at the same time and manner, because they are too numerous and differ in needs and practices (Kotler, Wong, Saunders & Armstrong, 2005). Therefore, a lot of companies use target marketing to identify parts of the market they can serve best. Target marketing includes segmentation, targeting, and positioning. The first step, market segmentation, consists of dividing heterogeneous markets into explicit homogeneous groups of buyers with similar needs, characteristics, or purchase behaviour. The second step, market targeting, involves selecting one or more segments to enter after evaluating each segment's attractiveness. The third step, market positioning, entails the position of the product in consumers' minds relative to that of competitors, based on important attributes of the product. This positioning in minds of consumers is done to simplify buying decision making. Market positioning will be further elaborated in the remainder of this research.

According to Brooksbank (1994), a positioning strategy consists of interrelationships between three subcomponents: customer targets, competitor targets and competitive advantage. A segment in the market needs to be entered resulting in, considering a company's strengths, satisfying customer needs better than competitors. This requires complete understanding of a company's *strengths, weaknesses, opportunities, and threats* (SWOTs), which can be achieved by internal, competitor and customer analysis. The final positioning strategy can be brought into action by means of an appropriate marketing mix; *product, price, promotion and place* (the 4P's). Each P should be adapted to make sure the target segment regard the product as being superior to competitive products. Figure 2.1 shows the interrelationship of the three components of a positioning strategy according to Brooksbank (1994).

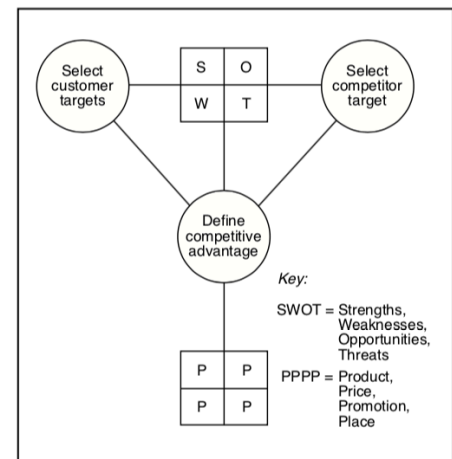


Figure 2.1: Components Marketing Positioning Strategy. Reprinted from "The Anatomy of Marketing Positioning Strategy", by Brooksbank, R. (1994).

Kotler et al. (2005) distinguishes various positioning strategies that use associations to change consumers' perception of products. The first strategy, *product attributes*, positions many technical products by focusing on specific attributes of a product. The second strategy, *benefits offered*, positions many products by pointing out the needs they fill. The third strategy, *usage occasion*, also positions many products by emphasizing the specific time a product could be used. The fourth strategy, *users*, could help position products, because products are associated by their user class. The fifth strategy, *activities*, is used to sell expensive products. The sixth strategy, making use of *personalities*, who also often help position products. The seventh strategy, *cult positioning*, is synonymous with children's products, which are merchandized. The eighth strategy, *origin* of products, associates products with its place of manufacture. The ninth strategy, *other brands*, helps position products. The tenth and eleventh strategy are *competitors*, because they provide two strategies: position a

product *against the competitor* and *away from competitors*. The final strategy is *product class* membership. Often, a combination of several strategies is used by marketers.

2.2. Marketing mix

As also stated by Brooskbank (1994), a good positioning strategy could be implemented by making use of the marketing mix (Rajagopal, 2019). Rajagopal (2019) discusses the expansion of the indicators of the marketing mix over the years due to changing business environments and government policies. *Product, price, promotion* and *place* are still the fundamental indicators of the marketing mix, dominating the process of developing a good marketing strategy. Besides the basic 4P's, the marketing mix consists of extended functional indicators (5P's): *packaging, pace, people, performance* and *psychodynamics*, and design indicators (2P's): *posture* and *proliferation*. On top of that, there are peripheral elements of the marketing mix which affect marketing strategies. The peripheral elements of the marketing mix are: the 4A's: *awareness, availability, affordability* and *adaptability*, the 4C's: *consumer relations, convenience, cost to consumers* and *conflicts*, the 4V's: *validity, venue, vogue* and *value*, and the 4E's: *expansion of business, exploitability of markets, experience sharing* and *emotions of consumers* (Figure 2.2).

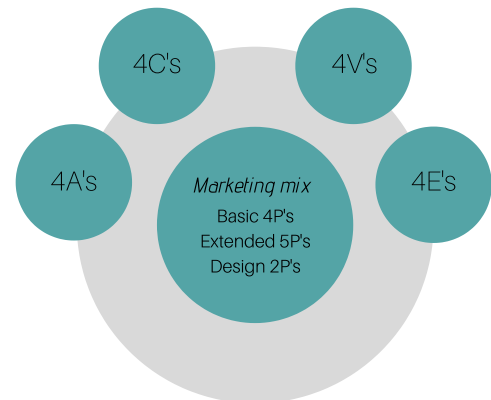


Figure 2.2: Marketing mix based on Rajagopal (2019).

Due to the size of this expanded marketing mix, this research focuses on four consumer-sensitive indicators of the marketing mix, which are used to position brands and products: *price, promotion, availability*, and *packaging* (Rajagopal, 2019). Consumers are most sensitive to these indicators resulting in wider psychodynamics and purchase intentions. When consumers are unfamiliar with brands or products, like with hybrid meat, developing such marketing mix strategies to position a product or brand is challenging. The marketing mix needs to be designed correctly to acquire new consumers and retain existing ones, by adding competitive advantage and customer value.

Time constraints of this research resulted in selecting only two of these four consumer-sensitive indicators to discuss in detail. These are one fundamental indicator: *promotion*, and one peripheral indicator: *availability*. These two are selected, because they are sensitive to changes in demand and technology in the modern world. Availability of meat alternatives and substitutes in supermarkets is rising, and promotion strategies need to adapt to innovations in for example social media platforms.

2.2.1. Promotion

Promotion means communicating the product to customers to build and maintain customer relationships (Kotler et al., 2005). To do this, a company uses a promotion mix consisting of advertising, personal selling, sales promotion, public relations and direct marketing tools. Due to increasing competition in the market, good promotional strategies are required to be a successful company (Rajagopal, 2019). In this modern digital world, promotions are driven by

word-of-mouth and social media interactions. All elements of the promotion mix should guarantee that communication with customers and partners raise awareness and are informative and ethical (Madeira, 2019).

2.2.2. *Availability*

Availability is part of the 4A's of the peripheral elements of the marketing mix which affect marketing strategies (Rajagopal, 2019). Availability of products in stores within reach of consumers is necessary to prevent them from switching to other available brands. In case of non-availability of desired products, these products are not bought resulting in consumers switching to competitors. Therefore, availability contributes to the market performance of a company.

2.3. Framework

2.3.1. *Expected quality perception*

Consumers first develop quality perceptions based on, in this research, the two indicators *promotion* and *availability*, before intentions to buy hybrid meat products are formed. Before the purchase of hybrid meat, consumers will have expectations about the quality of the product, but only after purchase the experienced quality can be established (Brunsø, Fjord & Grunert, 2002). Expected quality perception is user-oriented and can be different between users for the same product. Brunsø et al. (2002) discuss the Total Food Quality Model to explain quality perception, which is originally suggested by Grunert, Larsen, Madsen and Baadsgaard (1995). The basis of this model is formed by the distinction between before and after purchase evaluations, because not all characteristics of a product can be established before purchase. This research focuses on the before purchase evaluation, since consumers' intentions to buy hybrid meat are formed before the purchase of hybrid meat products. In this part of the Total Food Quality Model quality expectations are made based on quality cues. Cues are informational stimuli, which can be observed prior to consumption (Steenkamp, 1989). *Promotion* and *availability* could be seen as extrinsic quality cues in this research, because they are physically not part of the product.

