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Preferences for Attributes of Halal Meat: Empirical Evidence from the Muslim Community in Vienna, Austria

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ABSTRACT

The aim of this contribution is to approximate Muslims' preferences towards selected attributes of halal meat. A comprehensive literature review on the influence of religion was undertaken with special emphasis on Muslims, a significant and growing community in Austria. An empirical study was conducted to estimate part-worth utilities. In particular, the attributes of halal label, price, slaughtering method, and country of origin were included in the empirical design. Based on the literature review, a conjoint experiment model was developed to approximate the importance of selected attributes and attribute levels. The methodological approach followed the so-called limit conjoint analysis. With this method, a no-choice option is included in the experimental design, meaning it comes closer to real shopping behaviour. A sample from the Austrian Muslim community was selected. Data collection within this community was demanding, mainly because of cultural aspects. The results of the conjoint experiment show that the most important attribute is the halal label. This clearly demonstrates the significance of correct and trustworthy labelling of halal products.

Keywords: halal; food labelling; limit conjoint analysis; certification; price

1   Introduction

Due to a series of food scandals over the last few decades, such as the horsemeat scandal (Yamoah and Yawson, 2014), the BSE crisis (Bánáti, 2011), and concerns about genetically modified or engineered food (Quin and Brown, 2008), consumers have started questioning the quality and safety of food products. Despite the fact that food consumption has never been safer, consumers seem more concerned than ever about eating the right products. Consumers' decisions often reflect aspects of their lifestyle, culture, health concerns, and religion (Nakyinsige et al., 2012). The impact of religion on consumers' behaviour is an especially important area of research as religion is one of the main factors shaping food choices (e.g., Choi, 2010; Musaiger, 1993). Empirical evidence shows that religion can influence consumers' attitudes and behaviour in general (e.g., Delener, 1994) and food purchasing decisions in particular (e.g., Mullen et al., 2000).

Most religions impose prohibitions related to consumption (Baazeem et al., 2016). In particular, meat and meat products are often prohibited or strictly regulated, maybe due to association with cultural habits and rituals (Fiddes, 1992). For instance, eating pork is forbidden in Judaism, and pork and beef are forbidden in Hinduism and Buddhism (Sack, 2001). In Islam, there are certain restrictions on what Muslims are allowed to consume: not only is there a prohibition on alcohol, pork, and dead meat (Bonne et al., 2007), food also has to be *halal* or permissible according to Islamic principles (Mohayidin and Kamaruizaman, 2014). As supermarkets offer a broad selection of products and services, the clear identification of a product as *halal* is important for many Muslim consumers (Nakyinsige et al., 2012). Although the certification as a halal product is an important factor influencing Muslim consumers, other food attributes, such as price or country of origin, may also influence their purchase decisions. The current study aims to shed light on this issue by exploring the importance of different attributes when buying halal meat, focusing on halal label, slaughter method, country of origin, and price.

2   Theoretical Background

2.1   Muslim consumers and halal meat

In general, devout Muslims follow strict dietary laws, derived from commandments found in the Koran. For instance, in Islamic law, eating pork or using any product derived from pigs is forbidden (Nakyinsige et al., 2012). Animals, such as cows, sheep, ducks and chickens are halal, but they have to be slaughtered according to Islamic rites (Ahmed, 2008). Halal is an Arabic word meaning lawful or that what is allowed by the lawgiver (Ahmed, 2008; Bonne et al., 2007; Mohayidin and Kamaruizaman, 2014). As Mathew et al. (2014, p. 263) point out, it "is commonly understood that *halal* food is accepted by Muslim consumers". A great number of Muslim consumers are becoming more knowledgeable about the various products that are being offered in supermarkets nowadays and are becoming more particular about the products they consume (Mohayidin and Kamaruizaman, 2014).

