Purchase intention of halal food products in Spain: the moderating effect of religious involvement

Pradana, M., Huertas-García, R. and Marimon, F.

Introduction

Religion's effect on consumer behaviour is an interesting topic to investigate. Previous research has proved that individual behaviour is affected by religion as an effect of its specific rules and taboos (Meixner et al., 2018). Modern research on consumer behaviour suggested that religious experience is one of the important factors that shape consumption (Han et al., 2019). There have been thousands of studies on this topic which varies from a perspective of the cognitive science of religion (Herbert, 2017), cultural evolution, to the religious society's consumer behaviour (Bonne and Verbeke, 2008b; Han et al., 2019). These studies observe the correlation between the complexity of a religious society and psychological consumer behaviour.

The result of such studies is essential to provide a more profound understanding of consumer choice in a religious environment (Wilson, 2012). One of the most interesting and sometimes controversial topics is Islamic consumer behaviour, as discussed in some relevant pieces of literature (Bonne et al., 2007; Bonne and Verbeke, 2008b; Lada et al., 2009; Wilson, 2012).

Religion has also provided a set of rules governing human life. One of the said rules is dietary prescription within Islam (Garg and Joshi, 2018). The term 'halal' is known as a religious concept which encourages Muslims (followers of Islam) to consume products that conform to their religious regulation (Alserhan, 2010). Halal is one of the devotional practices that Muslims ought to follow since it is a religious value that must be maintained (Bonne et al., 2007). As a religious group of people, Muslims have incorporated the halal concept in every aspect of their daily life (Lada et al., 2009).

Globally, Islamic teachings have laid down standards norms for adherents in various aspects, including in consuming foods and drinks (Tieman et al., 2013). With that reason, several Muslim products other than food also need to touch on the issue of halal-ness of the product. A guaranteed halal food product can manifest in the form of halal certification that accompanies a food product. With this certification, the manufacturer can attach the halal label on the packaging (Bonne et al., 2007).

Halal food consumption is growing rapidly following the growing population of Muslims all over the world. Based on the data from www.institutohalal.com, there will be a total of 1.9 billion people in the Muslim population worldwide by the year 2020. The increasing halal food demand will also worth USD 1.9 trillion by the year 2021 (Instituto Halal, 2019). The number shows that it is a promising business not only for Muslim countries but also for countries with less...
Muslim population (Asnawi et al., 2018). Other than Australia, New Zealand, Japan, and South Korea, Spain is also among the countries which are seriously developing their infrastructures to satisfy halal demands (Al-Ansi et al., 2019).

From the explanation above, we see that halal food demand is no longer merely a religious issue. It is also an essential part of business and tourism domains (Mohd Suki and Abang Salleh, 2016; Wilson, 2012). Therefore, we would like to contribute to the literature by exploring religious involvement influence on other factors including attitude towards halal, presumed influence towards purchase intention, and behaviour in halal food products.

The present work will empirically analyse the halal food purchase intention from the Spanish consumers' perspective. Several previous consumer behaviour studies related to halal food products cover these areas of consideration: halal awareness (Aziz and Chok, 2013), halal certification (Aziz and Chok, 2013), halal branding (Wilson, 2012; Garg and Joshi, 2018), food trust and security (Bonne and Verbeke, 2008b), purchase satisfaction (Al-Ansi et al., 2019), purchase intention (Elseidi, 2018), the effect of religious involvement (Jamal and Shukor, 2014; Jamal and Sharifuddin, 2015), and health (Tieman et al., 2013; Verbeke et al., 2013). However, the roles of these factors or constructs as moderating and mediating variables are still not explored much.

Therefore, the present work would also like to follow the steps of these previous researches with some modification on the model. We put 'attitude towards halal food' as a mediating variable and 'religious involvement' as a moderating variable to study the direct, indirect, and interaction effects of various factors on purchase intention. We expect that the present work would make two main contributions to the understanding of consumer purchasing decisions. The purpose of the present work was to contribute to the literature on halal food marketing and consumer behaviour. The first objective of the present work was to investigate the Muslim consumer behaviour towards halal food in Spain. The second objective was to add a new perspective to the literature on halal food purchase intention.

The structure of the present work is laid out as follows. First, we explained the introduction and relevant literature to formulate several hypotheses. Next, we discussed the methods used to test the hypotheses and provide the results. In the last part, we provided a discussion of the findings, research implications, and future research directions.