2.3.2. *Promotion*

In terms of *promotion*, participants of the study from Gravenly and Fraser (2018) rated animal-based protein as being better promoted than plant-based protein. Moreover, store audits made clear that there are more promotions for animal-based protein than for plant-based protein. In a study of Prinsloo, Groenewald and Pelsner (2014) about market positioning of branded meat products, 63% of the participants reported being influenced by 'word of mouth' (WoM) promotion. Positive word of mouth could contain recommendations about a product and pleasant, vivid, or novel experiences with a product to others (Anderson 1998). This finding of Prinsloo et al. (2014) is supported by Thøgersen and Zhou (2012), who state that marketers can benefit from early adopters who act as role models and communicate to other adopter groups. This can be called a 'pull strategy', which is also used by the Vegetarian Butcher, who base their promotion on storytelling, free publicity and social media (Ingenbleek & Zhao, 2019). In conclusion, *positive word of mouth* is expected to result in increased *expected quality perception* of hybrid meat. In this research, positive word of mouth covers the sustainability aspect of hybrid meat.

2.3.3. Availability

With regard to *availability*, results from the study of Gravenly and Fraser (2018) showed that animal-based protein occupies a higher amount of shelf space in supermarkets compared to plant-based protein. On top of that, participants in this study noted a lack of variety in plant-based protein products, in comparison to many different animal-based protein products and brands. This resulted in more satisfaction to shop for animal-based protein products than for plant-based protein products. Selling products in supermarkets is necessary considering availability. The Vegetarian Butcher started their sales at specialty stores and some butchers, but eventually their products are now also added to supermarkets' assortments (Ingenbleek & Zhao, 2019). When plant-based protein products are added to supermarkets' assortments, it is convenient if they could be easily located by consumers. In the study of Gravenly and Fraser (2018) it is found that plant-based protein products are less easy to find than animal-based protein products, because of a lack in consistency in product location between supermarkets. In conclusion, *availability* and *variety* of hybrid meat products in supermarkets are expected to result in increased *expected quality perception* of hybrid meat.

2.3.4. Food choice motivations

The relations of the two indicators, *promotion* and *availability*, and *expected quality perception* of hybrid meat products are moderated by motivations of consumers to buy these more sustainable protein products. This means these relations could be strengthened or weakened due to particular motivations to buy hybrid meat products. Results of the study of Hoek, Luning, Stafleu and de Graaf (2004) showed that vegetarians consider health as an important quality aspect more than meat consumers do. This is supported by Apostolidis and McLeay (2016), who reported that meat reducing consumers are more environmentally oriented in comparison with vegetarians, who avoid meat for more health and moral reasons. A similar comparison is made by Soule and Sekhon (2019) who found that vegan brands used health and taste persuasive appeals on packaging more often, whereas humane brands used animal welfare and environmental appeals more often.

These environmental motivations to buy hybrid meat stem from biospheric values a person can have, which are the most important values relating to stimulating pro-environmental behaviour (Steg, 2016). Due to biospheric values, people focus more on the consequences of their choices for nature and environment. Five strategies could motivate people to act upon their biospheric values: lowering cost and increasing benefits, reducing cognitive effort, information and feedback, taking advantage of people's desire to be consistent, and social influence.

The Food Choice Questionnaire (FCQ) of Steptoe, Pollard and Wardle (1995) is seen as the standard method for measuring motives, reasons or motivations for choosing and eating food (Onwezen, Reinders, Verain & Snoek, 2019). Onwezen et al. (2019) developed a single-item FCQ using eight original dimensions of Steptoe et al. (1995): health, mood, convenience, sensory appeal, natural content, price, weight control and familiarity. The ninth original dimension, ethical concerns, is subdivided based on a study of Lindeman and Väänänen (2000) in three ethical dimensions: environmental protection, animal welfare and social justice.

Since *positive word of mouth* contains information about the sustainability aspect of hybrid meat, it is expected that the motivational dimensions, environmental protection and animal welfare, have a positive effect on the relation between *promotion* and *expected quality*

perception of hybrid meat. In addition, the motivational dimensions, convenience and familiarity, are related to *availability* of hybrid meat in supermarkets. Therefore, a positive effect of convenience and familiarity on the relation between *availability* and *expected quality perception* of hybrid meat is expected.

2.3.5. Conceptual model and hypotheses

Based on literature, five hypotheses are formulated, resulting in a conceptual model (Figure 2.3).

H1: *Positive word of mouth* leads to higher *expected quality perception* of hybrid meat compared to no word of mouth

H2: *Availability* and *variety* of hybrid meat products in supermarkets lead to higher *expected quality perception* of hybrid meat compared to no availability and low variety of hybrid meat products in supermarkets

H3: The *food choice motivations* environmental protection and animal welfare positively affect the relation between *positive word of mouth* and *expected quality perception* of hybrid meat

H4: The *food choice motivations* convenience and familiarity positively affect the relation between *availability* and *variety* and *expected quality perception* of hybrid meat

H5: *Expected quality perception* of hybrid meat is positively related to consumers' *intention to buy* hybrid meat