Estimates of the number of Muslims in Europe vary widely, ranging between nine and 15 million, depending on the methodology used (Mandaville, 2003). Approximately 350,000 Muslims lived in Austria at the beginning of the 21st century (Abid, 2006). A study on behalf of the Austrian Federal Ministry of the Interior showed that the great majority of Muslims avoid certain dishes for religious reasons and 43 percent are strict about buying halal food (Ulram and Tributsch, 2012). Halal meat is certainly a major concern for Muslim consumers (Murugaiah et al., 2009), especially as eating halal is a sign of identity reserved for the Muslim community. In Austria, both the "Islamische Glaubensgemeinschaft in Österreich" ("Islamic Religious Community in Austria"- IGGiÖ), as well as the "Islamisches Informations- und Dokumentationszentrum" ("Islamic Information and Documentation Centre"- IIDZ), certify products as halal. The IGGiÖ does not own a trade license, but invokes religious-legal reasons and wants to provide a certification so that Muslims can rely on halal-certified products (Say and Niznik, 2010). The IIDZ, on the other hand, owns a trade licence (Heine et al., 2012) and works according to the rules of the Austrian standardisation institute 142000/142001. The underlying rules were defined together with an expert group to create clarity for businesses as well as Muslim consumers and were reviewed by Islamic authorities and organisations.

In the past, devout Muslim consumers simply avoided products that did not meet the standards of the Islamic law (Bonne et al., 2007). Nowadays, they are actively requesting *halal* certified products (Riaz and Chaudry, 2004). Therefore, companies, certifying organisations, as well as policy makers are in need of better insights into halal meat consumption (Bonne et al., 2007). Investigating Muslim consumers' preferences towards attributes of halal meat is important due to the policy relevance of the issue and the size of the halal food market. It is especially relevant to identify how much emphasis Muslim consumers

place on halal. Although the certification of products as *halal* and corresponding labelling is important for Muslim consumers, there may be other food attributes that influence Muslims' purchase decisions (Mohayidin and Kamaruizaman, 2014). For instance, Muslims' may use product attributes, like price, country of origin or method of slaughter, as the base for evaluating a product.

2.2   Halal label

Nowadays, consumers buy food that has already been packaged in stores and therefore the correct labelling of products is essential (Mohayidin and Kamaruizaman, 2014). Food labelling also affects willingness to pay of consumers for specific food attributes. E.g., Basu and Hicks (2008) presented findings concerning Fair Trade labelling. Halal is a product attribute that cannot be evaluated or ascertained by the individual consumer (Bonne and Verbeke, 2008). Because of this difficulty, consumers depend on a responsible authority to check the status on their behalf and to mark the product accordingly. The most common way to verify the halal status of a food is to closely examine the halal certificate or label (Verbeke et al., 2013). Labels on meat should always indicate where the animal was born, bred, and slaughtered. In addition, meat produced by slaughter without anaesthesia should also be marked as such (CAC, 1997; CEN, 2010). If such information is not available, Muslims may search for other available complementary information—e.g. the origin of the seller—in order to confirm a product's halal status. Meat sold by a Muslim is therefore always trustworthy, even if the information about the halal status is not explicitly given (Benkheira, 2002).

However, as the halal certification is not legally regulated in many countries, there is a level of confusion among Muslim consumers (Mohayidin and Kamaruizaman, 2014). For instance, in Austria many different halal logos exist. The correct labelling of halal products is essential for consumers as well as retailers because devout Muslim consumers will only buy food when they are certain it is genuinely halal (Ahmed, 2008). Another fundamental problem arises due to the different definitions of halal meat (Bonne et al., 2007). There are some law schools, for example, that only accept fish as halal, while others consider every sea-dwelling animal to be halal. Different concepts of halal further result from the difficulty of transferring the attribute "halal" to new products, procedures, and techniques. This applies, for instance, to gelatine or techniques of anaesthesia (electric shock) (Karaman, 2010).

Nevertheless, research indicates that Muslim consumers are willing to put considerable effort in obtaining halal products (Bonne and Verbeke, 2006). In a study by Mohayidin and Kamaruizaman (2014), the majority of Muslim consumers agreed that halal was an important consideration in their purchase process and many would only buy halal-certified food products, even if it meant paying a higher price. This seems to indicate that the certification *halal* is more important than the price of the product in purchase decisions.