Materials and methods

To support the purpose of the present work, we explored several previous journal articles. We began by narrowing the research scope of previous publications focusing on European countries. We found that most cited ones are the overall study about halal market growth in Europe by Lever and Miele (2012), consumers trust in halal meat in Belgium (Bonne and Verbeke, 2008b), determinants of halal food consumption in France (Bonne et al., 2007), and preferences for attributes of halal meat in Austria (Meixner et al., 2018). A recent publication about halal tourism in Spain by Vargas-Sánchez and Moral-Moral (2019), and halal food purchase intention in Spain (Pradana et al., 2020) are decent benchmark studies in exploring the topic in this specific area.

Moreover, several previous publications about the purchase intention of halal food products incorporate religious involvement as the self-identity for Muslim consumers (Jamal and Shukor, 2014; Jamal and Sharifuddin, 2015). Religious involvement indicates a person's commitments to the practices of religion (Mukhtar and Mohsin-Butt, 2012; Abd Rahman et al., 2015; Jamal and Sharifuddin, 2015). We incorporate the religious involvement concept by Jamal and Shukor (2014), which adds the religious involvement factor as a moderator in halal products' purchase intention.

Preceded influence and attitude towards halal food

Previous research has proven that perceptions of peer exposure mediate the relationship between personal exposure to media content and perceived peer norms (Gunther et al., 2006). Regarding this matter, Gunther and Storey (2003) explained that people tend to respond to the influence of mediated communication on others, regardless of the accuracy of the perceived impact. This concept is now known as 'presumed influence', which has been proven as a predictor of consumers' attitude (Lim et al., 2020). In the present work, we build a hypothesis that presumed influence affects 'attitude towards halal'.

\[ H1 - \text{presumed influence has a positive effect on attitude towards halal food} \]

Amidst the rapidly increasing demand for halal foods, various studies have investigated consumer attitude and behaviour as antecedents of purchase intention and willingness to pay for halal products (Aziz and Chok, 2013; Asnawi et al., 2018). On the other hand, purchase intention can also be
viewed as an effect of consumer attitude and judgments about a product (Ajzen, 1985). The relationship between attitude and purchase intention is important for predicting consumer behaviour, hence the formulation of our second hypothesis.

**H2 – attitude towards halal food has a positive effect on halal purchase intention**

There is always a fear among Muslim consumers that some foods and other products may contain *haram* (unlawful, non-halal) substances (Lada *et al.*, 2009). Therefore, presumed influence by their peers or family is required so that Muslim consumers are certain that they did not make a mistake in choosing food products which are unlawful and can cause sin (Aziz and Chok, 2013).

**H3 – presumed influence has a positive effect on halal purchase intention**

In terms of behaviour, Ajzen (1985) argued that perceptual behaviour control reflects past experiences. It also anticipates obstacles to attract more subjective attitudes and norms toward consumer behaviour. Behavioural intention explains how often consumer intention repeats the purchase of a product, while use behaviour is used to explain how often consumers use a particular product in their daily life (Mohd Suki and Abang Salleh, 2016; Asnawi *et al.*, 2018).

**H4 – halal purchase intention has a positive effect on halal purchase behaviour**

According to Asnawi *et al.* (2018), the concept of attitude towards halal food includes cultural, social, personal, and psychological factors of consumers. While according to Al-Ansi *et al.* (2019), the factors that can affect purchase intention of a product can be from culture, social classes, reference groups, and family reference. When talking about the relationship between presumed influence, purchase intention, and attitude towards halal, we believe that one's perspective can mediate presumed influence and purchase intention. Therefore, we formulate these following hypotheses:

**H5 – attitude towards halal mediates the relationship between presumed influence and purchase intention**

Religious involvement as a moderating variable

Growing up and living in a religious community increases the odds of being a believer. It also explains the psychological impact of the particular belief (Meixner *et al.*, 2018). From time to time, religious belief is heavily influenced by cultural learning (Jamal and Shukor, 2014). Several papers have discussed the relationship between religiosity and halal purchase decision (Jamal and Shukur, 2014; Jamal and Sharifuddin, 2015; Mohd Suki and Abang Salleh, 2016). These researches focus on attitude which we believe has a direct influence on purchase intention and are associated with religious involvement (Jamal and Sharifuddin, 2015). In the present work, we use the construct of religious involvement as a moderating variable which affects relationships between other constructs, as seen in some previous studies (Jamal and Sharifuddin, 2015; Mohd Suki and Abang Salleh, 2016).

**H6 – religious involvement moderates the relationship between presumed influence and purchase intention**

One will display a particular behaviour if he/she perceives that others think he/she should be behaving the way they expect him/her to (Jamal and Sharifuddin, 2015). We can indicate this behaviour by asking respondents to assess whether other people are likely to agree or disagree if they show the intended behaviour (Aziz and Chok, 2013).