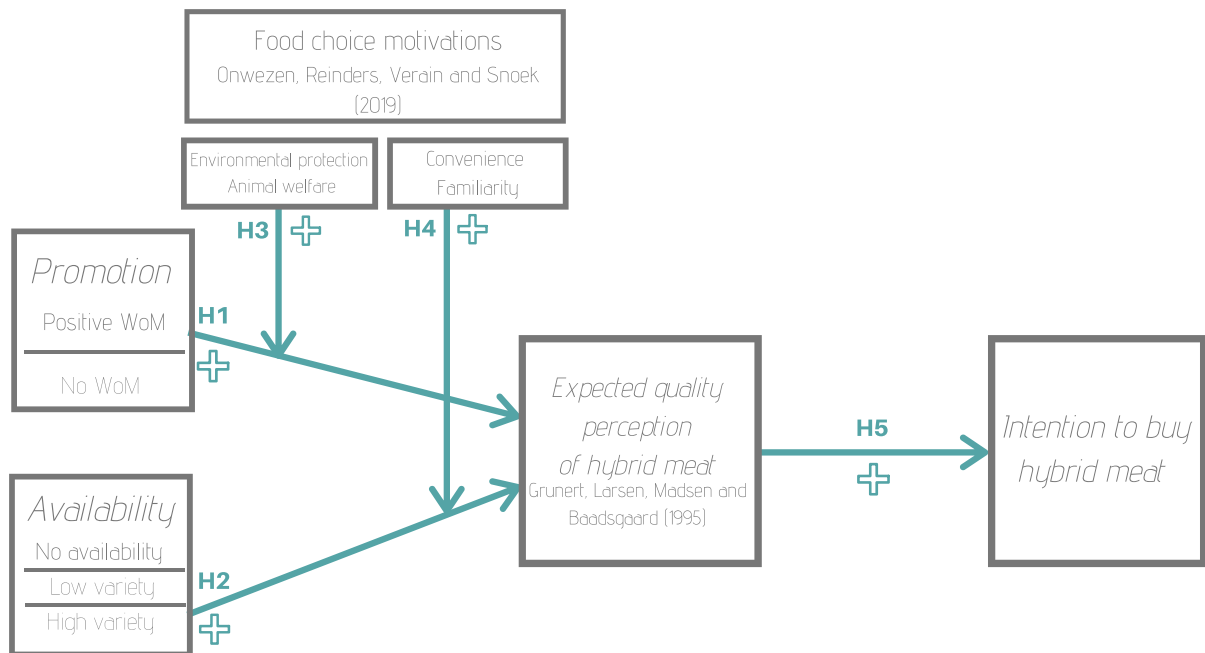


Figure 2.3: Conceptual model

3. Methodology

3.1. Design and participants

In this research, a 2x3 factorial design was used, resulting in six possible scenario groups (Figure 3.1). The main stimulus *promotion* was divided into two options: positive word of mouth and no word of mouth. The main stimulus *availability* was divided into three options: no availability, low variety and high variety.

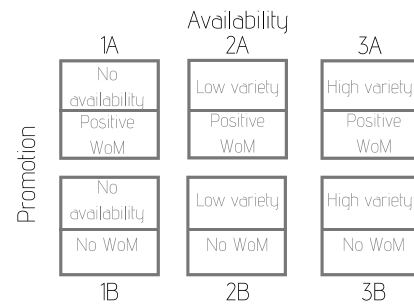


Figure 3.1: 2x3 factorial design

The sampling size was targeted at a level of 120 participants. Participants had to live in the Netherlands, and had to be sixteen years or older. Since the survey had to be filled in online, participants were gathered via online platforms as Facebook and WhatsApp.

3.2. Stimuli

The stimulus *promotion* had two different options: one consisting of positive word of mouth about the sustainability aspect of hybrid meat and the other consisting of no word of mouth. The first option was made clear by a simulated Facebook review post, with information about the consequences of meat production and consumption for the environment, with hybrid meat seen as the solution to reduce environmental harm. In the second option, nothing was showed.

The stimulus *availability* had three different options: no availability, low variety and high variety. No availability was made clear by: "Imagine you are walking in a supermarket. You are standing in front of the shelf of meat and meat replacers, and **cannot find** any hybrid meat product. This particular supermarket **does not offer** hybrid meat". Low variety was made clear by: "Imagine you are walking in a supermarket. You are standing in front of the shelf of meat and meat replacers, and **can find one type** of hybrid meat product. This particular supermarket **does offer one type** of hybrid meat". High variety was made clear by: "Imagine you are walking in a supermarket. You are standing in front of the shelf of meat and meat replacers, and **can find eight types** of hybrid meat products. This particular supermarket **does offer eight types** of hybrid meat".

3.3. Measures

Expected quality perception was measured with four items on a 7-point scale, ranging from 1 = 'very unlikely' to 7 = 'very likely', based on the Total Food Quality Model of Grunert et al. (1995). The quality dimensions were: taste, health, convenience and process.

Intention to buy hybrid meat was measured with one item on a 7-point scale, ranging from 1 = 'I will definitely do not' to 7 = 'I will definitely do' (Zhou, Thøgersen, Ruan & Huang, 2013).

Food choice motivations was measured with eleven items on a 7-point scale, ranging from 1 = 'not at all important' to 7 = 'very important', based on the single-item FCQ of Onwezen et al.

(2019). The items were: health, mood, convenience, sensory appeal, natural content, price, weight control, familiarity, environmental protection, animal welfare and social justice.

3.4. Procedure

After the introduction, an image of an example of hybrid meat was showed to all participants. Participants were randomly assigned to one of the six scenario groups. At first, one of the two *promotion* options (positive word of mouth or no word of mouth) was showed, followed by one of the three *availability* options (no availability, low variety or high variety). After reading and seeing these conditions, four items on *expected quality perception* were asked. Subsequently, one item on *intention to buy* hybrid meat, and eleven items on *food choice motivations* were asked. At last, four questions to gain knowledge on background information were asked. The complete survey can be found in Appendix 7.1.

3.5. Data analysis

Data was analysed using IBM SPSS Statistics 23. To check hypothesis 1 up to and including hypothesis 4, the relation between the two main stimuli *promotion* and *availability* and *expected quality perception* of hybrid meat, moderated by *food choice motivations* needed to be analysed. This was done using Univariate General Linear Model (ANOVA and factorial ANCOVA). To check hypothesis 5, the relation between *expected quality perception* of hybrid meat and *intention to buy* hybrid meat needed to be analysed. This was done using Linear Regression. Before analysing all data, the data was explored by checking on outliers, missing data and assumptions. The assumptions checked for the Univariate General Linear Model were: normality, homogeneity of variance and independence of the covariate and treatment effect. The assumptions checked for the Linear Regression were: linearity, normality, independence of errors and homoscedasticity.

4. Results

4.1. Descriptive and preparative

No missing data was found, since all participants (n=129) had to fill in all questions. The sample of this research consisted of 98 women and 31 men (Appendix 7.2.1). In table 4.1 descriptive statistics of the (control) variables are shown. Meat eating frequency had a mean of 4.31 days a week. The average age of participants was 25.5 years, with a minimum of 16 years and a maximum of 67 years. The highest completed level of education of the sample had a mean of 2.52, which varies between University preparatory high school and Bachelor's degree. *Expected quality perception, intention to buy and food choice motivations* were all measured on a 7-point scale. The mean of expected quality perception is most close to 'slightly likely'. The mean of intention to buy is most close to 'I might do'. Among the food choice motivations, price had the highest mean (=5.77), followed by health (=5.68), convenience (=5.18) and environmental protection (=5.15).

	N	Minimum	Maximum	Mean	Std. Deviation
<i>Meat eating frequency – days a week</i>	129	0.00	7.00	4.31	2.056
<i>Age</i>	129	16.00	67.00	25.5	9.860
<i>Highest completed level of education</i>	129	1	6	2.52	0.953
<i>ExpectedQualityPerception</i>	129	1.50	7.00	4.91	0.921
<i>Intention to buy</i>	129	1	7	4.71	1.608
<i>Food choice motivation – is healthy</i>	129	2	7	5.68	0.960
<i>Food choice motivation – is a way of monitoring my mood</i>	129	1	7	4.37	1.370
<i>Food choice motivation – is convenient</i>	129	2	7	5.18	1.079
<i>Food choice motivation – provides me with pleasurable sensations</i>	129	1	7	6.03	.874
<i>Food choice motivation – is natural</i>	129	1	7	4.79	1.327
<i>Food choice motivation – is affordable</i>	129	2	7	5.77	0.923
<i>Food choice motivation – helps me control my weight</i>	129	1	7	4.88	1.381
<i>Food choice motivation – is familiar</i>	129	1	7	4.09	1.296
<i>Food choice motivation – is environmental friendly</i>	129	2	7	5.15	1.232
<i>Food choice motivation – is animal friendly</i>	129	1	7	4.98	1.492
<i>Food choice motivation – is fairly traded</i>	129	1	7	4.91	1.329

Table 4.1: Descriptive Statistics

The number of participants was equally distributed among the six scenario groups (Table 4.2).