2.3   Method of slaughter

The halal status of meat is often wrongly believed to be equivalent to the application of a certain slaughter method (Nakyinsige et al., 2012). As a product attribute, halal labelling refers to the nature, origin and the processing method of food designated for Muslim consumers, not only to the slaughter method (Verbeke et al., 2013). Cows, sheep, goats, ducks, and chickens are halal, but they have to be slaughtered according to Islamic rites in order to be suitable for consumption (Ahmed, 2008). Rules for halal slaughter are based on the principles of effectively draining the animal's blood, without causing unnecessary suffering (Kocturk, 2002). The jugular vein and the oesophagus are cut with a sharp knife, in order to interrupt the blood flow to the brain and thereby immediately cause a loss of consciousness (Kocturk, 2002).

Halal slaughter is associated with health and safety (Bonne and Verbeke, 2008; Rezai et al., 2010) and consumers believe that halal food products follow stricter quality standards than non-halal products (Rezai et al., 2010). Gregory (2008) argues that even some non-Muslims buy halal slaughtered meat, as they associate it with a lower risk of transmitting bovine spongiform encephalopathy (BSE).

2.4   Country of origin

Due to the expanding global economy, the origin of food is gaining increasing attention as important product characteristic (Bolliger and Reviron, 2008). The relevance of the country of origin on purchase decisions has been generally agreed on in research (e.g., Alfnes 2004; Hoffmann, 2000; Juric and Worsley, 1998, Vukasovic, 2009). Yet its power to affect consumer decisions is complex: the country of origin affects the significance that consumers associate with distinct foods (Bolliger and Reviron, 2008) and thus certified products have a higher degree of credibility (Magdelaine et al., 2008). The information further affects behavioural intentions through social norms (Vukasovic, 2009) and may influence consumers' behaviour through patriotic feelings about their own country (Han and Terpstra, 1988). Nevertheless,

Liefeld (2004) argues that today, it is impossible to find a domestically produced product to purchase in every product category. This may mean that the country of origin is nowadays less important than it used to be when compared with other product attributes.

2.5 Price

Consumers are usually interested in purchasing a product at the lowest possible price. Food purchase decisions are therefore supposed to depend on an evaluation of the costs (price) and the benefits of the product (Verhoef, 2005). Nevertheless, previous research has shown that price plays a minor role in food purchase decisions compared to, say, the colour when it comes to peppers (Frank et al., 2001), or the origin of the product when it comes to meat (Furnols et al., 2011; Vukasovic, 2010). A study by Ahmed (2008) showed that Muslim consumers select the authenticity of the meat as the most important factor when buying halal meat, whereas they are less concerned about the price (third concern). This is in line with the observation that Muslim consumers are willing to pay a higher price for certified halal labelled meat (Verbeke et al., 2013).

From a marketing point of view these findings are highly relevant, but the impact of halal labelling along with other product attributes, like slaughter method, country-of-origin, and price has not been assessed. The current article addresses this gap by exploring the importance of different attributes when buying halal food. The current study focuses on halal meat because meat is one of the most important products when it comes to sales in the food sector in industrialised countries (Meixner et al., 2007).

3 Materials and methods

3.1 Conjoint analysis design

The generally accepted approaches for estimating the utilities of product characteristics are all forms of Conjoint Analysis (CA) (Gustafsson et al., 2007). Confirming Annunziata and Vecchio (2013), "[c]onjoint analysis is generally considered to be a useful method for assessing consumer acceptance". As our target group is rather unknown in market research and no experiences are available concerning data collection and the application of market research in general, we decided to use a simple ranking based CA, the traditional form of CA, comparable to that used by Cranfield et al. (2009) for organic food. The approximation of the part worth model was based on the usual additive composition model (e.g., Steenkamp, 1987; Brinkmann and Voeth, 2007):

$$u_j = \mu + \sum_{k=1}^{K} \sum_{l=1}^{L} \beta_{kl} \cdot x_{jkl}$$

with

u_j : estimated total utility of alternative j

μ : mean part worth over all stimuli

β_{kl} : part worth of attribute level l ($l = 1, \dots, L$) of attribute k ($k = 1, \dots, K$)

x_{jkl} : dummy variable with $x_{jkl} = 1$ if attribute level l of attribute k at stimulus j exists, else $x_{jkl} = 0$

The approximation of the part worth β_{ki} of each attribute level of respondent i is based on a simple transformation of rankings to scores (Backhaus et al., 2014):

$$\beta_{ki} = (K+1) - r_{ki}$$

where K represents the total number of the ranked stimuli and r_{ki} is the relevant rank of stimulus k for respondent i.