**H7 – religious involvement moderates the relationship between attitude towards halal and purchase intention**

In the present work, we would like to test the aforementioned constructs’ relationship with the Spanish Muslim consumers' purchase intention and behaviour. Purchase intention indicates that consumers will follow their experience, preferences, and external environment in obtaining information, evaluating alternatives, and in making a purchase decision (Darrat, 2011). The visual description of the research model can be seen in Figure 1.

**Research methodology**

The present work is directed to answer specific questions which are highlighted in the previous parts. It begins with exploring theories and concepts which will be used as the research progresses. This will be applicable and give room for further research (Hair *et al.*, 2016). As earlier explained, our plan for the development of the present work is divided into several steps. This section focuses on the development of the hypotheses, variables, and statistical measures.
Construct and measurement

We combine constructs from the communication theory (presumed influence), used constructs from halal literature (religious involvement), and consumer behaviour (attitude, purchase intention, and purchase behaviour). To measure presumed influence, we adopt measures by Tsfati et al. (2011). Regarding the attitudes toward halal products, we adopt four measurement items used by Mukhtar and Mohsin-Butt (2012) and combine these with Haque et al. (2015). Furthermore, measures by Jamal and Sharifuddin (2015) are used to measure religious involvement, the ones by Abd Rahman et al. (2015) are used to measure halal purchase intention, and the ones by Khalek and Ismail (2015) are used to measure behavioural acceptance of halal food. All constructs were measured using a five-point Likert scale measurement. The scale point "5" indicates "Strongly Agree", point "4" indicates "Agree", point "3" indicates "Slightly Agree", point 2 indicates "Disagree", and point "1" indicates "Strongly Disagree".

The present work uses hierarchical regression which is combined with path analysis to investigate the relationships as depicted in the research model. The questionnaire contains 20 questions with five constructs in the measures. These five constructs consist of religious involvement (four items), presumed influence (four items), attitude towards halal (four items), halal purchase behaviour (four items), and purchase intention (four items).

Respondents’ profile

Spain is still home to almost two million Muslims (Mesa, 2012). Based on the Islamic Community of Spain (UCIDE), the total Spanish Muslim population in 2018 is 1,946,300 (Vargas-Sánchez and Moral-Moral, 2019).

A convenience sampling was used to obtain information from a particular group of Muslim respondents. According to Sekaran and Bougie (2016), convenience sampling refers to the collection of information from members of population who are conveniently available to provide it. Since the study about halal food purchase intention focusing on Spanish consumers is quite new, we believed convenience sampling is justifiable for the present work. Some prominent studies on the topic also used convenience sampling, such as Bonne et al. (2007), Lada et al. (2009), and Abd Rahman et al. (2015).

A group of respondents who were employed, unemployed, students, and business owners participated in answering the questionnaire. Our questionnaire was distributed online with the help of several mosque staff in Barcelona, Madrid, Seville, and Cordoba. Malhotra (2007) explained that for research that uses a structural equation modelling (SEM) analysis and with up to five latent constructs, the minimum sample size is 200. The present work consists of five latent constructs, and a sample size of 500.

Results and discussion

Outcome

The data analysis method used in the present work to identify characteristics is descriptive analysis. Other analysis method used is Structural Equation Modelling (SEM) with the SmartPLS software version 3. SEM is a second-generation multivariate analysis technique that connects factor analysis and path analysis. This allows researchers to test while simultaneously estimate the relationship between constructs (Hair et al., 2016).

The first stage of analysis using the SEM method is to make a path diagram analysis. This is done to interpret the relationship between latent variables and indicators on PLS software. Next, the measurement model analysis is carried out to see the outer loading value. This is done to evaluate the relationship as a constructed variable with the manifest indicator.

Exploratory Factor Analysis (EFA)

Our next step is to conduct an exploratory factor analysis (EFA). An exploratory factor analysis
of all 20 constructs with eigenvalues above 1.0 is carried out. According to Fornell and Larcker (1981), the reliability is evaluated by analysing the value of composite scale reliability (CR) and average variance extracted (AVE). As seen in Table 1, the CR values between 0.6 and 0.7 can still be taken into consideration. The AVE value is already acceptable since it is greater than 0.5.

Table 1. EFA result.