	No availability	Low variety	High variety
Positive word of mouth	21 (scenario 1A)	22 (scenario 2A)	23 (scenario 3A)
No word of mouth	23 (scenario 1B)	19 (scenario 2B)	21 (scenario 3B)

Table 4.2: Frequencies Scenario Groups

At first, the six scenario groups (1A,1B,2A,2B,3A,3B) were recoded into two variables: “Promotion” with 0 = no word of mouth and 1 = positive word of mouth, and “Availability” with 0 = no availability, 1 = low variety and 2 = high variety.

The four items of *expected quality perception* were tested on correlation with a Principal Component Analysis. One component was made out of these four items, based on the eigenvalue larger than one criteria and converge of the scree plot (Appendix 7.2.1.). A Reliability Analysis was done to check whether this one component was reliable. The Cronbach’s Alpha indicated reliability of the component ($=.620$) (Appendix 7.2.1.). The Cronbach’s Alpha did not increase by deleting one of the items, so the items could be merged into one component (Appendix 7.2.1.). This new variable “*ExpectedQualityPerception*” was used in further analysis.

4.2. Hypotheses

In table 4.3 means of *expected quality perception* and *intention to buy* for each scenario group are shown. Scenario 3A had the highest mean of *expected quality perception* and scenario 1B had the lowest mean of *expected quality perception*. Scenario 2B had the highest mean of *intention to buy* and scenario 1B had the lowest mean of *intention to buy*. The patterns of these means are also shown in figures 2 and 3 in Appendix 7.2.2. When looking at the means of *expected quality perception* for *availability* and *promotion* separately, they were highest for high variety and positive word of mouth (Appendix 7.2.2.). When looking at the means of *intention to buy* for *availability* and *promotion* separately, they were highest for low variety and positive word of mouth (Appendix 7.2.2.).

	No word of mouth			Positive word of mouth		
	No availability 1B	Low variety 2B	High variety 3B	No availability 1A	Low variety 2A	High variety 3A
Mean ExpectedQualityPerception	4.5326	4.8158	5.0476	5.0952	4.8182	5.1630
Mean Intention to buy	4.35	5.05	4.67	4.95	4.64	4.65

Table 4.3: Means ExpectedQualityPerception and Intention to buy for each scenario group

4.2.1. Relation promotion and availability – expected quality perception

Before testing hypothesis 1 up to and including hypothesis 4, several assumptions needed to be checked: normality, homogeneity of variance and independence of the covariate and treatment effect. The first assumption, normality, was checked by examining a normal Predicted Probability plot (P-P plot). The residuals followed a close to normal distribution, so this assumption was met (Appendix 7.2.2.1.). The second assumption, homogeneity of variance, was checked by a Levene’s test. The variances were roughly equal in different groups, because the Levene’s test was not significant, $F(5,123) = .87$; $p = .501$ (Appendix 7.2.2.1.). This means the assumption homogeneity of variance was met. For the last

assumption to be met, the covariate should not differ across all scenario groups, which is made sure by randomly assigning participants to each scenario group.

At first, hypothesis 1 and 2 are checked by a main effect only analysis of variance (ANOVA). The main effects of the independent variables *promotion* and *availability* on *expected quality perception* were measured. There was no statistically significant main effect found of *promotion* on *expected quality perception*, $F(1,125) = 2.08$; $p = .152$ (Appendix 7.2.2.1.). There was also no statistically significant main effect found of *availability* on *expected quality perception*, $F(2,125) = 1.51$; $p = .224$ (Appendix 7.2.2.1.). With these findings, hypotheses 1 and 2 were not supported.

Factorial analysis of covariance (factorial ANCOVA) was done to check whether *promotion* and *availability* are dependent on each other, whilst controlling for *food choice motivations*. The following items were used: availability, promotion, the interaction effect of availability and promotion, motive 3: convenience, motive 8: familiarity, the interaction effects of availability and motives 3 and 8, motive 9: environmental protection, motive 10: animal welfare, and the interaction effects of promotion and motives 9 and 10. There was no statistically significant interaction between *promotion* and *availability* on *expected quality perception*, whilst controlling for *food choice motivations* 3, 8, 9 and 10, $F(2,113) = .61$; $p = .544$ (Appendix 7.2.2.1.). There was no statistically significant interaction between *availability* and motive 3: convenience, $F(2,113) = 1.37$; $p = .258$ (Appendix 7.2.2.1.). There was no statistically significant interaction between *availability* and motive 8: familiarity, $F(2,113) = .285$; $p = .753$ (Appendix 7.2.2.1.). There was no statistically significant interaction between *promotion* and motive 9: environmental protection, $F(1,113) = .00$; $p = .988$ (Appendix 7.2.2.1.). There was also no statistically significant interaction between *promotion* and motive 10: animal welfare, $F(1,113) = 1.87$; $p = .174$ (Appendix 7.2.2.1.). With these findings, hypotheses 3 and 4 were not supported.

4.2.2. Relation expected quality perception – intention to buy

Before testing hypothesis 5, several assumptions needed to be checked: linearity, normality, independence of errors and homoscedasticity. The first assumption, linearity, was checked by a scatterplot with *expected quality perception* on the horizontal axis and *intention to buy* on the vertical axis. A linear relation could be found in the scatterplot, so this assumption was met (Appendix 7.2.2.2.). The second assumption, normality, was checked by examining a normal Predicted Probability plot (P-P plot). The residuals of the regression followed a close to normal distribution, so this assumption was met (Appendix 7.2.2.2.). The third assumption, independence of errors, was checked with a Durbin-Watson statistic. This value was 2.326, which is close to 2, so this assumption was met (Appendix 7.2.2.2.). The last assumption, homoscedasticity, was checked with a scatterplot of residuals. This assumption was met as well, because the residuals were equally distributed (Appendix 7.2.2.2.).

Linear Regression was done to check whether *intention to buy* can be predicted by *expected quality perception*. A high correlation between *expected quality perception* and *intention to buy* was found ($r = .525$) (Appendix 7.2.2.2.). A statistically significant effect was found between *expected quality perception* and *intention to buy hybrid meat*, $R^2 = .276$, $F(1,127) = 48.39$; $p < .001$ (Appendix 7.2.2.2.). With this finding, hypothesis 5 was supported.

5. Conclusion and discussion

5.1. Conclusion

The aim of this research was to investigate suitable marketing positioning strategies for brands offering hybrid meat. The main research question guiding this research was:

“Which marketing positioning strategies are most suitable for brands offering hybrid meat, reaching most effective consumer insights?”

An answer to this main research question was formed by conducting an online survey to measure consumer insights, additional to a literature study on different marketing positioning strategies.

The results showed no evidence for hypothesis 1 up to and including hypothesis 4. This means no evidence was found for the fact that *positive word of mouth* leads to higher *expected quality perception* of hybrid meat compared to no word of mouth, including the positive affection of the *food choice motivations* environmental protection and animal welfare on this relation. Besides, no evidence was found for the fact that *availability* and *variety* lead to higher *expected quality perception* of hybrid meat compared to no availability and low variety, including the positive affection of the *food choice motivations* convenience and familiarity on this relation. The results showed evidence for hypothesis 5. This means *expected quality perception* of hybrid meat is positively related to consumers' *intention to buy* hybrid meat.