The conjoint design consisted of 4 attributes: "Slaughter indication" (the product label contained or didn't contain the text: "Halal slaughtered"), "Halal label" (yes/no), "Price" (€3.5, €5.5, €7.5 per kg chicken breast), and "Origin" (domestic/foreign). In total, 24 stimulus cards can be produced (representing all possible product profiles). To estimate utilities, a reduced design of 10 cards was used (including 2 holdout cards; see Table 1).

Table 1.
Stimulus cards with attributes and attribute level – reduced design

Card No.	Slaughter indication	Halal label	Price	Origin	Holdout
1	no indication	yes	€7.50	foreign	0
2	no indication	no	€5.50	foreign	1
3	no indication	no	€3.50	foreign	0
4	Halal	yes	€3.50	domestic	0
5	no indication	no	€3.50	domestic	0
6	no indication	yes	€5.50	domestic	0
7	Halal	yes	€5.50	domestic	1
8	Halal	no	€7.50	domestic	0
9	Halal	yes	€3.50	foreign	0
10	Halal	no	€5.50	foreign	0

It was of major importance for our research that we were able to evaluate the validity of the sample data. An excellent way of doing this is to include holdout stimuli in the CA design which are evaluated by the interviewees but not considered for estimating utilities. Comparing their "theoretical" utility (approximated on the basis of the evaluation of all other stimulus cards) with their real evaluation is an excellent way of proving validity.

One big disadvantage of ranking based CA is that interviewees have to be able to generate a ranking of stimulus cards (which is quite demanding from a cognitive perspective if the number of necessary stimulus cards is high). In our case the number of necessary product profiles was limited (8 stimulus cards and 2 holdout cards; see Table 1). Therefore, we assume that this disadvantage is not that important in our case.

Another disadvantage is that, in general, there is no no-choice option in the conventional application of CA. To overcome this problem, we included a so-called "Limit Card" to offer the interviewees the possibility of telling us which product alternatives they would purchase (Limit CA; Voeth, 1998; Backhaus and Voeth, 2003). By using this approach, we were able to individually approximate utilities and to include a no-choice option into our empirical design as was done by Brinkmann and Voeth (2007) and Meixner et al. (2007). In this case, the approximation of the part worth β_{ki} transforms to β_{ki}^{*} depending on where the Limit Card was placed by the respondent i (i.e., up to which rank the respondent is willing to buy the product alternatives = LC_i).

$$\beta_{ki}^{*} = \beta_{ki} - (K - LC_i + 0.5)$$

This implies that the first stimulus card which will be bought by the respondent has a total utility of 0.5, the second of 1.5 and so on. If β_{ki}^{*} is negative, the respondent is not willing to buy this product alternative. LC_i equals the zero-point in the transformed scale. In the example in Table 2, respondent i placed the LC after card no. 9 (he/she was willing to buy the first 3 stimuli; $LC_i = 3$).

All product profiles were presented as visual stimuli coming close to reality (see Figure 1 for stimulus card no. 4) as was done by de Andrade et al. (2016) for lamb meat. The same picture was used for all stimulus cards, the text and label varied confirming a reduced design (Table 1). Stimulus cards no. 2 and 7 were holdout cards.

Table 2.
Part worth transformation using Limit Card (LC)

Rank	1	2	3		4	5	6	7	8	9	10
Card no.	4	1	9		6	7	2	3	10	5	8
Score β_{ki}	10	9	8		7	6	5	4	3	2	1
Limit Card				LC							
Score β_{ki}^{*}	+2.5	+1.5	+0.5	0	-0.5	-1.5	-2.5	-3.5	-4.5	-5.5	-6.5

Figure 1. Stimulus card no 4.