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
<th>Composite Reliability</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religious Involvement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I frequently read religious books (Quran and Islam-teachings)</td>
<td>0.659</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I frequently listen to religious lectures on television / radio</td>
<td>0.762</td>
<td>0.800</td>
<td>0.501</td>
</tr>
<tr>
<td>I attend religious discussion with friends, relatives, or family</td>
<td>0.664</td>
<td>0.643</td>
<td>0.547</td>
</tr>
<tr>
<td>I enjoy spending time with others of my religious affiliation</td>
<td>0.741</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am often influenced by my family and friends to purchase halal products</td>
<td>0.466*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>souha to seek information about halal products</td>
<td>0.664</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presumed Influence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am more sure about the halal-ness of a food product if my friends and family consume it</td>
<td>0.685</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I understand and know exactly the meaning of halal thanks to my friends and family</td>
<td>0.716</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The existence of a halal logo in the packaging of food products is important</td>
<td>0.667</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will choose a product based on whether there is a halal logo</td>
<td>0.627</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude towards Halal Food</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Halal logo makes me feel safe to consume the product</td>
<td>0.613</td>
<td>0.731</td>
<td>0.539</td>
</tr>
<tr>
<td>I always look for the halal logo on the product packaging before buying any products or goods</td>
<td>0.635</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am willing to pay more for food products with an authentic halal logo</td>
<td>0.668</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I prefer to buy halal certified products even when the brand is not very popular</td>
<td>0.469*</td>
<td>0.673</td>
<td>0.687</td>
</tr>
<tr>
<td>I buy halal certified products even when the brand is slightly expensive</td>
<td>0.555*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am willing to travel long distance to buy food products with an authentic halal logo</td>
<td>0.633</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am interested in buying halal food</td>
<td>0.660</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will keep buying halal food based on my need</td>
<td>0.741</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Halal Purchase Intention</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will not consume the food if it is prepared using any non-halal ingredients for example alcohol</td>
<td>0.659</td>
<td>0.658</td>
<td>0.568</td>
</tr>
<tr>
<td>I will not eat if the food is doubted as halal</td>
<td>0.557*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: authors' own elaboration

As shown in Table 2, we confirm the constructs with Confirmatory Factor Analysis (CFA). Here, the loadings of all items are all greater than 0.6, therefore the individual item reliability is accepted (Hair et al., 2016).

Afterwards, the construct internal consistency is examined by checking the value of the composite internal scale reliability. From Table 2, we can see that the Cronbach alphas of the latent variables already fulfilled the requirement, which is a minimum
of 0.7 for internal consistency (Hair et al., 2016). We also confirm the internal consistency by evaluating the average variance extracted (AVE). Our result shows that all variables have AVE values higher than 0.5, which fulfill the requirements by Fornell and Larcker (1981).

Our next step is to analyse composite reliability, Cronbach’s alpha, and the average variance extracted. This allows us to check the reliability of the items and the composites considered. In the hypothesised model, a minimum sample of 30 datasets is required (Hair et al., 2016). Hence, given the sample size of 500, the use of PLS-SEM is advisable for the model.

### Structural model assessment

Next, the relationships between constructs are analysed through structural equation modelling (SEM). With the PLS-SEM approach, we can test causal-predictive relationships between the latent variables simultaneously. Along with this, we could also examine the relationship with complex variables (Jöreskog and Wold, 1982). The commonly used critical value for the two-tailed t-test is 1.96 for the significance level of 10% (Hair et al., 2016). Table 3 summarises the path coefficients and their p-values.

According to Table 3, there is a significant positive effect of presumed influence on the attitude towards halal products (β = 0.757, p-value < 0.001). This indicates that H1 is accepted. Meanwhile, the attitude towards halal products also has a significant effect on purchase intention (β = 0.885, p-value...
This indicates that H2 is also accepted. However, it is a different situation for H3. There is a negative effect of presumed influence on purchase intention (β = -0.133, p-value < 0.001). Next, we further analyze H3 with the possibility of a mediation effect (which will further be explained in the discussion about H5). H4 finds the same positive effect of purchase intention on purchase behaviour (β = 0.962, p-value < 0.001).

Regarding the negative value of H3, Bergeaud-Blackler and Ferretti (2006) suggest that young Muslim consumers are gradually breaking the shopping habits of their parents. Not all Spanish Muslims feel a high intention to buy halal food even though the presumed influence from their families and peers are high. As mature consumers, they independently desire a formal halal certification and reliable halal labels to inform and reassure them about the product quality and its halalness. At the same time, they also do not have a problem with buying meat from supermarkets instead of buying from traditional halal butchers.

Mediation effect

Our result shows that the attitude towards halal products acts as a mediator on the effect of presumed influence and purchase intention. The conclusion is drawn from the results shown in Table 4. As Zhao et al. (2010) suggested, positive significance (t-values) of both paths forms the mediating relation. This means that the mediation effect exists in the form of complementary partial mediation. From Table 4, we can see that the obtained indirect effect of 0.670 is both positive and significant. In this case, the mediation results show that the attitude towards halal products can be viewed as a direct predictor of purchase intention. Furthermore, it may also act as an indirect predictor of purchase intention via presumed influence, which corresponds with the findings by Garg and Joshi (2018).