To conclude, no specific combination of *promotion* and *availability* was found to be the most suitable marketing positioning strategy for brands offering hybrid meat. It was found that higher *expected quality perception* of hybrid meat among consumers lead to higher *intention to buy* hybrid meat.

5.2. Discussion

5.2.1. Theoretical relevance

From a theoretical point of view this research contributes to literature concerning filling the knowledge gap on consumer insights of hybrid meat and the best way to position this product in the market. This research investigated suitable marketing positioning strategies by testing the effect of *promotion* and *availability* on *expected quality perception* of hybrid meat among consumers and eventually the effect of *expected quality perception* on consumers' *intention to buy* hybrid meat. Not all findings of this research confirm expectations and findings of prior studies.

In this research, no evidence was found for the fact that *positive word of mouth* leads to higher *expected quality perception* of hybrid meat compared to no word of mouth. This finding does not support findings of prior studies regarding *promotion*, since other studies indicated the effectiveness of word of mouth. Results from the study of Prinsloo et al. (2014) on market positioning of branded meat products showed that 63% of the respondents are being influenced by word of mouth as a marketing tool. In this modern world, online conversation and feedback by consumers about brands and products seem to be more influencing than

marketing by the brand itself (Gutmanis, Grinberga-Zalite, Rivza, Polovko, & Liepa, 2018). On top of that, several studies state that a certain 'pull strategy', which is based on storytelling of early adopters to other adopter groups, free publicity and social media, is effective considering promotion (Thøgersen & Zhou, 2012; Ingenbleek & Zhao, 2019).

In this research, no evidence was found for the fact that *availability* and *variety* lead to higher *expected quality perception* of hybrid meat compared to no availability and low variety. This finding does not support findings of prior studies regarding *availability*, since other studies indicated the effectiveness of availability and variety of hybrid meat in supermarkets. Availability of products in stores within reach of consumers contributes to the market performance of a company, since in case of non-availability of desired products a switch to competitors could be made (Rajagopal, 2019). Place of purchase and availability of products is found to be of high importance when choosing for food products, which indicates that availability can be seen as an influencing factor on food choice by consumers (Radder & le Roux, 2005). On top of that, availability can be seen as determinant of the perceived quality of a product (Issanchou, 1996). In the study of Gravenly and Fraser (2018), participants indicated more satisfaction to shop for animal-based protein products than for plant-based protein products, because of high availability and variety of animal-based protein products in supermarkets compared to plant-based protein products.

This research focuses on the before purchase evaluation part of the Total Food Quality Model, since consumers' intentions to buy hybrid meat are formed before the purchase of hybrid meat products (Brunsø et al., 2002). At this before purchase state, *expected quality perception* is one of the factors which could determine intentions to buy hybrid meat (Issanchou, 1996). Findings of this research do support findings of prior studies regarding *intention to buy* hybrid meat, since evidence was found for the fact that *expected quality perception* is positively related to consumers' *intention to buy* hybrid meat.

5.2.2. Practical relevance

If all possible reasons why no statistically significant effects between the two main stimuli *promotion* and *availability* and *expected quality perception* of hybrid meat were found, are taken into account, this research could be of high practical relevance. If statistically significant effects were found, either positive or negative, between the two main stimuli *promotion* and *availability* and *expected quality perception* of hybrid meat, advice could be given to brands offering hybrid meat to position their product in an optimal way. The best combination of promotion and availability could be offered to these brands, to reach most effective consumer insights. This is of high practical relevance, since these most effective consumer insights can result in meat reduction and higher consumption of hybrid meat, which contributes to a more sustainable way of protein intake. This meat reduction is of great importance, since nine billion people need to be fed by the middle of this century in an environmentally sustainable way, which is not possible if the environmentally harmful production of meat continues (Steinfeld et al., 2006).

5.2.3. Limitations and implications for further research

There are several possible reasons why no statistically significant effects between the two main stimuli *promotion* and *availability* and *expected quality perception* of hybrid meat were found. Added to that, this research includes limitations which could affect the validity and reliability of this research.

The positive trend of the means of *expected quality perception* indicated that the sampling size of this research was underpowered to find statistically significant effects between the two main stimuli *promotion* and *availability* and *expected quality perception* of hybrid meat (Appendix 7.2.2.). With the sampling size of 129 participants, about 20 participants were in each scenario group. If each scenario group contained more participants, the effects between the two main stimuli *promotion* and *availability* and *expected quality perception* of hybrid meat could have been statistically significant. Besides, the average age of participants was around 25.5 years old. This means most participants are students or people who just graduated. In addition, the survey was distributed through online channels as Facebook and WhatsApp, which means participants are mostly within my network of friends and family, or mostly live in Wageningen. Age and distribution channels both affect the reliability of this research, because participants do not represent the whole population. This means no conclusions could be drawn which are generalizable to all inhabitants of the Netherlands above sixteen years old. On top of that, the sampling size consisted of mostly women, which could influence the outcome of this research, since women and men could differ in opinions and values considering meat and sustainability. To prevent all these factors, it is suggested to increase the sampling size of future research.

Another possible reason why no statistically significant effect between the two main stimuli *promotion* and *availability* and *expected quality perception* of hybrid meat was found, is the decision to choose for the example of a hybrid hamburger which consists of 30% mushrooms. There could be participants who do not like the flavour or texture of either hamburgers or mushrooms. This affects the scores on *expected quality perception*, as taste is one of the quality dimensions which had to be rated. Future research could exclude participants in advance who do not like either hamburgers or mushrooms, or could choose a more neutral product and add a more neutral plant-based protein. Another suggestion for future research is to use an image of a real example of hybrid meat which is already being sold or going to be sold in supermarkets. However, this is only possible if a hybrid meat product has been developed.

English was chosen as the language of the survey, because most of the items used are based on the English written Total Food Quality Model of Grunert et al. (1995) and single-item FCQ of Onwezen et al. (2019). In this research, practical reasons were of sufficient value to choose English as the language of the survey. On the other hand, it is possible that not all participants understood the English items, which could have created a lack of clarity influencing the validity of this research. In future research the language should be taken into consideration as well.

All eleven items of the single-item FCQ of Onwezen et al. (2019) were used in the survey, but not all items were analysed when testing the hypotheses. The items convenience and familiarity were expected to have a positive effect on the relation between *availability* and *variety* and *expected quality perception* of hybrid meat. The items environmental protection

and animal welfare were expected to have a positive effect on the relation between *positive word of mouth* and *expected quality perception* of meat. If only the four items with an expected effect were used in the survey, participants may figured out the aim of this research, resulting in socially desirable answers. It was chosen to only analyse the four items which were expected to have an effect, because of a higher error degrees of freedom, which indicates more precise estimates and a more powerful test. It is suggested to use all items in the survey and only the items with an expected effect in the analysis in future research as well.

The study of Rajagopal (2019) distinguishes four consumer-sensitive indicators of the marketing mix, which are used to position brands and products: *price*, *promotion*, *availability*, and *packaging*. Due to time constraints, this research only focuses on two of them, namely promotion and availability. To complete and broaden this research, it is suggested to use all four consumer-sensitive indicators in future research. In this way, a complete suitable marketing strategy for brands offering hybrid meat can be created.