3.2 Data Collection

Data collection was extremely difficult. First of all, there was a language problem. Although most of the interviewees had been living in Austria for a long time, some of them still didn't speak German fluently. This problem was addressed by partly using a translator from the relevant community (Turkish, Bosnian, etc.) during the interviews. Secondly, there were also cultural barriers. As we interviewed a Muslim target group, we had to comply with typical Muslim social habits, practices, and customs. E.g., in most cases it was not possible to directly interview women – usually, a male relative accompanied the female interviewees. Fortunately, the topic of the survey was not a sensitive one: we only collected information concerning shopping behaviour. Therefore, cultural difficulties were not as serious as they could be when addressing more sensitive topics like social behaviour, values, or beliefs. A third problem arose from the places where the interviews were conducted. About one third of all interviews was conducted in mosques, which might also have had a significant influence too, as only religious Muslims were reached there. Altogether, these shortcomings must be considered in the interpretation of our results.

3.3 Sample

In total, 116 persons with an Islamic background took part in the survey. 67 interviewees were male (58%), 49 were female (42%). 19 were 25 years old or younger (16%), 74 between 26 and 45 years old (64%), the remaining 23 interviewees were older than 45 (20%).

Compared to the Austrian average, the household size was considerably larger, with an average of 3.5 (the average sample size in Austria is 2.67 and in Vienna, where the data were collected, 2.06); this is close to the average household size of 3.52 for Turkish households in Austria. About half of the sample lived in a household with more than 4 members (Table 3).

Table 3.
Socio-demographics of sample (n = 116)

	n	Valid %
Gender		
Female	49	42.2
Male	67	57.8
Age		
Up to 18	3	2.6
18-25	16	13.8
26-35	36	31.0
36-45	38	32.8
46-55	14	12.1
56-65	6	5.2
Older	3	2.6
Place of birth		
Turkey	51	44.3
Austria	29	25.2
Bosnia	19	16.5
Albania	3	2.6
Macedonia	4	3.5
All other	9	7.8
Nationality		
Turkey	55	47.4
Austria	29	25.0
Bosnia	18	15.5
Albania	5	4.3
Macedonia	4	3.4
All other	5	4.3
Persons in the household		
1	5	4.3
2	29	25.0
3	26	22.4
4	37	31.9
5	6	5.2
6	6	5.2
more than 6	7	6.1
Household income per month		
Less than 1000 €	15	12.9
1000-2000 €	75	64.7
2001-3000 €	24	20.7
3001-4000 €	2	1.7

On average, an Austrian household has an income of about €2877; this amount is significantly lower in households of non-EU persons (it decreases to about €1600 and less, depending on where the members come from). The household income of the sample was rather low too. Almost three quarters of the sample had a household income of less than €2000. Although the average cannot be calculated because no metric information is available, the income distribution within the sample seems to be close to the overall income distribution of Austrian households with a migrant background.

All in all, the structure of the sample is close to the Austrian reality for comparable households. Of course, the sample size is too low to guarantee transferability to larger sub-groups of the population. However, the results deliver valuable information about a huge part of the Austrian population where almost no market relevant information was available before (confirming official statistics: in 2015 in Austria [total population 8.5 million], about 1.8 million people or 21% had a migration background; Statistics Austria, 2017).

4   Results

4.1   Validity of utility approximation

Kendall's Tau τ is a parameter commonly used for measuring the validity of the utility approximation in ranking CA. As we can see from Table 4, τ is quite low for a large part of the sample if the price attribute is assumed to follow a linear decreasing utility function (see below). Therefore, the linear less-condition for the price attribute will not be kept. If all attributes are assumed to be discrete, τ is much higher and is above 0.8 for more than 80% of all cases (less than 60% with the linear less price attribute). In addition, many members of the sample (47 cases) were classified as reversals (the linear less-condition couldn't be kept for these cases), another strong signal that the linear less assumption is not valid in our study.