Moderation effect

The moderating effects of religious involvement are positive, but not all are significant. In our model, we estimate a standardised path coefficient of 0.122 for H5. The moderation effect is significant because the p-value of 0.005 is lower than 0.01 (Henseler et al., 2016). Furthermore, H6 (religious involvement moderates the effect of presumed influence on purchase intention) is also supported. This is seen from the positive coefficient and significant p-value. This is consistent with findings by Jamal and Sharihuddin (2015). The higher the religious involvement is, the higher the chance that positive influence between the halal logo attitude on purchase intention will increase. On the contrary, the lower the religious involvement is, the higher the chance that positive influence between the halal logo attitude on purchase intention will decrease.

However, in the case of H7, the obtained path coefficient 0.059 has an insignificant p-value, which is 0.157. This value is higher than 0.01, therefore H7 is rejected. Religious involvement does not act as a moderator on the relationship between attitude towards halal and purchase intention.

Conclusion

We would like to begin the conclusion by discussing the unproven hypothesis. In our results, we find that religious involvement does not act as a moderator on the relationship between attitude towards halal and purchase intention. The reason behind this is

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path coefficient</th>
<th>SE</th>
<th>p-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 Presumed Influence -&gt; Attitude</td>
<td>0.757</td>
<td>0.017</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H2 Attitude -&gt; Intention</td>
<td>0.885</td>
<td>0.097</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H3 Presumed Influence -&gt; Intention</td>
<td>-0.133</td>
<td>0.023</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H4 Intention -&gt; Behaviour</td>
<td>0.962</td>
<td>0.003</td>
<td>0.000</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Source: authors’ own elaboration.
most probably because Muslim consumers, especially the second or third generation of Muslims in a non-Muslim country such as Spain, do not have the same shopping habits like their parents. Their purchase intention of halal food products is still affected by certain attitudes toward halal food that they inherit from their parents. This attitude is also shaped by the behaviour of the people around them. The second and third generation of Muslims tend to have lower religious involvement as compared to their parents. However, no matter how high their involvement in religious events is, neither their attitude towards halal food nor their halal food purchase intention is affected.

All other relationships that we test are proven significant. We first thought that presumed influence is a construct that is less involved in halal studies. However, in our results, it is proven to have a significant effect on purchase intention, just as significant as the effect on attitude towards halal food. The relationship of presumed influence on halal purchase intention will also be stronger if Muslims are more involved in religious events in their community. This result corresponds to previous research discussing the same topics focusing in European countries (Bonne et al., 2007; Ahmed, 2008; Bonne and Verbeke, 2008a; Meixner et al., 2018).

On the discussion of whether attitude towards halal food mediates the relationship between presumed influence and purchase intention, the result is also shown to be positive. There is a round of positive relationships of these constructs toward purchase intention. This is also followed by a positive and significant relationship between halal purchase intention and purchase behaviour.

Limitations and future research directions

Although the present work has provided new insights, we could not neglect the study limitations. First, research findings cannot be generalised based on the present work alone. We experience a similar limitation with Prada et al. (2020) that "...having used a convenience sample, it is not possible to extrapolate the results to the total population but the distribution of the sample obtained is fairly balanced." The sample size is adequate for the present work, but we do not differentiate whether the respondents are the first, second, or third generation of Muslims. Here, the religious involvement of Muslims may vary, and so does their attitude towards halal foods. We also do not take into account whether the respondents were immigrants from other countries or born in Spain.

Last but not least, data obtained in the present work do not give sufficient room to explore differences in cultural values as shown in Jamal and Shukor (2014), and Jamal and Sharifuddin (2015). Culture can influence Muslim consumers’ acceptance of halal food products, especially if the consumers are tourists who have different cultural backgrounds. Spain itself relies much on tourism, and the country has to seriously consider the halal market as potential. As a practical implication, we suggest Spain tourism to explore more about halal market opportunity by working with related institutions, such as Halal Food Council of Europe in Brussels, Belgium.

Acknowledgement

The authors gratefully acknowledge Telkom University and University of Barcelona for supporting the present work.

References


Bonne, K. and Verbeke, W. 2008a. Religious values
informing halal meat production and the control and delivery of halal credence quality. Agriculture and Human Values 25: 35-47.


Mukhtar, A. and Mohsin Butt, M. 2012. Intention to