6. Reference list

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7. Appendix

7.1. Survey

Welcome,

My name is Claartje Lingbeek, and I am currently in the final phase of my Bachelor Business- and Consumerstudies at Wageningen University and Research. For my BSc thesis, I am conducting a research about an innovative product: **hybrid meat**. Hybrid meat partially replaces animal proteins with plant-based protein sources. An example could be a hamburger which consists of 70% meat and 30% mushrooms.

Firstly, an example will be shown, followed by a couple of questions. Finally some background questions will be asked.

The information you provide, will be stored and processed anonymously. Filling in this questionnaire will take about **4 minutes**.

Thank you a lot for participating!

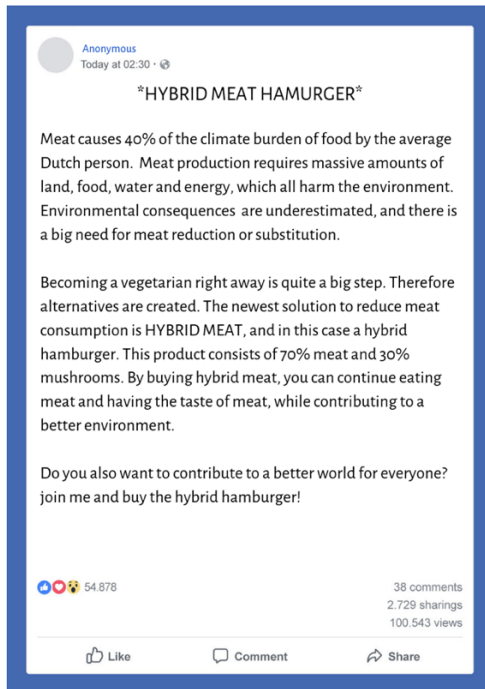


This is an example of hybrid meat. The hybrid hamburger partially replaces meat by adding 30% mushrooms.



Scenario 1A:

You can read the following text about hybrid on social media:



Imagine you are walking in a supermarket. You are standing in front of the shelf of meat and meat replacers, and **cannot find** any hybrid meat product. This particular supermarket **does not offer** hybrid meat.



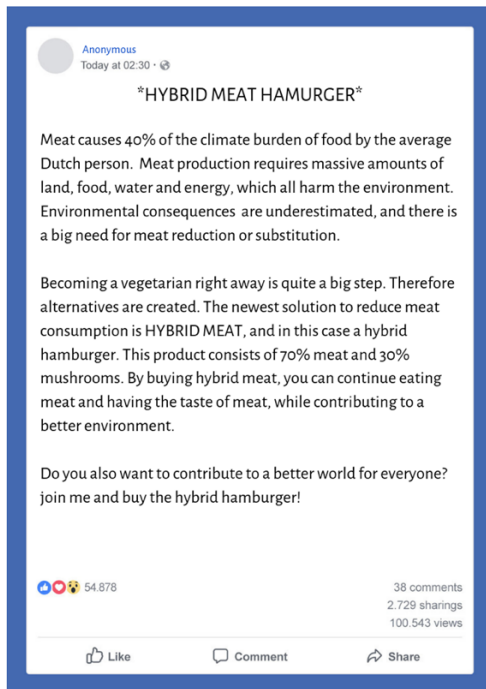
Scenario 1B:

Imagine you are walking in a supermarket. You are standing in front of the shelf of meat and meat replacers, and **cannot find** any hybrid meat product. This particular supermarket **does not offer** hybrid meat.



Scenario 2A:

You can read the following text about hybrid on social media:



Imagine you are walking in a supermarket. You are standing in front of the shelf of meat and meat replacers, and **can find one type** of hybrid meat product. This particular supermarket **does offer one type of** hybrid meat.



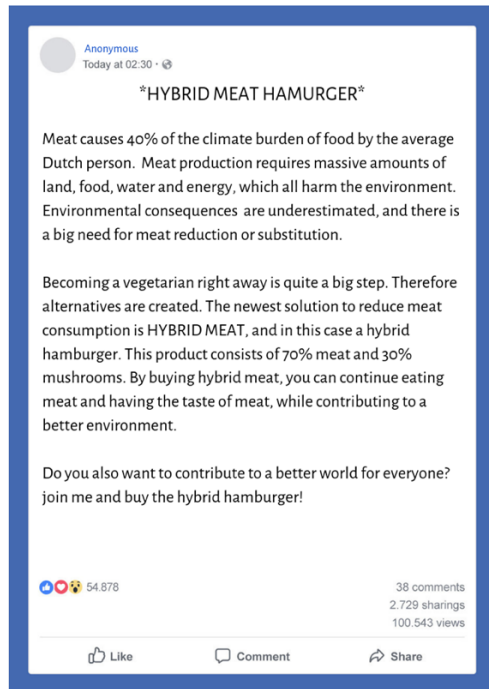
Scenario 2B:

Imagine you are walking in a supermarket. You are standing in front of the shelf of meat and meat replacers, and **can find one type** of hybrid meat product. This particular supermarket **does offer one type of** hybrid meat.



Scenario 3A:

You can read the following text about hybrid on social media:



Imagine you are walking in a supermarket. You are standing in front of the shelf of meat and meat replacers, and **can find eight types** of hybrid meat products. This particular supermarket **does offer eight types of** hybrid meat.



Scenario 3B:

Imagine you are walking in a supermarket. You are standing in front of the shelf of meat and meat replacers, and **can find eight types** of hybrid meat products. This particular supermarket **does offer eight types of** hybrid meat.



Expected quality perception

Based on what you just read about hybrid meat, to what extent you **expect** this product to:

	Very unlikely	Moderately unlikely	Slightly unlikely	Neither likely nor unlikely	Slightly likely	Moderately likely	Very likely
Be tasty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Be healthy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Be convenient (e.g. ease of purchase, saving time at planning/ preparation/ consumption/ cleaning up etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Have a decent production process (e.g. organic production, natural production, production without use of GMOs etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Intention to buy

Do you intend to buy hybrid meat in the near future?

	I will definitely do not	I will probably do not	I might do not	neutral	I might do	I will probably do	I will definitely do
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Food choice motivations

It is important to me that the food I eat on a typical day ...

	Not at all important	Not important	Not really important	Neither important nor unimportant	Somewhat important	Important	Very important
Is healthy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is a way of monitoring my mood (good feeling or coping with stress)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is convenient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provides me with pleasurable sensations (e.g. texture, appearance, smell and taste)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is natural	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is affordable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helps me control my weight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is familiar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is environmentally friendly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is animal friendly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is fairly traded	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Background

How many days a week do you eat meat?

0 1 2 3 4 4 5 6 7

Days a week

What is your age?

What is your gender?

☐ Male

☐ Female

☐ Other

What is your highest completed level of education?