Table 4.
Distribution of Kendall's Tau depending on utility functions

	Price linear less			All discrete		
	n	Valid %	Cumulative %	n	Valid %	Cumulative %
$0.2 < \tau \le 0.4$	3	2.6	2.6	1	0.9	0.9
$0.4 < \tau \le 0.6$	17	14.7	17.2	5	4.3	5.2
$0.6 < \tau \le 0.8$	27	23.3	40.5	17	14.7	19.8
$0.8 < \tau \le 1.0$	69	59.5	100.0	93	80.2	100.0
Total	116	100.0		116	100.0	

For the remaining analysis, we will not exclude cases where Kendall's Tau τ is below a certain level because those cases do not significantly affect the results.

4.2   Part-worth utility of the price attribute

In the literature, a linear function is often assumed (Green et al., 2001). Price, for example, is approximated by a decreasing linear function delivering smaller utilities for higher price levels. In our case, the utilities were approximated for each price level (€ 3.5, € 5.5, and € 7.5) from about -0.3 to about -0.8 (see Figure 2). However, as we pointed out above, this assumption should not be retained. A more realistic utility approximation takes the different price levels as discrete options. The price levels € 3.5 and € 5.5 deliver more or less comparable utility approximations of about 0.2. If the price rises further, utility decreases considerably to a level below -0.4. Obviously, there is a price barrier somewhere between € 5.5 and € 7.5 that significantly lowers utility and, consequently, the purchase intention of consumers. As there is no huge difference between the options 3.5 and 5.5, halal meat producers could probably calculate a price premium without reduction of purchase intention (up to a level of around € 5.5).
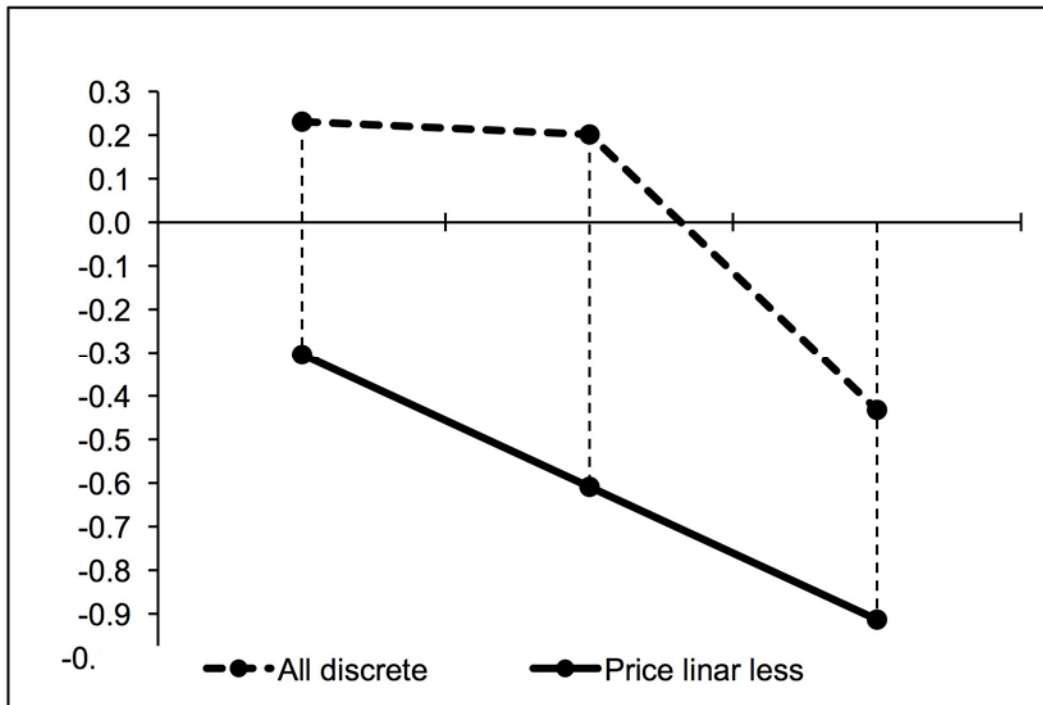
Figure 2. Utilities.

4.3 Importance of product attributes and Kendall's Tau τ

In our sample, the most important attribute seems to be the halal label, with *w* = 0.326. It is a short and immediate signal that the meat is Halal. This signal was much more effective compared to a written confirmation that the animal was slaughtered according to the Islamic rules (attribute "Slaughter indication"; *w* = 0.184). The price gains importance if we discard the assumption that price follows a linear less utility function (*w* = 0.296). Then, the attribute "Price" was almost as important as the attribute "Halal label". The origin of the meat was much less important with *w* = 0.194. Altogether, no attribute was of minor importance; the distribution of *w* shows that all attributes are parameters that should be taken into account by manufacturers processing meat for Muslims (Figure 3).
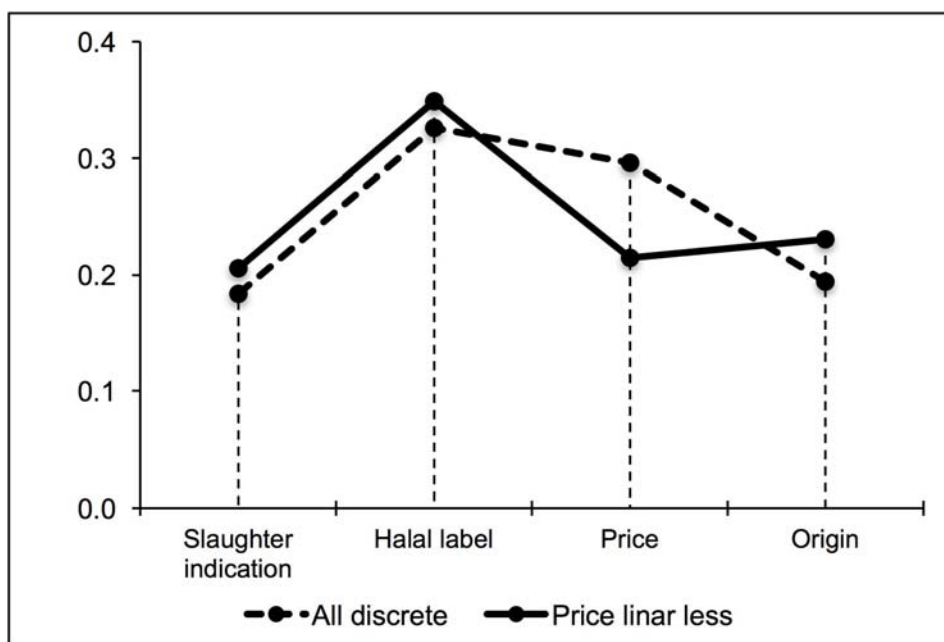

Figure 3. Importance of product attributes.

Table 5.
Average utility of attribute levels and overall importance of attributes

		Utility estimate u	Sig.	Overall importance w
Slaughter indication	halal	0.460	0.000	0.184
	no indication	-0.460	0.000	
Halal label	yes	1.281	0.000	0.326
	no	-1.281	0.000	
Price	€ 3.5	0.231	0.069	0.296
	€ 5.5	0.201	0.074	
	€ 7.5	-0.432	0.003	
Origin	domestic	0.624	0.000	0.194
	foreign	-0.624	0.000	
(Constant)		-0.231	0.033	

Concerning attribute levels, the total utility rises most if the product carries a halal label (u = +1.281; Table 5). Besides that, the ideal product within our survey was of domestic origin (u = +0.624), its packaging carried an indication that meat was Halal slaughtered (u = +0.460), and it was offered at a price of €3.5 (u = +0.231; however, as mentioned above, the utility for €3.5 and €5.5 is almost the same, the difference is not significant; see Table 5). The validity of the part-worth approximation of the aggregated model is excellent: τ amounts to 1.00 for both, the ranking of the stimulus cards and of the holdout cards.