☐ Vocational college or mid level high school

☐ University preparatory high school

☐ Bachelor's degree

☐ Master's degree

☐ Doctorate

☐ Other

→

7.2. Output IBM SPSS Statistics 23

7.2.1. Output IBM SPSS Statistics 23: Descriptive and preparative

Table 1: Frequencies: gender

What is your gender? - Selected Choice					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	31	24.0	24.0	24.0
	Female	98	76.0	76.0	100.0
	Total	129	100.0	100.0	

Table 2: Principal Component Analysis: Total Variance Explained

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.876	46.901	46.901	1.876	46.901	46.901
2	.866	21.640	68.541			
3	.676	16.907	85.448			
4	.582	14.552	100.000			

Extraction Method: Principal Component Analysis.

Figure 1: Principal Component Analysis: Scree Plot

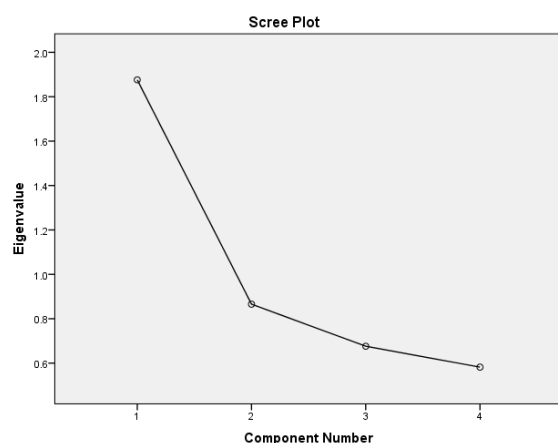


Table 3: Principal Component Analysis: Component Matrix

Component Matrix^a

	Component
	1
Based on what you just read about hybrid meat, to what extent you expect this product to: - Be tasty	.664
Based on what you just read about hybrid meat, to what extent you expect this product to: - Be healthy	.699
Based on what you just read about hybrid meat, to what extent you expect this product to: - Be convenient (e.g. ease of purchase, saving time at planning/ preparation/ consumption/ cleaning up etc.)	.741
Based on what you just read about hybrid meat, to what extent you expect this product to: - Have a decent production process (e.g. organic production, natural production, production without use of GMOs etc.)	.631

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Table 4: Reliability Analysis: Cronbach's Alpha

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.620	.621	4

Table 5: Reliability Analysis: Item-Total Statistics

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Based on what you just read about hybrid meat, to what extent you expect this product to: - Be tasty	14.48	8.627	.381	.176	.564
Based on what you just read about hybrid meat, to what extent you expect this product to: - Be healthy	14.60	9.117	.415	.178	.543
Based on what you just read about hybrid meat, to what extent you expect this product to: - Be convenient (e.g. ease of purchase, saving time at planning/ preparation/ consumption/ cleaning up etc.)	14.99	7.617	.461	.221	.501
Based on what you just read about hybrid meat, to what extent you expect this product to: - Have a decent production process (e.g. organic production, natural production, production without use of GMOs etc.)	14.86	9.090	.349	.147	.586

7.2.2. Output IBM SPSS Statistics 23: Hypotheses

Figure 2: Estimated Marginal Means ExpectedQualityPerception – Scenario groups

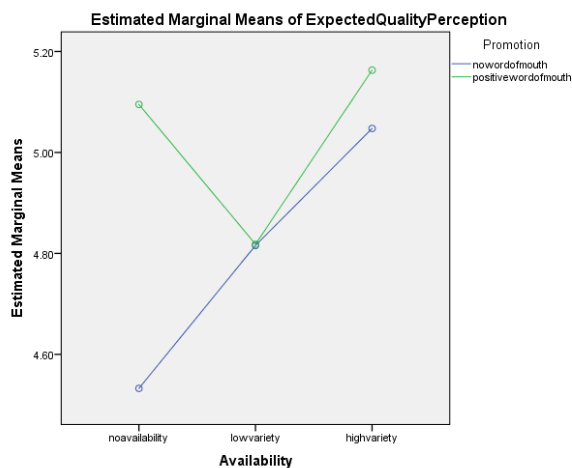


Figure 3: Estimated Marginal Means Intention to buy – Scenario groups

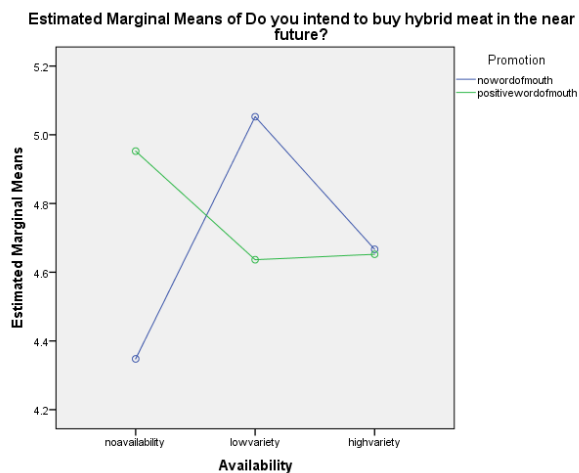


Figure 4: Estimated Marginal Means ExpectedQualityPerception - Availability

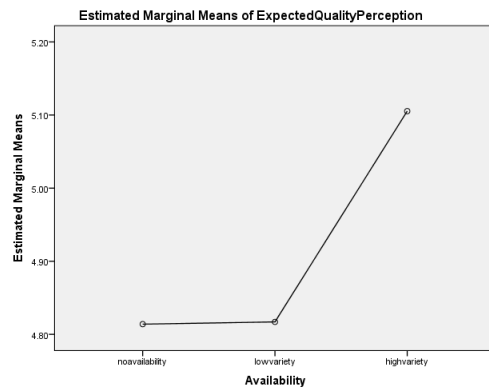


Figure 5: Estimated Marginal Means ExpectedQualityPerception - Promotion

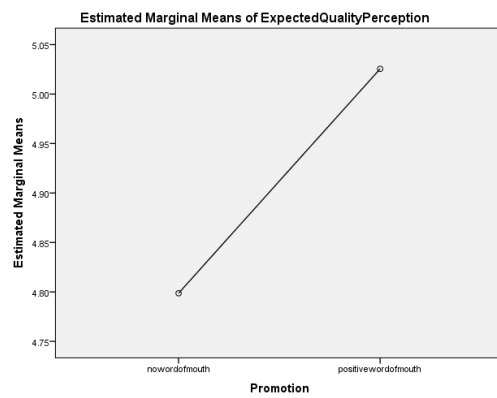


Figure 6: Estimated Marginal Means Intention to buy - Availability

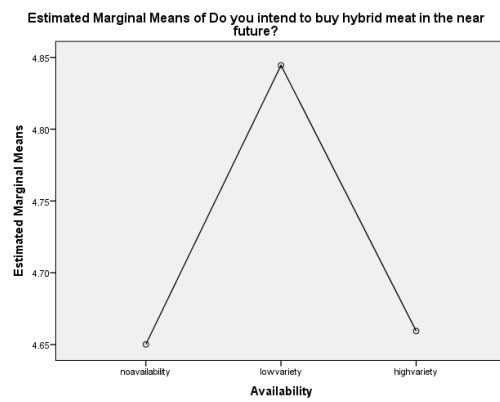
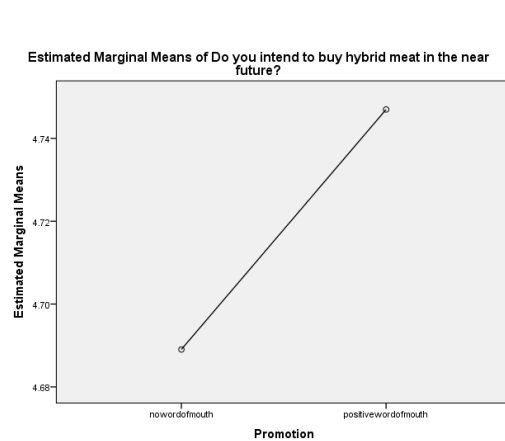