5   Discussion and future perspectives

The current study reveals that Muslim consumers' decision to buy meat is affected most by halal labelling and the price of the meat. This finding supports recent research showing that products labelled as "halal" are recognized as hygienic and of good quality (Mohayidin and Kamaruizaman, 2014). Based on our findings, the correct labelling of halal meat is essential, especially as there are very few labels on food items in conventional grocery stores e.g. in Austria or UK, that indicate whether the product is lawful for Muslim consumption and some labels used are misleading (Ahmed, 2008). Further, the discovery of horsemeat in some beef products in 2013 in the EU and the detection of pork meat in some "halal" products in the UK indicates the need for accepted halal certification bodies to ensure the correct labelling of meat (Fuseini et al., 2017). If Muslim consumers do not trust the labels used in traditional grocery stores, they are likely turn to small stores owned by Muslims, where they rely on the characteristic "Muslim ownership" to infer the halal status of the meat, rather than relying on a halal label (Verbeke et al., 2013).

Another attribute which is important in Muslim consumers' decision to buy halal meat is the price. The role of the price in consumers' decision to buy meat has been much discussed in the literature (e.g., Jackson et al., 2006; Ngapo et al. 2004; Verbeke and Viaene, 1999). The current study contributes to the discussion by showing that there is little difference in purchase intention between the options at a price of €3.5 and €5.5, confirming Verbeke's (2013) findings that Muslim consumers are willing to pay a premium for certified halal labelled meat.

The current study applies limit conjoint analysis, which is a common method for examining preferences in buying decisions (Schnettler et al., 2009; Sichtmann and Stingel, 2007). Other CA approaches such as rating based CA or choice based CA (CBCA; Asioli et al., 2016) might deliver different results. Therefore, future research could use different methods to approximate the part-worth utilities of products and product attributes. Perhaps, these approaches would also help to overcome cultural differences; CBCA in particular is a simpler method in which customers only have to make choices between a limited number of alternatives. Subsequently, the results of a wider sample could then be compared with our results in order to validate the quality of the limit CA approach. Both approaches, limit CA and CBCA, consider the no-choice option; therefore, more empirical research comparing the approaches could be beneficial. Other CA approaches like rating based CA (Endrizzi et al., 2011) could have been applied as well. Almli et al. (2015) showed in their case study that both rating and ranking based CA approaches delivered comparable results. Although more time consuming, ranking based CA was proven to be less monotonous and delivered more structured data (Almli et al., 2015), which would be an argument for preferring ranking based CA.

One core aim of future research should be to find a way of collecting data that takes different cultures into account. We discovered that it is demanding to conduct a survey within the Muslim community.

Besides the language barrier, which is easily overcome with translators (as we did partly in our survey), the main problem is the different culture of the target group. Up to now, its members are not used to taking part in marketing research. Further, most of the participants were recruited in the urban Region of Vienna, the capital and largest city of Austria, as it was not easy to obtain access to the community in rural areas. This observation reflects the results of to the Austrian census in 2001 (the last year, when information about religious confession was collected), which revealed that 36% of all Muslims living in Austria lived in Vienna (compared to between 1.2% and 16.4% in each of the other eight federal states of Austria) (Statistics Austria, 2007). Although halal labelled meat and meat products are increasingly available in Austria, large retail chains leave the halal business to specialised shops, which are mainly located in the bigger cities (Moser, 2015). Muslim consumers in rural areas of Austria and more moderate Muslims (who might not attend Mosques, where one third of all interviews were conducted) may have attached importance to other aspects of halal meat. As previous research on halal meat has identified, there are differences between urban and rural areas concerning, for example, non-Muslim consumers' awareness of the benefits of halal meat (Rezai et al. 2010), something that should be addressed in further research. Cross-sectional studies addressing the whole target group of Muslims and delivering representative findings are therefore recommended.

6 Conclusions

From a practical point of view, the findings of the current study are highly relevant. For marketers and policy makers, the current insights open up new perspectives for strategic marketing and communication purposes, e.g., manufacturers may decide to offer Halal meat at a higher price. Doing so will still meet consumers' expectations and will likely not decrease purchase intention as long as the most important requirements are met (halal label). The current results further stress the importance of the correct and trustworthy labelling of halal products. The current number and variety of certifications and labels is large and confusing to consumers, which makes it difficult for them to recognize labels and to trust them due to the limited transparency of the certification processes. Nevertheless, consumers will only be willing to change their buying behaviour if they trust in the credibility of labels and certificates.

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