Figure 7: Estimated Marginal Means Intention to buy – Promotion



7.2.2.1. Relation promotion and availability – expected quality perception

Figure 8: General Linear Model (GLM): Normal P-P Plot of residuals

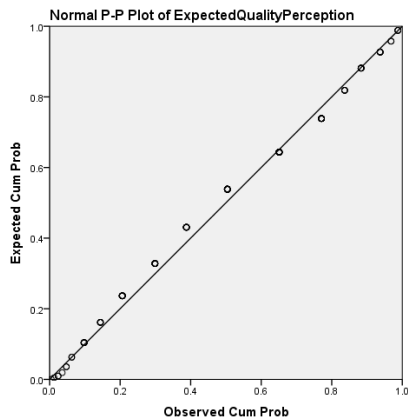


Table 6: GLM: ANCOVA: Levene's Test of Equality of Error Variances

Levene's Test of Equality of Error Variances^a

Dependent Variable: ExpectedQualityPerception

F	df1	df2	Sig.
.874	5	123	.501

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Availability + Promotion + Motives_3 + Motives_8 + Motives_9 + Motives_10 + Availability * Promotion + Availability * Motives_3 + Availability * Motives_8 + Promotion * Motives_9 + Promotion * Motives_10

Table 7: ANOVA: main effects only

Tests of Between-Subjects Effects

Dependent Variable: ExpectedQualityPerception

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4.334 ^a	3	1.445	1.730	.164
Intercept	3099.453	1	3099.453	3711.363	.000
Availability	2.526	2	1.263	1.512	.224
Promotion	1.735	1	1.735	2.077	.152
Error	104.391	125	.835		
Total	3219.750	129			
Corrected Total	108.725	128			

a. R Squared = .040 (Adjusted R Squared = .017)

Table 8: ANCOVA: Tests of Between-Subjects Effects

Tests of Between-Subjects Effects

Dependent Variable: ExpectedQualityPerception

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	19.611 ^a	15	1.307	1.658	.070	.180
Intercept	40.908	1	40.908	51.873	.000	.315
Availability	1.181	2	.591	.749	.475	.013
Promotion	2.200	1	2.200	2.789	.098	.024
Motives_3	.961	1	.961	1.219	.272	.011
Motives_8	.518	1	.518	.657	.419	.006
Motives_9	.519	1	.519	.658	.419	.006
Motives_10	3.670	1	3.670	4.653	.033	.040
Availability * Promotion	.967	2	.483	.613	.544	.011
Availability * Motives_3	2.161	2	1.080	1.370	.258	.024
Availability * Motives_8	.449	2	.224	.285	.753	.005
Promotion * Motives_9	.000	1	.000	.000	.988	.000
Promotion * Motives_10	1.477	1	1.477	1.873	.174	.016
Error	89.114	113	.789			
Total	3219.750	129				
Corrected Total	108.725	128				

a. R Squared = .180 (Adjusted R Squared = .072)

7.2.2.2. Relation expected quality perception – intention to buy

Figure 9: Linear Regression: scatterplot linearity

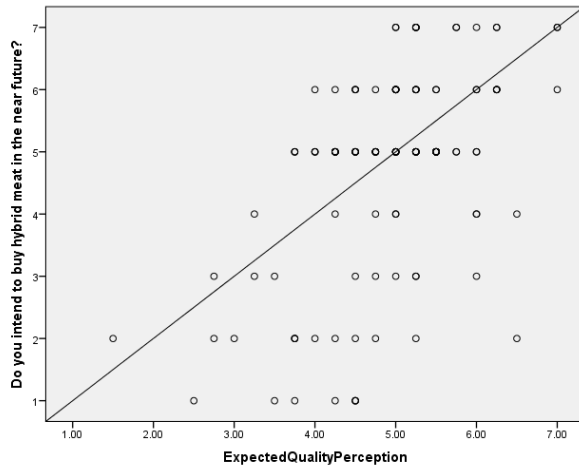


Figure 10: Linear Regression: Normal P-P Plot of residuals

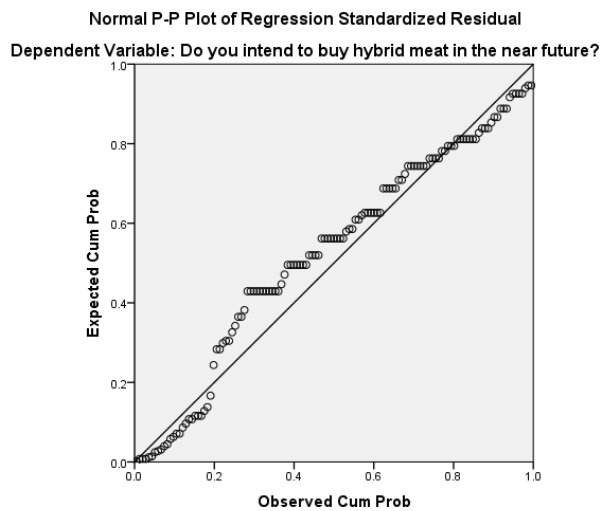


Figure 11: Linear Regression: Scatterplot residuals

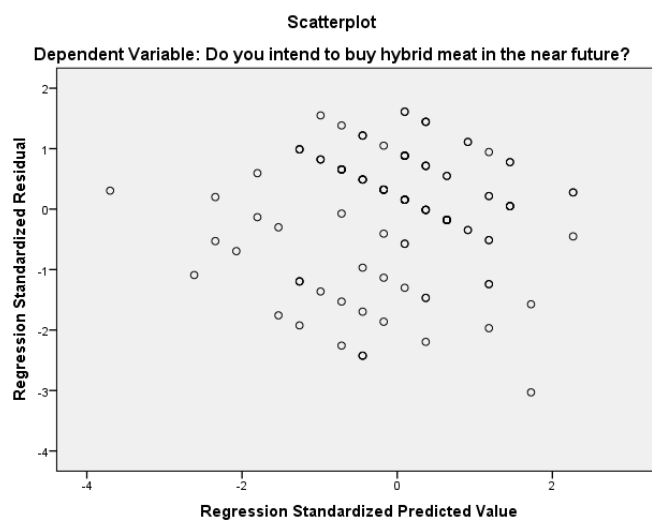


Table 9: Linear Regression: Model Summary

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.525 ^a	.276	.270	1.373	2.326

a. Predictors: (Constant), ExpectedQualityPerception

b. Dependent Variable: Do you intend to buy hybrid meat in the near future?

Table 10: Linear Regression: Regression

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	91.264	1	91.264	48.386	.000 ^b
	Residual	239.542	127	1.886		
	Total	330.806	128			

a. Dependent Variable: Do you intend to buy hybrid meat in the near future?

b. Predictors: (Constant), ExpectedQualityPerception